

Countryside Recreation Research Advisory Group

COUNTRYSIDE RECREATION RESEARCH 1986/87: THE PROGRAMMES OF THE CRRAG AGENCIES

**Edited by Hilary Talbot-Ponsonby
Secretary to the Group**

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University of Bristol
Rodney Lodge
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Bristol BS8 4EA
(0272) 741117

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PREFACE

In 1982, The Countryside Recreation Research Advisory Group decided to publish an annual compilation of the current and prospective research programmes of agencies represented on the Group (see list of member agencies below), so that more information about this work could reach a wider audience of interested organisations. The first edition of the compilation appeared in June 1982. This publication is the fifth in this series and contains information on countryside recreation research and recent publications, correct at April 1986.

In content and inevitable limitations, the document closely resembles previous editions. As with the 1985/86 edition, a thematic index has been included. Each project has been allocated a code which relates it to the relevant agency programme and appears both in the main text and at the appropriate point in the index.

Although considerable effort has been made to edit agencies' research programmes as originally submitted into a common format, the result does not disguise the varied nature of the individual programmes nor the differing extents to which the programmes have a bearing on countryside recreation research as strictly defined. A range of choice has been exercised by each contributor in the cut-off between that judged to be relevant to CRRAG and that not, with some lists more tightly drawn than others. The register only includes the research programmes of member agencies. It is planned to include the research undertaken by two of the Local Authority Associations each year: this year the research programmes of the Association of District Councils and the Convention of Scottish Local Authorities are described.

A listing of this kind is of short term value as it stands, in that programmes of research are often subject to change according to the availability of resources and changing operational needs of sponsoring bodies. Therefore not all the prospective items listed may, in fact, proceed. However, to mitigate these circumstances, at the end of each section is the name, address and telephone number of a suitable contact in the respective agency, who will be pleased to respond to enquiries and requests for further information.

It is hoped that this compilation will be of value and interest to those with an involvement in countryside recreation and allied fields. Further copies are available free of charge from Hilary Talbot-Ponsonby, School for Advanced Urban Studies, University of Bristol, Rodney Lodge, Grange Road, Bristol BS8 4EA (0272) 741117.

BODIES REPRESENTED ON CRRAG

Association of County Councils
Association of District Councils
Association of Metropolitan Authorities
British Tourist Authority/English Tourist Board
British Waterways Board
Convention of Scottish Local Authorities
Countryside Commission
Countryside Commission for Scotland
Department of the Environment (Observer)
Forestry Commission
Historic Buildings and Monuments Commission for England and Wales (English Heritage)
Ministry of Agriculture, Fisheries and Food (Observer)
Natural Environment Research Council
Nature Conservancy Council
Scottish Development Department (Observer)
Scottish Sports Council
Scottish Tourist Board
Sports Council
Wales Tourist Board
Water Authorities Association

The Group includes representatives of a range of statutory agencies: from those whose role is mainly to provide grants and advice (such as the two Countryside Commissions), to representatives of the Local Authorities Associations whose member Councils are the main public sector providers. The Group was established in 1968 as an advisory technical liaison group to harmonise the countryside recreation research of member agencies and to promote knowledge of such research. The harmonisation aim is achieved by the agencies making regular presentations of their research and development programmes to the Group.

GLOSSARY

ACC	Association of County Councils	ITE	Institute of Terrestrial Ecology
ACORN	A classification of residential neighbourhoods	LDR	Long Distance Route
ADAS	Agricultural Development and Advisory Service (MAFF)	LNR	Local Nature Reserve
ADC	Association of District Councils	MAFF	Ministry of Agriculture, Fisheries and Food
AMA	Association of Metropolitan Authorities	MISR	Macaulay Institute of Soil Research
ACONB	Area of Outstanding Natural Beauty	MOD	Ministry of Defence
ASH	Anderson Semens Houston	MSC	Manpower Services Commission
BTA	British Tourist Authority	NCC	Nature Conservancy Council
BWB	British Waterways Board	NERC	Natural Environment Research Council
CAP	Common Agricultural Policy	NNR	National Nature Reserve
CASE	Collaborative Award in Science and Engineering	NOSCA	North of Scotland College of Agriculture
CC	Countryside Commission	NSHEB	North of Scotland Hydroelectric Board
CCS	Countryside Commission for Scotland	NP	National Park
CLA	Country Landowners Association	NR	Nature Reserve
CLR	Centre for Leisure Research	NT	National Trust
CoEnCo	Council for Environmental Conservation	OPCS	Office of Population and Census Statistics
COSLA	Convention of Scottish Local Authorities	OS	Ordnance Survey
CRRAG	Countryside Recreation Research Advisory Group	RSPB	Royal Society for the Protection of Birds
DAFS	Department of Agriculture and Fisheries for Scotland	R & D	Research and Development
DC	Development Commission	SAAA	Scottish Amateur Athletics Association
DEm	Department of Employment	SC	Sports Council
DEn	Department of Energy	SDA	Scottish Development Agency
DOE	Department of the Environment	SDD	Scottish Development Department
DOI	Department of Industry	SSC	Scottish Sports Council
DTP	Department of Transport	SSSI	Site of Special Scientific Interest
EC	European Commission	STB	Scottish Tourist Board
EH	(English Heritage) Historic Buildings and Monuments Commission for England and Wales	STRI	Sports Turf Research Institute
ESCA	East of Scotland College of Agriculture	TRRU	Tourism and Recreation Research Unit
ESRC	Economic and Social Research Council	WA	Water Authority
ETB	English Tourist Board	WAA	Water Authorities Association
FBA	Freshwater Biological Association	WOAD	Welsh Office Agriculture Department
FC	Forestry Commission	WRC	Water Research Centre
GHS	General Household Survey	WTB	Wales Tourist Board
HFRO	Hill Farming Research Organisation		
HIDB	Highlands and Islands Development Board		

THE RESEARCH PROGRAMMES

1986/87

Research of Member Councils 1986/87

	<i>Authority</i>	<i>Project Title and Summary of Objectives</i>	<i>Timescale From/To</i>	<i>Contact Name</i>
Leisure Facilities				
ADC1	Basingstoke & Deane BC	Leisure Plan.	Continuing	J Blower.
ADC2	Preston BC	Survey of Public Leisure Facilities and Requirements. To gather information relating to the existing recreational needs of Preston and determine the future requirements.	Feb 1985/ June 1985	B Hall, Recreation Officer.
ADC3	Three Rivers DC	Establish usage, need and demand for sport, leisure and recreation amenities as part of overall examination of provision for leisure in the District. Will lead to statement and implementation of leisure policy for the District.	March 1986/ Dec 1986	D Coburn.
ADC4	Bracknell DC	Review of Amenities 1984. A statement of the current situation and future proposals for discussion and planning.	Completed	S Taylor.
ADC5	Bristol City Council	Ashton Court Draft Management Plan. The objective is to ascertain recreation and management policy options/proposals.	Feb1986/ Sept 1986	C Tudor, Parks Dept.
ADC6	Arun DC	Recreation and Community Leisure Needs Study. A review of current leisure provision and opportunity and the needs and demands of residents of, and visitors to, Arun District, providing a framework for future policy and actions with relevant priorities, responsibilities and necessary resources identified where possible.	1984/86	Roger Quinton, Chief Leisure & Tourism Officer.
ADC7	Arun DC	Development of Water-based Leisure and Recreation Facilities and Opportunities. A detailed examination of the current position and the formulation of a framework for a future policy and actions with relevant priorities, responsibilities and necessary resources identified where possible. Tentative new proposal.		Roger Quinton, Chief Leisure & Tourism Officer.
ADC8	Southampton City Council	The Peartree Green Residents' Survey. Proposed use for open space.	Completed	R & D Unit, Dept of Leisure Services.
ADC9	Nottingham City Council	Visitor Survey of Newstead Abbey and Grounds. An analysis by questionnaire of visitors' requirements when visiting Abbey and grounds.		P Wood, Senior Keeper of Fine and Decorative Arts, c/o Newstead Abbey, Linby, Notts.
Physical Environment				
ADC10	Thanet DC	Flora and Fauna survey of Thanet, Atlas of Flowering Plants in Thanet, Land use and wildlife in Thanet, Birds of Thanet.	1984/86	D F W How.

ADC11	North Hertfordshire DC	Environmental habitat and site identification, mapping and assessment.	On-going	T James, Natural History Dept.
ADC12	North Hertfordshire DC	Grazing Land Survey of Hertfordshire (with Herts County Council).	1985	T James, Natural History Dept.
ADC13	North Hertfordshire DC	Development of survey techniques for the study of woodland bird population (with RSPB).	1984/85	T James, Natural History Dept.
ADC14	North Hertfordshire DC	Development of a recreational and habitat conservation plan for Weston Hills Border.	1984/85	G Hauxwell, Planning Dept.
ADC15	North Hertfordshire DC	Development of methodology for identifying 'Areas of semi-natural interest', for structure plan review (with Herts County Council).	1984/85	T James, Natural History Dept.
ADC16	North Hertfordshire DC	Development of a habitat management plan for Purwell Meadows, Hitchin.	1984/85	T James, Natural History Dept.
ADC17	North Hertfordshire DC	Study of plant colonisation and habitat development in disused gravel pits for the production of conservation proposals.	1985 start	T James, Natural History Dept.
ADC18	Macclesfield BC	Lindow Common SSSI. Ecologist commissioned to produce management plan.	1984	G Tiedeman.
ADC19	Macclesfield BC	The Moor, Knutsford. Ecologist to produce management plan. Tentative new proposal.	March 1986/ Sept 1986	J Moody.
ADC20	Macclesfield BC	Poynton Coppice. Educationalist to produce interpretive strategy.	March 1986/ Sept 1986	J Wakefield.
ADC21	Bolsover DC/ Derbyshire County Council/ Nottinghamshire County Council (plus associated District Councils)	Strategy for the future management of Creswell Crags. A joint strategy involving the County and District Councils which would provide for the conservation of Creswell Crags, a site of international archaeological importance, whilst also building on the potential of the area as a major tourist attraction.	1986	B Whalley.
ADC22	Bolsover DC	Establishment of Rural Walks/Trails. To provide facilities on the fringe of urban areas for casual recreation, whilst at the same time promoting an awareness of environmental and local history features.	1986	B Whalley.
ADC23	Portsmouth City Council	Brown Tail Moth. Control of Infestation.	Oct 1986	Chief Environmental Health Officer.
ADC24	Hart DC	Fleet Pond, Environment Survey for Management. Plan for SSSI.	Feb 1984/ July 1986	G Wild.
ADC25	Epping Forest DC	Historic Landscape Survey. To identify, evaluate and conserve surviving features in the landscape of historic or ecological significance.	1982 start	A J B Robinson.
ADC26	Cyngor Dosbarth Dwyfor	Llyn Peninsula Heritage Coast Project. To conserve unspoilt coastline, increase public awareness and improve informal recreation. 50% grant-aided by CC.	1985/90	G I Huws.

ADC27	Bracknell DC	Review of Amenities 1984. A statement of the current situation and future proposals for discussion and planning.	Completed	S A Taylor.
ADC28	North Norfolk DC	A Study of the Ecology of Holt Country Park.	April 1985/ March 1986	A Starling.
ADC29	Reading BC	Urban Wildlife Survey of Reading aiming to catalogue species with implications for open space policy and management. In association with Reading University and Berks, Bucks and Oxon Naturalist Trust.	1985/87	L B Punter.
ADC30	Hull City Council	Strategy for the Provision of Indoor Sport and Recreation Facilities in Hull. Proposals for indoor public sports facilities in the city.	1983	N Riding.
ADC31	Hull City Council	Survey of Open Space in Hull. Survey of and proposals for public and private open space facilities.	Dec 1985 start	T Hardie.
ADC32	Hull City Council/ Humberside County Council	Public Footpaths. Preparation of definitive public foot-path map — survey and research work.	On-going	T Oates.
ADC33	Hull City Council/ Humberside County Council	Recreational Cycle-Routes. Strategy for the provision of long distance urban cycle-routes.	On-going	C Boxshall.
ADC34	Exeter City Council	Biological Data Bank. Collection of data for use in management and interpretation.	On-going	Kelvin Boot.
ADC35	Exeter City Council	Exeter Valley Parks — Meadow Flora Project. Creating floristically rich meadowland on reclaimed land.	1985/87	Martin Davies.

Leisure and Society

ADC36	Stafford BC	Northern Area Study. An appraisal of the recreational facility provision in the north of the Borough.	1985	R Dreschler.
ADC37	Rhuddlan BC	Rhuddlan Coast Tourism Study. To provide data through a user survey.	1894/85	R K Smith.
ADC38	Thanet DC	Guide for the Disabled in Thanet.	1984/85	D F W How, Admin/Research Manager.
ADC39	Thanet DC	Tourism Surveys.	1984/85	D F W How, Admin/Research Manager.
ADC40	Thanet DC	History of Thanet and Minster.	1983/86	D F W How, Admin/Research Manager.
ADC41	Thanet DC	Public Rights of Way.	1983/84	D F W How, Admin/Research Manager.
ADC42	St. Albans City and DC	MSC Community Programme. Conservation of disused railway lines to footpaths/cycleway on Smallford Trail and Nicky Way.	Continuous	D Clough.
ADC43	Cardiff City Council	Caerphilly Mountain Project Study Area. With Taff Ely BC/Rhymney Valley DC/South Glamorgan County Council/ Mid Glamorgan County Council.	Continuous	D Clough.
ADC44	Cardiff City Council	City Tourism Study.	Continuous	L Owen.
ADC45	Cardiff City Council	City Landscape Policy.	Continuous	D Clough.

Applied Disciplines and Techniques

ADC46	Portsmouth City Council	Portsdown Hill Plan. To ascertain public usage of open space on Portsdown Hill.	May 1985	John Lacey, Landscape Designer, Parks and Recreation Dept.
ADC47	South Wight BC	Isle of Wight Heritage Coast. To devise a management plan to conserve and enhance the undeveloped character of the Hamstead and Tennyson Heritage Coasts. A visitor survey will be carried out by the heritage coast service in 1986 with the main objective to survey the pattern of visitor activity and recreational pressures on the heritage coasts.	1986/87	S Traves.
ADC48	South Wight BC	The Island's Countryside Heritage study. Survey of historic parks and gardens in the Isle of Wight. Tentative new proposal.	1986/87	S Traves.
ADC49	Macclesfield BC	Hydrologist commissioned to produce report of water relations.	June 1985/ July 1985	C Crossley.
ADC50	Hull City Council	Land East of Southcoates Lane. Survey of naturally generated woodland on derelict land for recreational management.	Dec 1985 start	C Boxshall.
ADC51	Cardiff City Council	Management Plan, Glamorganshire Canal LNR. Conserve wildlife and maintain countryside recreation.	On-going	C Powell.
ADC52	Cardiff City Council	Caerphilly Mountain Project. Survey of the Wenallt Area and Management Proposals.	On-going	P Jayne, Caerphilly Mountain Project Leader (Mid Glamorgan County Council).
ADC53	Cardiff City Council	Forest Ganol Area.	April 1986	P Jayne, Caerphilly Mountain Project Leader (Mid Glamorgan County Council).
ADC54	Elmbridge BC	Commons Management Plan. Multi-use management plan for 1,500 acres of Commons to satisfy recreational, conservation and educational pressures.	On-going	Graham Hunt.

Related Study Areas

ADC55	St. Edmundsbury BC	West Stow Anglo-Saxon Village. Reconstruction of Anglo-Saxon Village.	Continuing	M G Livermore.
ADC56	Rochford DC	To analyse change in farm landscape, to identify valuable areas and to recommend management.	1984/86	I M Edwards.
ADC57	Rossendale BC	Rossendale Ecological Survey. Joint project Lanc's Trust for Nature Conservation, Rossendale Groundwork.	1985	Engineer.
ADC58	Rhuddlan BC	Former Tip Sites Rhyl and Prestatyn. Reclamation of tipped land for recreational purposes.	On-going	R K Smith.
ADC59	Hart DC	Leisure Plan. To identify the supply of leisure facilities, to assess the demand for leisure activities and to suggest the need for new or modified facilities.	1984/86	A C Crowson.

ADC60	Hart DC	Agricultural Analysis and Local Plans Pilot Study. To provide a framework for the consultation with MAFF on agricultural matters in connection with the preparation of local plans incorporating: structure of holdings; constraints on agriculture; identification of areas of significance and areas of improvement; urban fringe problems, agricultural output and tourism.	1985/86	A. C. Clowson.
ADC61	Hull City Council	Play Area Provision in Residential Estates. Policy for open space standards in new housing schemes.	On-going	R Marrs.
ADC62	Southampton City Council	The present usage and problems associated with differing leisure demands upon the same natural resources.	Completed	R & D Unit, Dept of Leisure Services.
ADC63	Nottingham City Council	Nottinghamshire Biological Records Survey. On-going survey of sites of flora and fauna interest in Nottinghamshire. Results housed at Natural History Museum, Wollaton Hall, Nottingham.	1975 start	G Walley, Senior Keeper of Natural Sciences, Natural History Museum, Wollaton Hall, Nottingham.
ADC64	Nottingham City Council	Archaeological Survey of Nottingham. An on-going programme of archaeological excavating and surveying of Saxon-Medieval Nottingham in association with the DOE.	1970 start	C Young, Field Archaeologist, Brewhouse Yard Museum, Castle Boulevard, Nottingham.

Research Programme 1986/87

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>	
Continuous/Annual Research				
BTA/ETB1	British Tourism Survey	Comprehensive monthly survey of all overnight trips taken by British residents, plus an annual survey of Britons' holiday-taking at home and abroad.	Continuous/ Annual	Combines two previous tourism surveys: the British Home Tourism Survey and the British National Travel Survey.
BTA/ETB2	English Hotel Occupancy Survey	To survey bed and room occupancy, duration of stay, and the proportion of arrivals from overseas at a sample of hotels throughout England.	Monthly	Commissioned from British Market Research Bureau.
BTA/ETB3	Holiday Intentions Survey	To survey British residents' intentions to take a holiday of four nights or more during the forthcoming season.	Annual	Commissioned from NOP Market Research Limited.
BTA/ETB4	English Heritage Monitor	To analyse England's historic attractions in terms of their number, type, presentation, and visitor trends.	Annual	In-house.
BTA/ETB5	Sightseeing in England	To analyse the use and capacity of all kinds of visitor attractions in England.	Annual	Compiled in-house on basis of survey of visits to attractions throughout England.
BTA/ETB6	International Passenger Survey (secondary analysis)	To examine the volume, value, and characteristics of overseas visitors to Britain.	Annual	The survey is sponsored by the DEM. BTA and the tourist boards pay for extra data collection and analysis on specified topics, for instance the regional distribution of overseas tourism throughout Britain.
BTA/ETB7	Overseas Visitor Survey	To investigate the profile and opinions of overseas visitors to Britain.	Continuous	Some regular and some occasional topics are included in this survey whose findings supplement data from the International Passenger Survey.
BTA/ETB8	London Visitors Survey	To examine the characteristics, behaviour, and opinions of overseas visitors in London during the Summer.	Annual	Sponsored in collaboration with London Visitor and Convention Bureau and London Transport.
BTA/ETB9	Tourism Barometer	To survey business trends by sector of the tourist industry.	Quarterly	Results on Prestel (Page 22088).
BTA/ETB10	Regional Tourism Fact Sheets	Statistical digests for each of the twelve ETB regions.	Annual	
Current Research				
BTA/ETB11	Bournemouth and South East Dorset Tourism Survey	To examine current visitors, their economic and social impact, tourism prospects and resources and advise on future policies for marketing and development.	1984/86	Sponsored by Bournemouth Council, Dorset County Council, ETB, and Southern Tourist Board.

BTA/ETB12	London Tourist Accommodation Study	To quantify the amount and type of accommodation available to tourists in London; assess current levels of demand and likely levels of demand up to 1995; assess constraints to new hotel building in London; and suggests ways of overcoming any problems identified.	1985/86	Sponsored by BTA, ETB, British Airways, British Airports Authority. Commissioned from Horwath & Horwath (UK) Ltd.
BTA/ETB13	Cumbria Tourism Research	In support of a proposed tourism strategy for Cumbria, to conduct surveys of current visitors, the economic impact of visitor spending, tourism resources, hotel and self-catering accommodation use and tourism trends.	1985/86	Surveys commissioned from RSGB Research Surveys, DRV Research and Centre for Leisure Research.
BTA/ETB14	Bath Visitor Survey	To survey visitors in Bath during a 12 month period from June 1985.	1985/86	Commissioned from NOP Market Research and jointly sponsored with Madame Tussaud's and Bath City Council.
BTA/ETB15	Windsor Visitor Survey	To survey visitors in Windsor during the summer of 1985, to identify changes since similar survey in 1980.	1985/86	Survey commissioned from NOP Market Research.
BTA/ETB16	British Leisure Visits Survey	To evaluate the scale and nature of leisure day visiting by the British population. Leisure outside the home will be covered comprehensively throughout 1986. Both activities and spending will be surveyed and breakdowns provided for national and regional statistics, seasonal trends, and demographic data.	1986	Commissioned from Taylor Nelson Associates.

RESEARCH PUBLICATIONS 1985/86

BTA/ETB(P) 1	British Tourist Authority, English Tourist Board, Wales Tourist Board (1985), <i>British Home Tourism Survey 1984</i> .
BTA/ETB(P) 2	British Tourist Authority, <i>Tourism Intelligence Quarterly</i> .
BTA/ETB(P) 3	English Tourist Board (1985), <i>English Hotel Occupancy Survey</i> (monthly reports and annual summary).
BTA/ETB(P) 4	English Tourist Board (1985), <i>English Heritage Monitor 1985</i> .
BTA/ETB(P) 5	English Tourist Board (1985), <i>Sightseeing in 1984</i> .
BTA/ETB(P) 6	British Tourist Authority (1985), <i>Heritage and Leisure Attendances 1984</i> .
BTA/ETB(P) 7	English Tourist Board (1985), <i>Holiday Intentions Survey</i> .
BTA/ETB(P) 8	British Tourist Authority (1985), <i>Overseas Visitor Survey 1984</i> .
BTA/ETB(P) 9	British Tourist Authority (1985), <i>Survey Among Overseas Visitors to London — Summer 1984</i> .
BTA/ETB(P) 10	English Tourist Board (1985), <i>England's Tourism</i> .
BTA/ETB(P) 11	English Tourist Board (1985), <i>Regional Tourism Fact Sheets 1984</i> (twelve regional editions).
BTA/ETB(P) 12	British Tourist Authority (1985), <i>Exhibition Facilities in London — Providing for the Future</i> .
BTA/ETB(P) 13	British Tourist Authority (1985), <i>Conference and Exhibition Market Survey 1984</i> .
BTA/ETB(P) 14	British Tourist Authority (1985), <i>Employment in Tourism</i> .

Contact for enquiries: I M Rickson, Planning Research Manager, BTA/ETB Research Services, Thames Tower, Black's Road, London W6 9EL (01-846-9000 Ext 2464).

Research Programme 1986/87

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>
Recently Completed Research			
BWB1	Central Scotland Canals	To study the development potential of the Forth and Clyde Canal and the Union Canal. Four sites with potential were identified and the establishment of a Central Scotland Canals Enterprise Group to assist in the regeneration process was proposed.	Completed Joint funding with SDA and six local authorities.
BWB2	Angling Development	To assess the angling market, and the feasibility of different management options.	Completed
BWB3	Hydraulic Paddle Gearing	A survey of boaters' opinions on the BWB policy of replacing traditional 'rack and pinion' paddle gearing with hydraulic paddle gearing. Opinion was found to be evenly split between the two types.	Completed
BWB4	Boat Rallies	To study the market characteristics and reactions of visitors to BWB sponsored boating rallies.	Completed
Current Research			
BWB5	Caledonian Canal	To assess the market characteristics and reactions of visiting yachtsmen to the canal's facilities by means of a questionnaire.	1985/86
BWB6	Stoke Bruerne Museum	A survey of visitors to the museum was undertaken to collect information about visitors and their views.	1985/86
BWB7	Anderton Lift	To study the different approaches that could be used to turn the lift, an ancient monument in a state of disrepair, into a visitor attraction.	1985/86
BWB8	Kennet and Avon Canal	To prepare a waterway plan, setting out policies and proposals for leisure activities, in consultation with local authorities, The Kennet and Avon Canal Trust and other interested bodies.	1984/86
BWB9	East Midlands Cruiseway	To establish a strategy to develop the River Trent, River Soar, and Fossdyke and Witham Navigations for hire boating and power boating.	1984/86
BWB10	Boating and Angling Relationships	To investigate the relationships between boat traffic, waterway ecology and fisheries on canals.	Sept 1984/ Sept 1987 Carried out by a student at Liverpool University, funded by a CASE award and BWB sponsorship.

Tentative New Proposals

BWB11	Waterway Plans	To study the tourism potential of the London Canals and draw up plans for parts of the Grand Union Canal, Staffordshire and Worcestershire Canal and the Lancaster Canal.	On-going
BWB12	Omnibus Survey	To aid the monitoring of BWB's performance by repeating the 1984 survey to produce an estimate of the numbers using the BWB's waterways for different activities.	1986
BWB13	Hire Boats Survey	To collect information on market characteristics, expenditure and user reactions from visitors using weekly hire boats. This is an annual survey.	1986/87
BWB14	Towing Path Surveys	To survey users of BWB towing paths to collect user reactions to facilities and services, and possibly to make a detailed study of the practicality of making the Leeds and Liverpool Canal towing path into a long distance route.	1986/87
BWB15	Lock Cottage Holiday Homes	A survey of visitor's reactions and market characteristics will be undertaken.	1986/87
BWB16	Boating Strategy	To draw up a marketing strategy to promote privately owned pleasure boats on inland waterways.	1986

Contact for Enquiries: Robert Hall, Leisure Planning Officer, British Waterways Board, Penn Place, Rickmansworth WD3 1EU (0923-778231).

Research of Member Councils 1986/87

	<i>Authority</i>	<i>Project Title Summary of Objectives</i>	<i>Timescale</i>	<i>Contact Name</i>
Recently Completed Research				
COSLA1	Central RC	Regional Strategy for Interpretation. To identify main resources and co-ordinate agency involvement.	1983/85	Louise Livingstone, Planning Dept.
COSLA2	Falkirk DC	Derelict Land Survey of the Slamannan Plateau. To gauge the extent of land sterilisation caused by disused mining bings on the Slamannan Plateau area and their potential after-use.	1983/84	I Ludbrook.
COSLA3	Dumfries and Galloway RC	Loch Ken Study. A study of the problems associated with water-based recreation and other activities on the Loch and its environs.	1985	C Hartley.
COSLA4	Lothian RC	Programme of Site Surveys and Participation Monitoring. To provide information about site users, and examine how systematic information on visitors to the countryside can be collected in the longer term at the regional scale.	1983/85	Norman Ireland.
COSLA5	East Lothian DC	Programme of Site Surveys. Site surveys; household surveys in selected park catchment areas. In collaboration with CCS. Report available 1986.	1983/85	Ian Fullerton.
COSLA6	City of Edinburgh DC	Survey of Visitors. A survey of visitors in Lothian area to monitor visits to sites.	1983/85	H R O Linscer.
COSLA7	West Lothian DC	Lothian Site Surveys 1984 and 1985.	1984/85	P Sutherland.
COSLA8	Strathclyde RC	Urban Sports. Technical analysis undertaken as basis for preparatory work for regional strategy.	Completed	V Goodstadt.
COSLA9	Strathclyde RC	M80 Environmental Impact Assessment. New road through Glasgow east.	Completed	J Irvine.
COSLA10	Strathclyde RC	Forth and Clyde Canal Subject Plan. Identification and implications of reopening the canal.	Completed	J MacDougall.
COSLA11	Strathclyde RC	Loch Lomond Subject Plan. Implications of initiating Loch Lomond as a Regional park.	Completed	P Woodhead.
COSLA12	Strathclyde RC	Archaeological Guidelines. Definition and approach to significant archaeological remains.	Completed	V Goodstadt.
COSLA13	Strathclyde RC	Ecological Guidelines. Definition and approach to conservation on regionally significant ecological sites and habitats.	Completed	V Goodstadt.

COSLA14	Strathclyde RC	Urban Ecology. Survey and analysis of potential alternative uses of vacant/underused land on and around the conurbation, in particular for agriculture, forestry and ecological purposes.	Completed	V Goodstadt.
COSLA15	Argyll and Bute DC	Tourism and Marketing Surveys. Carried out by Area Tourist Boards.	1984/85	James McMillan (Rothesay ATB)/Ian Clason (Dunoon ATB).
COSLA16	Scottish Development Agency	Oban Waterfront Development. Survey Work.	1984/85	Blair Armstrong.
COSLA17	Kilmarnock DC	Rights of Way Survey.	1984/85	D Hadley.
COSLA18	Grampian DC	Natural Habitat Survey. To map semi-natural habitats of the region.	1983/85	A E Woodward.
COSLA19	Grampian DC	Forestry Grant Applications. To monitor amount, location and type of forestry grant applications.	1985	A E Woodward.
COSLA20	Midlothian DC	Off-peak Usage of Local Authority Leisure Centres. A case study.	Completed	L Denholm.
COSLA21	Midlothian DC	The Development of Tourism in Midlothian. A feasibility study.	Completed	L Denholm.
COSLA22	East Kilbride DC	Palaeoecological Survey of East Kilbride. Survey aims to establish the vegetation history from analysis of pollen in deep peat.	March 1985	District Ranger, Calderglen Country Park.

Current Research

COSLA23	Roxburgh DC	Provision of Sports Pitches. Woodside Kelso (2).	1985/86	J Inglis.
COSLA24	Falkirk DC	Visitor Survey of Annual Events Held. To determine through questionnaires/interviews: distance travelled, and visitor satisfaction to local attractions and events.	Annual	A Smith.
COSLA25	Fife RC	Development of opportunities for countryside informal recreation and education/interpretation for people with special needs.	1984 start	H Stevenson.
COSLA26	Lochaber DC	Aonach Mor Ski Development. To create winter tourist season. To create jobs and stabilize local economy.	1986/89	David Blair.
COSLA27	East Lothian DC	Monitoring Car Park Use at Longniddry Bents, Gallane Bents, Yellow Craig, John Muir Country Parks. To monitor visitors' use of the above facilities: local significance.	Continuous	Ian Fullerton.
COSLA28	Strathclyde RC	Forestry Guidelines. Identification of potential constraints upon afforestation (agriculture, water catchment, heritage, scenic, tourism/recreation).	1986	V Goodstadt.
COSLA29	Cumbernauld and Kilsyth DC	History of Land Use in and around Palacecraig Country Park.	1982/86	B R Thomson.
COSLA30	Dumbarton DC	Habitat Management. Rhododendron Control.	1984 start	S Sankey.

COSLA31	Dumbarton DC	Annual Children's Club. Content and Marketing.	1984 start	S Sankey.
COSLA32	Dumbarton DC	Touring facilities (Balloch Castle).	1985 start	S Sankey.
COSLA33	Glasgow DC	Pollock Park Visitor Survey. To provide information on levels and characteristics of visitors to Pollock Country Park; to provide comparative assessment with 1979 TRRU Survey and review management implications and marketing.		
COSLA34	Hamilton DC	Rights of Way Survey and Archival Research, Chatelherault.	1984/87	M Wooley.
COSLA35	Perth and Kinross DC	Quarrymill, Perth. Woodland Park for the disabled. In collaboration with Cannochoy Trust.	1984/87	C Kent.
COSLA36	Shetland Islands Council	Interpreting Shetland. A continuing study of requirements for interpreting facilities throughout Shetland.	Continuous	A Hamilton.
COSLA37	Shetland Islands Council	Feasibility Study for New Museum, Arts Centre, Natural History Centre and Visitor Orientation Centre. A study into the requirement for these facilities and the best means of combining them functionally and geographically. In collaboration with Shetland Amenity Trust.	1985/86	A Hamilton.
COSLA38	Grampian RC	Study of Environmentally Sensitive Areas. To identify and continuously review sites of scientific importance in the Region.	On-going	A E Woodward.
COSLA39	Grampian RC	Sites and Monuments Record. To identify and continuously review sites of archaeological importance in the Region.	On-going	I A G Shepherd.
COSLA40	Grampian RC	Balmedie Country Park.	1986	J J Raemeakers.
COSLA41	Grampian RC	Houghton House Country Park Visitor Survey. Survey aimed at improving the facilities.	1986/91	M O'Carroll.
COSLA42	Grampian RC	Haddo Country Park Visitor Survey. Survey aimed at improving the facilities.	1986/91	M O'Carroll.
COSLA43	Banff and Buchan DC	Banff and Buchan Coastal Study Survey and Recommendations. Assessment of coastal resources in terms of natural interests and tourist potential.		
New Research				
COSLA44	East Kilbride DC	Visitor Survey and Land Use Database. To develop a working pilot database suitable for use on microcomputers in Country Parks. Provisional project.	1986/87	District Ranger, Calderglen Country Park.
COSLA45	Grampian DC	Balmedie Country Park Visitor Survey aimed at improving the facilities.	1987/91	M O'Carroll.
COSLA46	Grampian RC	Management Guidelines for the Cairngorms. To produce a management plan for this outstanding natural and scenic area.	1987	T F Sprott.

COUNTRYSIDE COMMISSION

Research Programme 1986/87

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>	
Current Research				
CC1	Integrated Rural Development	To evaluate by experimental trials the application of an integrated programme of rural development in the Peak District National Park.	1981/88	Carried out by the Peak Park Joint Planning Board. Co-sponsors include DOE, MAFF, DC, NCC, FC.
CC2	New Forest Pony Premium Scheme	To help improve the overall management of the New Forest through encouraging good quality breeding stock.	1982/88	
CC3	Culm Measures	Potential integration of farming and forestry in a difficult area of SW England.	1986	Co-sponsored with FC, MAFF, NERC, EEC.
CC4	Cornish Heritage Coast Project	To develop countryside management techniques on heritage coasts in Cornwall.	1986/87	
CC5	Assessment of High Grade Limestone Sources in Northern England	Preliminary study to identify gaps in the known data on the occurrence of high grade carboniferous limestone.	1986/87	
CC6	Landscape Assessment	To investigate existing methods and approaches to landscape assessment and to develop a method of landscape description and assessment for Countryside Commission use.	1986/87	
CC7	Land Occupancy and Landscape Change	To investigate the claim that changes in land tenures, ownership and management regimes on farms are key causes of landscape change.	1985/87	Co-sponsored with ESRC.
CC8	Rural Data Base	To gather information and data relevant to rural change.	1986/87	Information includes: Human population, Agriculture, Natural environment.
CC9	Project Silvanus: Small Woods in SW	A project to combine environmental conservation with development of wood industries, forestry employment, and alternative sources of income to farmers.	1986/89	Being carried out by Dartington Institute.
CC10	Riparian Landscapes	To evaluate landscape, wildlife and recreation consequences of river improvement by Water Authorities.	1986/87	
CC11	Demonstration Farms Programme Phase IV	To promote advice and technical knowledge on all aspects of practical landscape conservation to farming interests via a demonstration farms programme on 10 farms.	Continuing	Co-sponsored with FC, MAFF and NCC.
CC12	Management of Uncropped Farmland	An examination of means of conserving features of wildlife and landscape interest without jeopardising agricultural output.	1985/87	Being carried out by the Weed Research Organisation.

CC13	Monitoring and Evaluation of Operation Groundwork	Monitoring the work of the project and evaluating the effectiveness of Groundwork in achieving its objectives focusing mainly on Operation Groundwork.	1984/87	
CC14	Promotion of Canal Towpaths for Recreation	To test the potential of canal towpaths for recreation and access on the Leeds, Liverpool and Brecon Monmouth canals.	1984/87	Co-sponsored with the BWB.
CC15	Monitoring Part III of the Wildlife and Countryside Act	To measure changes in rights of way and definitive maps following the new provisions of the Act.	1984/86	To be carried out by the Ramblers' Association.
CC16	Recreation Trends	Up-to-date information on countryside visiting to be obtained by repeat of some questions from 1984 survey.	1985/87	
CC17	Wales Countryside Forum Access Project	Projects in Wales to demonstrate how access arrangements might be improved and disputes resolved.	1985/87	
CC18	Catalogues of Common Land	A study of Common Land Registers to establish ownership and location, also the management of common land and its landscape and agricultural status.	1985/86	
CC19	Recreation and the Disadvantaged	To devise policies to enable the disadvantaged to enjoy recreation provision.	1985/87	Co-sponsored with Notts County Council.
CC20	Conservation Attitude Research	Information on public attitudes to landscape conservation. Questions to be added to British Social Attitudes Survey.	1985/87	
CC21	Recreation Market Research	To establish public reaction to the facilities which have been provided since the 1968 Countryside Act and future trends.	1985/87	A series of studies using consultants.
Committed New Research				
CC22	Impact of On-shore Oil Development on the Landscape	To highlight solutions to the problems of onshore oil exploration, and to contribute to the formation of a coherent policy.	1986/87	Co-sponsored with CoEnCo.
CC23	The Retention of Water Meadows	To assess the financial and management implications and the possibility of financial assistance towards their purchase.	1986/87	
CC24	Demonstration Woods Phase III	To identify, describe and present information for woodland owners on examples of good management.		Joint project with NCC.
CC25	Monitoring Landscape Change — Surveys of Specialist Areas	To assess the results of MLC on a national level.	1986/87	
CC26	Section 43 Maps of Moor and Heath Feasibility Study	To be carried out under remit of Wildlife and Countryside Act.	1986/87	
CC27	Coed Cymru Campaign Welsh Woods Campaign	To investigate markets for small woods produce.	1986/87	
CC28	Thames LDR Market Research	To investigate how the path will be used and how it should be promoted and managed.	1986/88	Linked with BWB canals project.

CC29	Commons Management Suffolk	To improve conservation and recreation management of common land in Suffolk through appointment of a 'Commons Officer'.	1986/88	
CC30	Farm Recreation Advice Project	To promote the use of farmland for informal countryside recreation using a project officer.	1986/88	CLA, Notts County Council and CC to cooperate in managing the project.
CC31	Rights of Way Surveys	To assist development of Commission's access policies by surveys of use and condition of rights of way network.	1986/87	
CC32	Access Land on OS Maps	To establish means of collecting data on open land where the public has a right of access.	1987/88	
CC33	Local Authority Resources	A survey of local authorities' staffing, organisation and budgets for access and recreation work.	1986/87	This project is to support the Recreation Policy Review.
CC34	Recreation Services	To survey the existing range, funding and development potential of recreation services, such as public transport, guided walks etc.	1986/87	This project is to support the Recreation Policy Review.
CC35	On-Farm Recreation Market Research	A study of the potential for on-farm recreation and tourism identifying likely projects, their cost, potential demand and income. The information will assist the farm recreation advice project (CC30).	1986/87	This project is to support the Recreation Policy Review.
CC36	Other Recreation Providers	A survey of countryside facilities provided by FC, WA, other public agencies and commercial organisations, their existing approach to recreation and constraints under which they operate.	1986/87	This project is to support the Recreation Policy Review.
CC37	Recreation Consequences of Agricultural Change	To consider recreation possibilities and consequences for farmers and agricultural policy of new uses for agricultural land.	1986/87	This project is to support the Recreation Policy Review.
CC38	Countryside Staff	To produce an inventory of countryside staff and a description of their terms of service and training needs as information for Countryside Commission Working Party on training of countryside staff.	1986/87	
CC39	Interpretation Advice	To provide, in conjunction with the Centre for Environmental Interpretation, a countryside interpretative advisory service.	Continuing	
CC40	Community Action Projects	To promote community action projects for conservation and recreation in the countryside.	1986/88	

Tentative Projects for 1986/87

CC41	Review of Countryside Management Projects	To assess the value of project officer and countryside adviser posts which are currently grant aided by the Countryside Commission.		
CC42	Landscape Assessment of River Valleys	To develop a methodology to assess the landscape value of rivers and the valleys through which they flow.		

CC43	Public Administration of Integrated Rural Development	To investigate the various ways in which existing or new forms of administration might more successfully integrate existing sectoral policies.	1986	
CC44	Feasibility Study on the Extension of Integrated Rural Development in EEC Countries	Assessing the feasibility of setting up practical projects in several member states, which demonstrate ways of reconciling agricultural, environmental and other policy objectives.	1986	CC contracted by the BEC.

RESEARCH PUBLICATIONS 1985/86

- CC(P) 1 Daniels, J L (1985), *Cannock Chase 1979-84: A country park plan on trial*, CCP 181.
- CC(P) 2 Daniels, J L (1985), *Cannock Chase Technical Report 1: Repairing eroded hillslopes around the honeypot car park*, CCP 182.
- CC(P) 3 Daniels, J L (1985), *Cannock Chase Technical Report 2: Heathland management trials at Brindley Heath*, CCP 183.
- CC(P) 4 Daniels, J L (1985), *Cannock Chase Technical Report 3: Encouraging visitor redistribution*, CCP 184.
- CC(P) 5 Daniels, J L (1985), *Cannock Chase Technical Report 4: Restoring vegetation at informal car parks*, CCP 185.
- CC(P) 6 Cairns, Catherine (1985), *Bridleway management*, CCP 189.
- CC(P) 7 Centre for Environmental Interpretation (1985), *Interpreting the heritage of the Settle-Carlisle railway line*, CCP 192.
- CC(P) 8 *The Wayfarer Project* (1985), CCP 193.
- CC(P) 9 East Sussex County Council (1985), *A step in the right direction — the marketing of circular walks*, CCP 195.
- CC(P) 10 Land Use Consultants (1985), *Management schemes for Commons*, CCP 197.
- CC(P) 11 *National Countryside Recreation Survey* (1985), CCP 201.
- CC(P) 12 Ramblers' Association (1985), *Rights of way legislation: 1st monitoring report*, CCP 202.
- CC(P) 13 Peak District (1985), *Camping Barns in the Peak District*, CCP 203.

Contact for Enquiries: Jeremy Worth, Recreation and Access Branch, The Countryside Commission, Crescent Place, Cheltenham GL50 3RA (0242-521381).

Research Programme 1986/87

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>	
Current and Recently Completed Research				
CCS1	Programme of Recreation Surveys in Lothian Region	Overview and final report.	1986	Final stage of a co-ordinated programme of recreation surveys, which is co-sponsored with Lothian RC and East Lothian, Midlothian and West Lothian DCs. Contracted to Anderson Semens Houston.
CCS2	Survey of West Highland Way	Survey of the use of this LDR and of the economic benefits arising therefrom.	1986	Contracted to the Centre for Leisure Research.
CCS3	GHS Analysis	Analysis of the 1983 General Household Survey leisure data.	1986	Co-sponsored with the SSC and contracted to the Henley Centre for Forecasting.
CCS4	Inventory of Gardens and Designed Landscapes	To compile a descriptive inventory of the main gardens and designed landscapes in Scotland.	1985/7	Co-sponsored with the Historic Buildings and Monuments Directorate of SDD. Contracted to Land Use Consultants.
CCS5	Footpath Management Project	To develop experience in and advice for the management of upland footpaths.	1984/6	R Aitken contracted to mount a programme of trials and associated studies.
CCS6	Advice on Drainage	To provide practical advice on drainage for recreational sites and footpaths.	1985/6	Contracted to the West of Scotland College of Agriculture.
CCS7	Plants and Planting Methods for the Countryside	To collate and publish advice in information sheet format for planting and other resource management techniques for amenity and recreation provision.	On-going	Continuing in-house with contributions from external advisers. Current work includes sheets on tree shelters, hedges and hedgerow trees and roadside planting.
CCS8	A Study of Planting under the Central Scotland Woodlands Project	To review the effectiveness of planting under the project and the attitudes of involved farmers to tree planting.	1986	Contracted to V Halhead.
CCS9	Highland Perthshire Interpretation	To prepare an interpretive plan for the area of the Highland Perthshire Initiative.	1986	Contribution to a study sponsored by the Highland Perthshire Development Company and others. Contracted to Ian White Associates.
CCS10	Clyde-Calders Urban fringe Project	Urban fringe project to develop methods of ameliorating landscape problems and to improve recreation opportunities in an area on the east side of the Glasgow conurbation.	1984/6	Co-sponsored with Strathclyde RC, in association with the City of Glasgow, Hamilton, Motherwell and Monklands DCs.
CCS11	Landscape and Wildlife Conservation on Agricultural Land	To prepare summary advice based on the two previous stages of farm survey.	Completed	Follows on from two previous studies of farms in east Scotland. Contracted to Cobham Resource Consultants. Co-sponsored with East of Scotland College of Agriculture and the NCC.

CCS12	Survey of Pollok Park, Glasgow	Survey of park visitors updating 1979 survey and following opening of gallery for the Burrell collection in the park.	1985/8	Contribution to a study sponsored by the City of Glasgow DC. Contracted to Anderson Semens Houston.
CCS13	Monitoring Change in the Countryside	Survey of recent change to land cover and other attributes contributing to the appearance of the countryside.	1986/8	The commission is jointly sponsoring with NCC the implementation in Scotland of the Council's National countryside Monitoring scheme.
CCS14	Design and Environmental Management in Ski Areas	To review existing and recommend improved approaches to environmental design and management for ski development in upland areas.	1985/6	Contracted to Anderson Semens Houston and co-sponsored with Highland RC.
CCS15	Landscape Conservation in National Scenic Areas	Development project to resolve landscape issues arising from changing land use in the Glen Lyon and Rannoch National Scenic Area.	1985/6	Stage 1 review now complete and proposals for a second stage, to prepare a landscape conservation strategy for the area, are being prepared.
CCS16	Review of Countryside Around Towns in Scotland	Study to review changing issues and action in the countryside around towns since the previous review in 1975.	1985/6	Contracted to Dartington Institute. Final report due in spring 1986.
CCS17	Fiscal Incentives for Woodland Conservation	Review of existing fiscal incentives for woodland management and establishment.	Completed	Jointly with NCC and the CC.
CCS18	The Voluntary Sector and MSC in Countryside Provision	To review the contribution of the voluntary sector and MSC funding towards conservation and recreation provision in the Scottish countryside.	1985/6	Contracted to the Centre for Leisure Research. Completion in summer 1986.

New Proposals

CCS19	Environmental Impact of Farms	Review of and recommendations for landscape and recreational issues arising from fish farming.	1986	Proposed study to follow on from existing work on the marine biological impacts of fish farming.
CCS20	Landscape Setting of Buildings	To develop design advice in respect of site and setting of buildings in the landscape.	1986 start	Detailed proposal to be decided.
CCS21	Countryside Around Towns	It is expected that the current review of research opportunities in the countryside around towns will generate new R & D work in this field.		No firm proposals at present.

RESEARCH PUBLICATIONS 1985/86

CCS(P) 1	<i>The Southern Upland Way: Report of a Survey of Walkers in the Summer of 1984</i> (1985), Anderson Semens Houston, Glasgow, for the Commission.
CCS(P) 2	<i>Visits to the Countryside and Coast in Lothian Region: Report No 1 Longniddry and Gullane; Report No 2 The North Pentlands; Report No 3 Roslin Glen and Vogrie Country Park; Report No 4 Beecraigs Country Park</i> (1985-6), Anderson Semens Houston, Glasgow, for the Commission.
CCS(P) 3	<i>Countryside Conservation: A Guide for Farmers</i> (1986), The Commission, Perth.
CCS(P) 4	<i>Lochshore Management</i> (1986), The Commission, Perth.
CCS(P) 5	*Clyde-Calders Urban Fringe Management Project (1985), <i>Second Annual Report</i> , Strathclyde Regional Council, Glasgow.

*Available in limited numbers only.

Contact for enquiries: John W Mackay Esq, Countryside Commission for Scotland, Battleby, Redgorton, Perth PH1 3EW (0738-27921).

Research Programme 1986/87

The Department's overall programme of research into rural and countryside-related issues is extensive. However comparatively few of these projects are directly centred on recreation. The main contracts concerned are listed below, together with some examples of work of wider application covered in the programme which have implications for the countryside 'backdrop' to recreation activities.

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>	
Recently Completed Research				
DOE1	Effects of Flow Regime on the Recruitment of Young Stages of Salmonid Fishes	To study the major factors of river flow concerning young stages of salmonids (egg-laying to swim-up fry) in the context of changes of regime brought about by river regulations.	Phase I 1977/81 Phase II 1981/85	Carried out by the Fresh-water Biological Association. Should suggest method to minimise damage and/or maximise benefit. Co-sponsored with MAFF, WRC, NERC Science Vote, WA assistance in kind.
DOE2	Cladophora (Blanket Weed) in Rivers: Factors Causing Excessive Growth.	To study the factors to provide knowledge to limit growth.	1983/85	Carried out by Mid Kent College with assistance in kind from Southern WA.
DOE3	Future of Rural Common Land	To examine the conditions and use of rural common land in different parts of the country, its agricultural and recreational potential and the means by which conflicts between the two can be minimised.	1983/85	Carried out by Rural Planning Services.
DOE4	Low Maintenance Amenity Grassland	To examine cultivars and growth retardants most suitable for grassed areas where there is a need to reduce mowing and maintenance costs.	1983/86	Carried out by Sports Turf Research Institute.
DOE5	Making the Most of Greenspace	To examine methods for reducing the maintenance costs of new landscapes created through CC Operation Groundwork and to develop a practical manual for use by local authorities and landscape managers.	1984/86	Carried out by Groundwork Trust, St Helens.
DOE6	European Habitat and Landscape Issues	To assess existing and possible future government policies and attitudes in EC countries concerning agriculture and its effects on habitat and landscape. Related to this, the nature of environmental pressure groups and the issues they promote.	1985/86	Carried out by Cobham Resource Consultants Ltd and the Institute for European Environmental Policy.
DOE7	National Remote Sensing Centre	Joint studies with Forestry Commission into providing woodland statistics.	1983/86	Centre set up by DOI in 1978 with co-sponsorship from other Government Departments.
Current Research				
DOE8	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.	1981/88	Carried out by the Peak Park Joint Planning Board. Co-sponsors include MAFF, CC, DC, NCC, FC.
DOE9	Rural Analysis of Census Data	To produce an up-to-date definition of urban and rural areas and re-analyse 1981 Census small area statistics accordingly, to show changes in rural areas since 1971.	1983/86	Carried out by Joint Unit for Research on the Urban Environment (JURUE), University of Ashton.

DOE10	Monitoring Landscape Change	To provide reliable information on rates of change in countryside features on a continuing basis.	1984/86	Co-sponsored with CC. Carried out by Hunting Technical Services.
DOE11	Countryside Implications of Possible Changes in the Common Agricultural Policy.	To assess the main options for reform of the CAP, the probable response of farmers in England and Wales and the effects on employment, wildlife conservation and landscape.	1985/86	Co-sponsored with DC and undertaken by Centre for Agricultural Studies, University of Reading.
DOE12	Rural Data Archive	To establish a Rural Data Bank which will collect, hold and disseminate machine-readable rural data on population, agriculture and environment.	1986/88	Being carried out by the ESRC; co-sponsored with DC, CC, MAFF, FC, NCC. The project is expected to be self-financing after 3 years.
DOE13	Effect of Nitrogen Fertiliser on Natural Grassland on West Sedgemoor	To determine the effect of nitrogen fertiliser on species composition of natural grassland on West Sedgemoor and to measure agricultural production.	1986/90	Being undertaken by Animal Grassland Research Institute. Co-sponsored with MAFF and NCC.
DOE14	Aboricultural Research	To improve methods of producing, establishing and managing amenity trees; to improve measures aimed at the prevention and control of tree decay and disease; and to provide an aboriculture advisory and information service.	1984/87	Co-sponsored with FC. Carried out at FC Research Station, Alice Holt, Farnham, Surrey.
DOE15	Assessment of Environmental Education Techniques	To investigate the use and effectiveness of environmental education techniques.	1984/86	Being carried out by the Council for Environmental Education.
DOE16	Survey of Visitors to the National Garden Festival 1986 — Stoke-on-Trent	To provide information about the types of visitors attracted to the Festival and to help assess the initiative.	1986/87	Being undertaken by NOP Market Research Ltd.
DOE17	Evaluation of the Derelict Land Grant Programme	To identify and assess the benefits and disbenefits of various types of project funded under the DLG programme.	1985/86	Being undertaken by Roger Tym & Partners.
DOE18	Leisure Statistics (GHS)	To provide, through the insertion of questions in the GHS on a three-yearly basis, a wide range of statistics on participation in leisure and countryside activities.	1986	OPCS.
DOE19	Environmental Standards for Freshwater Fish & Life	To provide information as to toxicity of various fish and invertebrates in connection with EC Directives.	1981/87	Being carried out by WRC Marlow.
DOE20	Analysis of Natural River Communities	To establish natural groupings of invertebrates in unpolluted rivers in relation to physical and chemical parameters.	Phase I 1979/81 Phase II 1981/84 Phase III 1985/87	Being carried out by Freshwater Biological Association. Phase II tests, extends and refines Phase I classification. Co-sponsored with NERC Science Vote. Assistance in kind WAS. Phase III will be production of a user manual.
DOE21	Water Resource Implications of Upland Management	To investigate change in water runoff resulting from afforestation, deforestation and conversion of bracken etc to pasture.	1981/87	Being carried out in Scotland by Institute of Hydrology. Co-sponsored with SDD, WRC, NSHEB, DEN, FC, BWB and NERC Science Vote. Local authority assistance in kind.

DOE22	Upland Management with Special Reference to Forestry and Water Quality.	To monitor changes in water quality resulting from extensive clear felling and re-afforestation expected in the next 30-50 years.	1981/88	Being carried out at a number of sites in England and Wales by Freshwater Biological Association, Windermere with input from Institute of Hydrology and ITE. Co-sponsored with Welsh Office (for work in Wales) and NERC Science Vote.
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Provisionally Committed New Research

DOE23	Mineral Workings and Amenity Restoration	To collate and evaluate existing information in order to provide appropriate guidance on requirements on initial restoration and subsequent aftercare where mineral workings are reclaimed for amenity use.	1986/87	Contractor to be decided. Relates to provisions in Town and Country (Minerals) Act 1981 for aftercare of workings.
DOE24	Cost-effective Management of Reclaimed Derelict Sites	To identify the methods of derelict land reclamation which lead to the most cost-effective maintenance of sites for a range of specific 'soft' after-uses.	1986/87	Contractor to be decided.
DOE25	Mineral Working in National Parks: Pilot Study	To gather information on, and evaluate the effects of, mineral working in and adjacent to National Parks and Areas of Outstanding Natural Beauty, and to assess likely trends and conflicts.	1986/87	Contractor to be decided.
DOE26	River Water Quality	Influences on phytoplankton development; implications of water cress cultivation.	1986/87	NERC/Freshwater Biological Association.
DOE27	River Corridors	Methodology for assessment of conservation value.	1986/87	Contractor to be decided.
DOE28	Alternative Support Systems for Rural Areas	To utilise the lessons learnt in the integrated Rural Development Programme, to suggest alternative systems of public support for rural areas.	1986/89	Contractor to be decided.
DOE29	Integrated Development of Land Resources	To build on existing modelling techniques; aim is to explore the interface between environmental factors and the economics of marginal agriculture/forestry.	1986/88	Being undertaken by Dartington Institute. Co-sponsored with MAFF, NERC and NCC.
DOE30	Pattern Analysis of Habitats and Landscape	To develop guidelines for land management, to build on previous work highlighting the relationship of size and fragmentation of wildlife habitats to preservation of diverse species populations.	1986/89	Contract under consideration.
DOE31	Recreation and Nature Conservation	To examine particularly disturbance and damage to wildlife.	1986/87	Contractor to be decided.
DOE32	Remote Sensing Techniques for Rural Land Classification	To examine patterns of landscape and how these might be used to analyse existing databases on habitats/landscape features distribution.	1986/88	Programme administered by National Space Agency.
DOE33	Co-ordinated Management Techniques for Small Woodlands	To monitor a project combining environmental conservation with development of wood industries, forestry employment and alternative source of income to farmers.	1986/89	Co-sponsored with CC, MAFF, FC, NCC, DC. Dartington Institute carrying out preparatory work.

RESEARCH PUBLICATIONS 1985/86

DOE(P) 1	<i>Survey of Visitors to the Liverpool Garden Festival (1985)</i> , Published in 3 volumes by NOP Market Research Ltd.			
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Contact for Enquiries: David Holgate-Pollard, Directorate of Rural Affairs, Department of the Environment, Room 11/03, Tollgate House, Houlton Street, Bristol BS2 9DJ (0272-218003).

Research Programme 1986/87

The restriction of funds available for recreation development by the Forestry Commission has continued to curtail the amount of recreation research being undertaken for the present. The amount of research has also been constrained by a shortage of staff time, but this will be alleviated. However, some additional funds for nature conservation research have been allocated.

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>
Current Research			
1. Recreation			
FC1	Development of the Orienteering Map for Wayfaring	To revise the wayfaring map to improve comprehension by the public and revise techniques for course layout.	1981/86 In-house at FC, Edinburgh, project nearing completion.
FC2	Midge Control in and around Recreation Facilities	To investigate what effective control measures (if any) of the main biting species of midge are possible at campsites and cabins.	1982/86 Co-sponsored with NERC, carried out at the Dept of Zoology, University of Edinburgh. Interim Report received 1985 and being evaluated.
FC3	The Effectiveness of Interpretive Programme Based on Visitor Centres	To enable visitor centre managers to monitor the effectiveness of existing interpretive programmes.	To mid 1983 Carried out at the Dept of Psychology, University of Surrey. Publication during 1986/87.
FC4	Bicycle Routes in Scottish Forests	To identify forest roads and tracks which may be suitable for development as Bicycle Routes or Trails.	1984/86 Carried out by Scottish Railway Path and Cycle Route Project. Report received 1985 and being evaluated.
2. Nature Conservation			
FC5	Wildlife Survey Newborough Forest	Survey of forest of high biological interest especially for sand dune flora and avifauna.	1985/86 ITE contract.
FC6	Blackgame	To identify reasons for decline in Blackgame population in Wales.	1985/86 Contract with RSPB.
3. Silviculture			
FC7	Forestry Census of Trees and Woodlands	To enumerate trees and woodlands over the whole of Great Britain.	To mid 1983 In-house at FC, Edinburgh. County summaries should be completed in early 1985. Aim is to publish main report during 1986.
4. Arboriculture			
FC8	Arboricultural Research	To continue a variety of research projects into tree establishment and tree decay to aid the DOE Arboricultural Advisory and Information Service.	1983/86 Co-sponsored with DOE. Carried out in-house at FC Research Station, Alice Holt, Farnham, Surrey.
Tentative New Projects			
1. Recreation			
FC9	Forest Recreation Survey Questions for Inclusion in 1987 GHS	Monitoring/survey of facilities, natural resources, countryside recreation sites/routes.	To ascertain numbers of visitors to GB forests and woodlands and preferences for recreation facilities.
FC10	Use of Computer Techniques in Forest Design.	To assess the applicability of computer techniques to forest design in GB.	In-house with advice from specialist consultants.

FC11	Forest Interpretation by Artists	To interpret the forest to the public from an artist's point of view.	1984/86
FC12	Public Preferences for Broadleaves and Conifers	To identify the aesthetic qualities of broadleaves and conifers and to assess public preferences for these species in ornamental and industrial use.	Outside consultants will be used.
2. Nature Conservation			
FC13	Goosander Breeding on Forest Water Systems	To investigate goosander breeding biology and adult turnover rate on water areas at Kielder Forest by using nestboxes.	Northern FC Research Station.
FC14	Habitat Protection of Northern Wading Birds	To identify means to protect the habitat of northern wading birds in relation to predation from forest margins in Sutherland and Caithness.	Joint FC and others.
FC15	Woodlark and Nightjar Habitat Requirements	To identify the factors required to stimulate breeding of woodlarks/nightjars in major production forest (Thetford).	Joint FC and others.
FC16	Habitat Requirements of Bats in Forests	To study the habitat and food requirements of bats in forests with reference to management treatments required to sustain/improve the environment for this species.	Joint FC and others.
FC17	Red Squirrel Habitat Requirements	To review existing research to identify further work required to clarify habitat issues.	Contract.
FC18	Fly Orchid Habitat Requirements	To study the habitat requirements for fly orchids in woodland and management systems to encourage this species.	
FC19	The Ecology of Upland Forest	To study the ecology of an upland forest, its value and wildlife habitat requirements.	FC/NCC.
FC20	The Effect of Conifers on Broad-leaved Sites	To study the ecological effects of conifers grown on broadleaved sites.	FC/NCC.

RESEARCH PUBLICATIONS 1985/86

No recreation publications were issued in this period. Details of all Forestry Commission research published in 1985/86 will be contained in Forestry Commission Report on Forest Research 1985 HMSO, London.

A selection of other publications of environmental interests are shown.

FC(P) 1	<i>Technology Transfer in Forestry</i> , FC Bulletin No 61, £6.50.
FC(P) 2	<i>Silviculture of broadleaved woodland</i> , FC Bulletin No 62, £9.50.
FC(P) 3	<i>Know your Conifers (Revised 1985)</i> , FC Booklet No 15, £2.95.
FC(P) 4	<i>Know your Broadleaves (Revised 1985)</i> , FC Booklet No 20, £3.95.
FC(P) 5	<i>Coppice</i> , FC Leaflet No 83, £1.75.
FC(P) 6	<i>Guide to Upland Restocking Practice</i> , FC Leaflet No 84, £2.30.
FC(P) 7	<i>Site Characteristics and Population Dynamics of Lepidopteran and Hymenopteran Forest Pests (IUFRO Symposium 1980)</i> , FC Research & Development Paper 135, £6.00.
FC(P) 8	<i>Tree Planting in Colliery Spoils</i> , FC Research & Development Paper 136, 50p.
FC(P) 9	<i>Mammal/Bird Damage Questionnaire 1983</i> , FC Research & Development Paper 137, £5.50.
FC(P) 10	<i>The Policy for Broadleaved Woodlands</i> , Policy and Procedure Paper No 5, Free.
FC(P) 11	<i>Native Pinewood Grants</i> , Free.
FC(P) 12	<i>Managing Farm Woodlands</i> , Free.

Contact for Enquiries: Duncan Campbell, Head of Environment Branch, Forestry Commission, 231 Corstorphine Road, Edinburgh EH12 7AT (031-334-0303).

Detailed information on all woodland and arboricultural projects is available from the Principal Research Communications Officer at FC Research Station, Alice Holt. Arboriculture research notes are issued as part of the DOE's Arboricultural Advisory and Information Service.

**HISTORIC BUILDINGS AND MONUMENTS COMMISSION FOR ENGLAND
AND WALES (ENGLISH HERITAGE)**

Research Programme 1986/87

<i>Project Title</i>	<i>Objectives</i>	<i>Timescale</i>	<i>Comments</i>
EH1 Historic Buildings Survey	Public Attitude Survey of certain Properties in Care.	Nov 1984	Internal.
EH2 Stonehenge Study Group Report	To consider options for preservation and presentation.	Jan 1985	Published.
EH3 Maiden Castle Visitor Centre Consultative Document	To consider options for preservation and presentation.	1985	Published.
EH4 Buildings at Risk	To find new uses for redundant or neglected historic buildings and to create an awareness of using historic buildings as a resource.	Annual	Campaign highlighted in 1987 Buildings at Risk Year.
EH5 Register of Parks and Gardens of Special Historic Interest in England	County by county register, imposing no new statutory controls, compiled under the provisions of the National Heritage Act 1983.	1987	Carried out in co-operation with the Garden History Society, National Trust and the Centre for the Conservation of Historic Parks and Gardens, University of York.
EH6 Pilot Study into the Computerisation of Historic Buildings Records	Study based on six district council areas in Oxon, Warwicks and Northants, to establish user requirements and range of costs for machine-based records of statutorily protected historic buildings.	Nov 1986	With Local Planning Authorities.
EH7 Survey of Listed Historic Buildings and Scheduled Ancient Monuments in BWWB Ownership	Survey to give an adequate basis for the management strategy for the protected structures on the waterway system in England.	1986 start	Joint EH/BWB post.
EH8 Conservation in Action: Chester's Bridgegate	Study of the regeneration of a run-down historic area by a concentration of relatively small grant-aided projects over a period of 8 years.	1982	Published.
EH9 The Economics of Historic Country Houses	Explores the problems of upkeep and opening, the income received, taxation and grants, alternative uses etc.	1981	Published.
EH10 Historic Buildings and Legislation	Appraises the whole range of legislation affecting historic buildings, in particular the Building Regulations (now in revised form) and fire requirements. The report includes a number of case studies.	1986	In Press.
EH11 Emergency Repairs for Historic Buildings	The first study of emergency repairs to be undertaken in this country. The report discusses their value in saving buildings and halting deterioration whilst new uses are found. The technical aspects are considered and case studies provided.		In progress.

EH12	Conservation in Action: Chesterfield's Market Area	Companion to the Bridgegate study, but covering a different approach, one based on a single major investment as a means of raising land values and so providing a basis for positive management action.	1986	
EH13	Staffing for Urban Conservation	The study examines every aspect of the work of Conservation Officers in local authorities, their status, professional background, training etc.		In progress.
EH14	Keeping the Character of Our Old Towns	Intended to help local authorities, developers and all concerned with the problem of preserving the character of old towns.		In progress.
EH15	Planning and Management of Conservation Areas	Considers conservation in relation to urban change and urban regeneration. A number of towns are examined in detail. The report will lay stress on integrated approaches and provide examples. It provides an overview of conservation practice in towns.		In progress.
EH16	Inventory of Conservation Areas	A 'telephone directory' of conservation areas with basic details as to location, relationship to the settlement in which they occur, land uses, special features etc. Details are given where located in a National Park or AONB.		Complete to April 1981, now being updated.
EH17	England's Archaeological Resource	A rapid quantification of the national archaeological resource and a comparison with the schedule of ancient monuments.	1984	Published.
EH18	Stonehenge Environs	A study of preservation and management policy for a specific landscape.	1984	Internal; further study being done.
EH19	Salisbury Plain Working Party Project	The identification and analysis of the historic landscape, to assist the management of the MOD estate, using new computer techniques.		In progress; some results in 1986.
EH20	Ancient Monuments in the Countryside	Project to document the archaeological heritage in the countryside, the legislation covering its protection and exploitation, and the issues currently facing its proper management.		

Contact for Enquiries: W Startin, Room 341, Fortress House, Saville Row, London W1X 2HE (01-734-6010 ext 388).

Research Programme 1986/87

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>
Current Research			
MAFF1	Potential Integration of Farming and Forestry in a Difficult Area of SW England	1986	Co-sponsored with FC, CC, NERC and EEC.
MAFF2	Environmental Issues, and Agriculture and Forestry Land Use Options	To 1988	Co-sponsored with DOE, NERC and NCC.
MAFF3	Future Land Use in the UK	To 1988	Undertaken at Cambridge University.
MAFF4	Project Silvanus	To 1989	Co-sponsored with CC, DOE, DC, FC and NCC.
MAFF5	ESRC Rural Data Bank	To 1988	Co-sponsored with DOE, DC and ESRC.
MAFF6	Peri-urban Agriculture	To 1990	
MAFF7	Operation Groundwork Project-Agricultural Survey	1986	Operation Groundwork sponsored by CC. Full-time MAFF adviser reporting to Farming Advisory Group of Groundwork Trust.
MAFF8	Farm Conflicts and Display Monitoring	To 1987	Related to Operation Groundwork project.
MAFF9	Historic Farm Buildings Study	1986	
MAFF10	The Costs to Farmers of Meeting Planning Conditions on Farm Buildings in National Parks	1986	
MAFF11	Heather Moorland Change on Exmoor	1986	
MAFF12	Integrated Moorland Management Programme, North Yorkshire Moors	To 1990	Joint project with North Yorkshire Moors National Park, and North of England Grouse Research Project.
MAFF13	Integrated Rural Development Project—Peak Park	1981/88	Carried out by the Peak Park Joint Planning Board. Co-sponsors include DOE, CC, DC, NCC, FC.

MAFF14	Application of Remote Sensing Techniques to Less Favoured Areas	To evaluate the role of satellite imagery in providing information for the integration of resource management strategies in Less Favoured Areas.	To 1988	Joint Project with ITE, NCC, FC, SSEW, DOE, CC, WOAD and various University departments.
MAFF15	Use of Colour Infra-red Aerial Photography in MAFF Hill and Upland Classification	To assess the usefulness of colour infra-red photography of Dartmoor National Park in assigning categories of land to MAFF Hill and Upland Classification.		
MAFF16	Evaluation of Simulated SPOT Satellite Data for Monitoring Land Use Change	To evaluate type and usefulness of data becoming available from SPOT in terms of spatial resolution and spatial characteristics and to evaluate the application of this data for land use monitoring purposes.	1986	
MAFF17	Conservation Checklist	To develop a conservation checklist to enable ADAS officers to identify semi-natural habitats on farms with possible conservation value.	1986	
MAFF18	Landscape Treatment of Existing Hill Farm Roads	To investigate the effectiveness of different forms of hedgerow planting and embankments in reducing the visual impact of hill farm roads.	To 1986	
MAFF19	Interpretation of Existing Legislation on the Management of Hedgerows and its Effects on Conservation Interests	To consider how SI1473 is interpreted with regard to condition of hedges and their conservation value upon completion of agricultural tenancies.	1986	
MAFF20	Hedgerow Treatment and Conservation Project on a Wiltshire Estate	To research and monitor different types of treatment on overgrown hedges and examine growth and response of different species of newly planted trees in varying ground conditions.	1986	
MAFF21	Hedgerow Management and Layering Trial	To monitor different systems of layering derelict and gappy hedges to assess improvement in stock-proofing and wildlife habitat.	To 1995	
MAFF22	Hedge Management and Shaping Trial	To monitor the various methods of mechanically trimming hedges to different shapes together with the effects on wildlife.	To 1995	
MAFF23	Hedge and Bank Maintenance	To examine various methods and materials for repairing banks on Exmoor.	To 1987	
MAFF24	Hedge Treatments in the Cotswolds	To compare two methods of hedge laying for effectiveness for stock-proofing and wildlife.		
MAFF25	Use of Surface Mulches for Hedge Establishment on Opencast Coal Sites	To compare weed control methods on newly planted hedges on restored opencast coal sites.	To 1989	
MAFF26	Shelter Belt Establishment Using Trees of 2 m Height	To determine whether a smaller number of larger trees can be established for a reasonable cost with minimal after-care in Less Favoured Areas.	To 1988	
MAFF27	Coppice Management of Lancashire Woodland for Environmental Conservation	To improve present levels of management in some woodland areas for farm income and employment generation.	To 2000	

MAFF28	Tree Guard Trial	To monitor different systems of protecting specimen/individual trees and demonstrate the different types of tree guard.	To 1992	
MAFF29	Tree Protection Techniques	To assess the advantages/disadvantages of using plastic tree guards on a large scale.	To 1987	
MAFF30	Drainage Improvement and Wetland Conservation	To determine if the integrity of a small wetland community can be maintained in close proximity to agricultural land subject to drainage and other improvements.	To 1988	
MAFF31	Effect of Arable Water Regime on an SSSI	To monitor the future water regime of a recently drained site which attempts to improve agricultural productivity whilst preserving a SSSI.	1986	
MAFF32	Effect of Nitrogen Fertiliser on Natural Grassland on West Sedgemoor	To determine the effect of nitrogen fertiliser on species composition of natural grassland on West Sedgemoor and to measure agricultural production.	To 1990	Co-sponsored with DOE and NCC.
MAFF33	Under-drainage Effectiveness when Restricted for Wildlife Conservation	To determine effects on species composition and agricultural production of natural grassland by partially restricting the drainage system of peat soils.	To 1990	Combined project with NCC.
MAFF34	Ditch Design for Wildlife Conservation	To examine the feasibility of constructing berms in deep ditches in peat, and assessing their value for wildlife.	To 1990	Joint project with NCC.
MAFF35	Observational Study-Biological Control of Aquatic Weeds in Lakes and Reservoirs using Grass Carp	To continue observation of reservoirs and to extend observation of weed control by carp.	1986	
MAFF36	Common Bird Census	To investigate the usefulness of habitat data, collected during the Common Bird Census, for analysing changes in wildlife.	On-going	
MAFF37	National Census of Small Mammals in Hedgerows	To provide a standard methodology for studying small mammals in hedgerows and to provide baseline data on species and abundance for evaluation and advisory work.	To 1988	
MAFF38	Wildlife Conservation Benefits of Changes in Agricultural Practices at High Mowthorpe EHF	To evaluate benefits to wildlife of changed management practices and to identify additional practices which would benefit wildlife.	To 1991	

RESEARCH PUBLICATIONS 1985/86

- MAFF(P) 1 *Land and Water Service (1986)*, R & D Report, 1984.
MAFF(P) 2 Central R & D Record Unit (1985), *National List of Approved Investigations*, MAFF.
MAFF(P) 3 *Redundant Farm Buildings in England and Wales: Pilot Study Report* (May 1985), MAFF.
MAFF(P) 4 *North Yorkshire Moors Integrated Moorland Management Programme Interim Report* (1985), MAFF in collaboration with North Yorkshire Moors National Park.

Contact for Enquiries: Lindsay Cornish, Principal Research Officer, Ministry of Agriculture, Fisheries and Food, Great Westminster House, Horseferry Road, London SW1P 2AE (01-216-6023).

Research Programme 1986/87

<i>Project Title</i>	<i>Summary of Objective</i>	<i>Timescale</i>	<i>Comments</i>	
I. Freshwater Biological Association (FBA)				
NERC1	Major Ions in Lakes and Streams Related to Input from the Atmosphere and Other Sources	To understand the impact of 'acid rain' upon catchments within the Lake District, and its possible effect upon river and lake fauna.	Continuing	Partly funded by DOE.
NERC2	Effects of Land Management on Water Courses	Studies to assess the impact of anthropogenically elevated sediment loads upon river and lake ecology.	Continuing	
NERC3	Biological Environments in Larger British Rivers	To relate the productivity of rivers to discharge-related variables.	April 1986 start	Partly funded by DOE.
NERC4	Factors and Processes Controlling Algal Populations	To study the composition and abundance of phytoplankton related to physical factors, geochemical cycling and nutrient regimes.	Continuing	
NERC5	The Pathogenicity of the <i>Saprolegniaceae</i> to Fish	To understand the manner in which salmonid and coarse fish become infected and resist infection.	To March 1985	
NERC6	Biology and Ecology of Aquatic Macrophytes	To study the factors controlling the growth of <i>Ranunculus calcareus</i> , using clones from fast, medium and slow flowing reaches of a river.	Continuing	Partly funded by Wessex WA.
NERC7	Management of Aquatic Macrophytes	To evaluate current methods, and an experimental weed cutting programme on Dorset rivers, for control of weed growth in rivers.	Continuing	
NERC8	Taxonomy, Physiology and Natural History of Invertebrate Animals	To study the taxonomy and ecology of invertebrates; the effects of chemical factors, including acidification, upon them and their significance as food for fish.	Continuing	
NERC9	Population and Community Ecology of Invertebrate Animals	Studies of invertebrates; communities associated with macrophytes in low-land rivers; their population dynamics in upland streams, rivers and small lakes; their significance as indicators of polluted waters.		Partly funded by DOE, SDD and the Welsh Office.
NERC10	Factors Influencing Crustacean Zooplankton Populations	To study the distribution; seasonal succession; effect of phytoplankton succession, fish predation and acidification on planktonic crustacea in lakes and reservoirs.	Continuing	Partly funded by DOE.
NERC11	Long Term Population Dynamics of Salmon, Trout and Other Fish in Chalk Streams	Analysis of data on stock recruitment, and growth rate of salmon, trout and other fish in a south of England river.		Funded by MAFF.

NERC12	The Relationship Between Feeding and Growth of Fish Species	Studies on the feeding and growth of salmonids and other fish species inhabiting 'salmonid' streams; to determine suitability of the stone loach (<i>Noemacheilus barbatulus</i> L) for these studies.		
NERC13	Migratory Behaviour of Salmon up the River Frome	To determine long term trends in the status of salmon populations.	Continuing	
2. Institute of Terrestrial Ecology (ITE)				
NERC14	Creating Attractive Grasslands	To review and quantify the use of wild flower seed in Britain; to establish plots of wild flower mixtures; to assess methods of introducing dicotyledons into existing grass-dominant swards.	To Dec 1987	Work at Monks Wood Experimental Station. NCC Contract.
NERC15	Plant Species Establishment in Planted Woodland in New Towns	To study the natural and assisted colonization of woodland by herbaceous plant species.	To March 1993	Work at Monks Wood Experimental Station.
NERC16	Bracken and Heathland Studies	To study the long term effect of management on bracken and heathland flora, and the ability of bracken to recover on cessation of management.	To April 1990	Works at Monks Wood Experimental Station.
NERC17	Lead Poisoning in birds	To determine the effect of lead on birds, with particular reference to swans.	To Dec 1985	Work at Monks Wood Experimental Station.
NERC18	Creation of Butterfly Habitats on a Landfill Site	To increase conditions suitable for butterflies and analyse the results.	To Dec 1986	Work at Monks Wood Experimental Station, contract with Essex County Council.
NERC19	Long Term Studies of Vegetation Change on a Landfill Site	To monitor long term experiments at Moor House NNR investigating the effects of sheep grazing and burning on upland vegetation.	To 1992	Work at Monks Wood Experimental Station.
NERC20	Assessing Butterfly Abundance	To provide a simple method of monitoring the abundance of butterflies in NRs, and to combine results to form a national Census of Butterflies.	To March 1986	Work at Monks Wood Experimental Station.
NERC21	Sand Dune Ecology in East Anglia	To investigate the effects of public pressure and different management techniques on sand dunes, and the overall factors affecting change within dune succession.	To March 1988	Work at Monks Wood Experimental Station.
NERC22	Impact of Land Drainage on Wildlife	To determine how far Wildlife communities have been affected by land drainage, as opposed to other forms of agricultural land use management.	To March 1986	Work at Monks Experimental station.
NERC23	Railway Resource Monitoring	To monitor railway vegetation with the intention of establishing rates and directions of succession, deterioration or loss, consequent on changing British Rail management policies.	To Dec 1987	Work at Monks Wood Experimental Station.
NERC24	Structure and Dynamics of Motorway Vegetation	To examine changes and development in motorway vegetation and to relate motorway verges to vegetation in other linear habitats, with a view towards establishing some general characteristics of linearity.	To Dec 1987	Work at Monks Wood Experimental Station.

NERC25	Invertebrate Conservation in Plantation Woods	To prepare general management guidelines for the conservation of invertebrates, especially butterflies, in plantation woodlands, and prepare management plans for 20 plantations of special interest.	To March 1988	Work at Monks Wood Experimental Station.
NERC26	Monitoring at Stonechest	To estimate the rate and direction of changes in the ecosystem resulting from drainage, game management and woodland management.	To March 1991	Work at Merlewood Research Station.
NERC27	Recent Changes of Land Cover and Landscape Features	To obtain quantitative data for the occurrence of defined landscape and land cover categories for the ecological survey of GB and to assess changes in these features from 1977-78 to 1984.	To Oct 1985	Work at Merlewood Research Station.
NERC28	Assessment of Amenity Tree Planting Schemes (CC)	To assess the success of the CC's scheme by estimating tree survival and by examining some of the factors affecting survival.	To Dec 1985	Work at Merlewood Research Station.
NERC29	Management of Grouse and Moorland	To follow up an experiment to increase grouse numbers in West Scotland by changes in land management and to continue to give advice on grouse management and land use.	To April 1987	Work at Banchory Research Station.
NERC30	Habitat Requirements of Black Grouse	To assess habitats and food of black grouse broods in summer, and flocks in winter.	To 1986	World Pheasant Association contract. Work at Banchory Research Station.
NERC31	Revegetation after Disturbance	To assess the ecological consequences of decontamination procedures on Gruinard Island, as a contribution to vegetation management following severe disturbance.	To Dec 1989	MOD contract. Work at Banchory Research Station.
NERC32	Human Impact in the Cairngorms	To assess human impact by measuring the numbers and breeding success of hill birds near and far from ski lifts, by counting people in these areas, and by measuring changes in ground damage on ski grounds.	To April 1990	Work at Banchory Research Station.
NERC33	Song Bird Density and Woodland Diversity	To study bird numbers in typical woods in Deeside, and compare these bird numbers with the structure and management of the woods.	To Sept 1986	Work at Banchory Research Station.
NERC34	Monitoring Otters in Shetland — Phase II	To monitor otter numbers in areas that may be affected by oil pollution in Shetland.	To Oct 1985	Work at Banchory Research Station.
NERC35	Organising a Symposium at Braathens in Winter 1985/86 — Trees and Wildlife in the Scottish Highlands	To review existing knowledge of semi-natural woodlands and develop principles for managing wildlife in commercial forests.	To March 1986	Work at Banchory Research Station.
NERC36	Design and Environmental Management in Ski Areas	To produce guidelines for CCS to help achieve a high standard of design and environmental management during the siting, layout and operation of downhill ski areas.	To March 1986	Work at Banchory Research Station.
NERC37	Studies of Sand Dune Flora in Wales	To assess effects of sand dune vegetation from known grazing and mowing regimes.	To April 1986	Work at Bangor Research Station.

NERC38	Rhododendrons in Snowdonia	To read through the literature on <i>Rhododendron Ponticum</i> in an attempt to understand its invasive behaviour and devise effective control measures.	To Dec 1982	Work at Bangor Research Station.
NERC39	Ecology of Arctic Alpines in Snowdonia	To investigate population dynamics of selected plant species of arctic-alpine affinities.	To April 1987	Work at Bangor Research Station.
NERC40	Scrub Succession at Aston Rowant	To assess the effects of a single treatment of rotovation and burning, of continuous grazing and of no treatment on the colonisation of chalk grassland by woody plants.	To Dec 1987	Work at Furzebrook Research Station.
NERC41	Restoration of Heathland	To monitor the vegetational, faunal and chemical changes in heathland restored on disused ball clay workings.	To Sept 1988	Contract with English China Clays Ltd. Work at Furzebrook Research Station.
NERC42	Hartland NNR Survey	To survey each year the ant and plant species and relate them to soil characteristics, and to establish a trend in post-burn regeneration.	To June 1985	Work at Furzebrook Research Station.
NERC43	Butterfly Habitat Management	Includes a number of projects investigating the Large Blue, the Black Hairstreak, the Brown Hairstreak, the Adonis Blue and Woodland Fritillaries. To create, maintain or improve habitats, monitor changes in population and mobility, and organise a conservation programme.	To March 1990	Work at Furzebrook Research Station.
NERC44	Poole Harbour Saltmarshes	To survey the saltmarsh vegetation of Poole Harbour, particularly Holes Bay, and assess the pattern of change since 1965.	To Dec 1984	Work at Furzebrook Research Station.
NERC45	Furzey Island: Saltmarsh and Mudflat Monitoring	To survey the saltmarshes and mudflats surrounding Furzey Island, Poole Harbour, and monitor changes in relation to oil development works.	To May 1986	Work at Furzebrook Research Station.
3. Institute of Hydrology				
NERC46	Water Resource Implications of Upland Afforestation	To improve estimates of annual and seasonal evaporation in the British uplands for various vegetation types. To examine the effects on stream flow, time distribution and sediment transport rates of different upland land use practices.	Continuing	Partially funded by DOE, SDD, WRC, DEn, NSHEB, FC and BWB.
NERC47	The Effects of Upland Land Use on Water Quality	To investigate the effect of three land use changes — clear felling, tree planting and grassland improvement — on water quality in upland areas.	Continuing	Partly funded by DOE, SDD, WRC, DEn, NSHEB, FC and BWB.
NERC48	Modelling the Effects of Acid Deposition	To provide a framework with which to assess the sensitivity of hydrological and chemical processes controlling catchment acidity.	To 1989	EEC and Royal Society.
NERC49	Conservation Management of Wetlands	Understanding of the hydrology of wetland sites and their interaction with surrounding 'reclaimed' land and the provision of criteria for evaluating possible threats from peripheral drainage.	Continuing	Partly funded by NCC and MAFF.
NERC50	Practical Evaluation of Agricultural Drainage in Relation to Wetland Conservation	To provide independent evidence in contentious issues of wetland conservation in the face of agricultural reclamation by drainage.	To 1990	Funded by MAFF.

FBA Publications

- NERC(P) 1 Sutcliffe, D W (1983), Acid precipitation and its effects on aquatic systems in the English Lake District (Cumbria), *Rep Freshwat Biol Ass*, 51, 30-62.
- NERC(P) 2 Sutcliffe, D W and Carrick, T R (1983), Chemical composition of water-bodies in the English Lake District: relationships between chloride and other major ions related to solid geology, and a tentative budget for Windermere, *Freshwat Biol*, 13, 323-352.
- NERC(P) 3 Sutcliffe, D W and Carrick, T R (1983), Relationships between chloride cations in precipitation and streamwaters in the Windermere catchment (English Lake District), *Freshwat Biol*, 13, 414-441.
- NERC(P) 4 Carling, P A (1983), Threshold of coarse sediment transport in broad and narrow natural streams, *Earth Surf Processes Landforms*, 8, 1-18.
- NERC(P) 5 Carling, P A (1983), Particulate dynamics, dissolved and total load, in two small basins, northern Pennines, *UK Hydrological Sciences J*, 28, 335-375.
- NERC(P) 6 Carling, P A (1984), Deposition of fine and coarse sand in an open-work gravel bed, *Can J Fish Aquat Sci*, 41, 263-270.
- NERC(P) 7 Carling, P A (1984), Comparison of suspended sediment rating curves using two sampling methods, In 'Channel processes; water, sediment, catchment controls', *Catena Supplement 5* (Schick A P) Cremlingen-Destedt; Catena Verlag, 43-49.
- NERC(P) 8 Reynolds, C S (1983), The physiological interpretation of the dynamic responses of populations of planktonic diatoms to physical variability of the environment, *New Phytol*, 95, 41-53.
- NERC(P) 9 Reynolds, C S (1983), Growth-rate responses of *Volvox aureus* Ehrenb (Chlorophyta, Volvocales) to variability in the physical environment, *Br phycol J*, 18, 433-442.
- NERC(P) 10 Reynolds, C S, Wiseman, S W and Clarke, M J O (1984), Growth and loss-rate responses of phytoplankton to intermittent artificial mixing and their potential application to the control of planktonic algal biomass, *J appl Ecol*, 21, 11-39.
- NERC(P) 11 Reynolds, C S and Reynolds, J B (1985), The atypical seasonality of phytoplankton in Crose Mere, 1972: an independent test of the hypothesis that variability in the physical environment regulates community dynamics and structure, *Br phycol J*, 20, 227-242.
- NERC(P) 12 Willoughby, L G, Pickering, A D and McGrory, C B (1983), Zoospore germination of *Saprolegnia* pathogenic to fish, *Trans Br mycol Soc*, 80, 421-435.
- NERC(P) 13 Pickering, A D and Duston, J (1984), Administration of cortisol to brown trout *Salmo trutta*, and its effects on the susceptibility to *Saprolegnia* infection and furunculosis, *J Fish Biol*, 23, 163-175.
- NERC(P) 14 Pickering, A D and Pottinger, T G (1985), Cortisol can increase the susceptibility of brown trout, *Salmo trutta* L, to disease without reducing the white blood cell count, *J Fish Biol*, 27, 611-619.
- NERC(P) 15 Dawson, F H and Robinson, W N (1984), Submerged macrophytes and the hydraulic roughness of a lowland chalkstream, *Verh int Verein theor angew*, 22, 1944-1948.
- NERC(P) 16 Elliot, J M and Drake, C M (1983), A new quantitative air-lift sampler for collecting macro-invertebrates on stony bottoms in deep rivers, *Freshwat Biol*, 13, 545-549.
- NERC(P) 17 Sutcliffe, D W (1984), Quantitative aspects of oxygen uptake by *Gammarus* (Crustacea, Amphipoda): a critical review, *Freshwat Biol*, 14, 448-489.
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Contact for Enquiries: R Padgham, Natural Environment Research Council, North Star Avenue, Swindon, Wiltshire (0793-40101).

Research Programme 1986/87

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>
Current Research			
1. Survey			
NCC1	Otter Survey of England	To reassess the status and distribution of the otter in England (completing surveys in Scotland and Wales funded by Vincent Wildlife Trust).	1984/86 University of Exeter.
NCC2	Survey of the Smooth Snake.	To assess the status and distribution of the smooth snake	1984/87 British Herpetological Society.
NCC3	Distribution of Seabirds at Sea	To determine the distribution and abundance of seabirds around Britain throughout the year.	1983/86 In-house (supported by Esso, BP, Shell, DEN and DTP).
NCC4	Invertebrate Site Register	To collect information on the distribution of rare invertebrate species for site selection, evaluation and defence.	1980/88 In-house.
NCC5	Entomological Survey by Specialists	To survey NNRs, SSSIs and sites of potential conservation importance for their invertebrate fauna.	Renewed Annually Various specialists.
NCC6	Invertebrate Survey and Classification of Rivers for Conservation	To survey the invertebrate communities of rivers in England and Wales for the selection of SSSIs.	1983/88 FBA.
NCC7	Rare Vascular Plant Surveys	To bring together existing information on the past and present distribution and abundance of rare vascular plant species in England and Wales.	1982/88 In-house.
NCC8	Upland Vegetation Survey	To make a descriptive survey, to select SSSIs and to produce standard upland survey methods.	1981/88 In-house.
NCC9	Inventories of Ancient and Semi-natural Woodlands	To identify ancient and semi-natural woodlands throughout Britain.	1981/88 In-house.
NCC10	Consultancy Work on Rivers	To provide specialist advice on the evaluation and management of rivers for nature conservation.	1984/87 N T H Holmes.
NCC11	Saltmarsh Survey of Great Britain	To collate survey information on British saltmarshes.	1981/87 In-house.
NCC12	Synoptic Survey of Saline Coastal Lagoons	To determine the distribution and status of examples of this threatened habitat and to assess their importance for conservation.	1984/87 Various university- based consultants.
NCC13	Survey of Rias, Harbours and Estuaries in Southern Britain	To survey and appraise these threatened sites as a basis for a conservation strategy.	1985/88 Field Studies Council.
NCC14	Survey and Monitoring of Proposed Marine Nature Reserves	To monitor species and communities of high conservation significance and identify management requirements for potential MNRs.	Long-term In-house, Field Studies Council and others.
NCC15	Peatland Survey of Northern Scotland	To survey the peatlands of northern Scotland and to produce conservation recommendations.	1985/87 In-house.

NCC16	Survey of Fresh-water Lochs	To survey the botanical interest of freshwater lochs in the Spey Valley, Orkney and Caithness.	1985/87	In-house and D Robson.
NCC17	Bryophyte Site Register	To identify and evaluate sites of importance for their mosses and liverworts.	1985/87	In-house (in co-operation with British Bryological Society and NERC (ITE)).
NCC18	Quinquennial Review for Wildlife and Countryside Act 1981	To gather evidence for giving advice to the Secretary of State on the composition of the schedules of protected species in the Act.	1985/87	In-house.
NCC19	National Survey of Badgers	To assess current numbers and distribution of badgers by means of a sample-based survey.	1985/87	University of Bristol.
NCC20	Phase 1 Survey of Yorkshire Dales National Park	To map the location and distribution of wildlife habitats throughout the National Park.	1985/87	In-house (funded jointly with Yorkshire Dales NP).
NCC21	Phase 1 Survey of Cumbria, North Yorkshire and Durham	To map the location and distribution of wildlife habitats in these counties as a basis for nature conservation strategies.	1986/89	In-house.
NCC22	Survey of Surrey Heathland	To survey the remaining heaths of Surrey as a basis for selection of SSSIs and subsequent conservation.	1985/86	In-house.
NCC23	Historical Changes in Lowland Grassland	To estimate changes in the total area of grassland in lowland England and Wales and the proportion that was semi-natural or unimproved at intervals over the last 50 years.	1985/86	NERC (ITE).
NCC24	Coastwatch	To collect, collate and analyse ecological information on the British coastline from cliff-top to low tide mark, using voluntary survey groups.	1985/88	In-house (supported by BP).
NCC25	Seabird Colony Register	To survey the entire British coastline to provide up-to-date figures for nesting seabirds, to establish a system for future updating and to publish results.	1985/87	In-house analysis; survey undertaken by Seabird Group.
NCC26	Moorland Bird Study	To identify moorland sites of major importance to birds and to assess relevant management factors.	1986/89	In-house.
NCC27	Pilot Survey of Goosanders and Mergansers in Scotland	To test techniques for a UK survey of goosanders and mergansers, particularly as a basis for NCC's advice to DAFS on its issue of licences to shoot them to protect fisheries.	1986	University of Durham.
NCC28	Survey of Sand-dunes in Great Britain	To produce an inventory of sand-dune habitats throughout Great Britain, classified by vegetation types.	1986/89	In-house.
NCC29	Geological Conservation Review	To identify and describe a series of sites which adequately represent the range of geological and physiographical features of Great Britain and should be conserved.	1979/89	In-house and various consultants and contractors.
NCC30	Survey and Documentation of the Wenlock Limestone	To carry out a full survey of the working quarries of Wenlock Edge, Shropshire, as a basis for long-term conservation of the international geological interest.	1986/87	Not yet arranged.
NCC31	Status and Conservation of British Freshwater Fish	To assess the current status of freshwater fish in existing NNRs and of rare and endangered fish in Britain generally.	1986/91	NERC (ITE).

NCC32	Status of Native Crayfish	To review the status of and means of conserving the native crayfish <i>Austropotamobius pallipes</i> , with particular reference to the problem of crayfish plague, caused by the fungus <i>Aphanomyces astaci</i> imported with alien crayfish.	1986/87	University of Nottingham.
NCC33	Survey of <i>Arctostaphylos</i> Heaths in North East Scotland	To survey and assess for SSSIs the remaining <i>Arctostaphylos</i> heathland in Speyside and Deeside and to survey in detail other important lowland heaths in north-east Scotland identified in 1985.	1986	In-house.
NCC34	Survey of Invertebrates of Welsh Lowland Peatland Sites	To survey the invertebrate fauna of a large sample of Welsh lowland peatland sites in relation to plant communities already described.	1986/90	In-house.
NCC35	Marine Nature Conservation Review	To identify and describe a series of sites which adequately represent the range of British marine eco-systems and should be protected.	1986/91	In-house and various consultants and contractors.
NCC36	Littoral and Sub-littoral Survey of Chalk Coasts of South-east England	To survey the unique communities of the chalk coasts of South-east England and to assess conservation requirements in the light of coastal protection works and the Channel Fixed Link Proposals.	1986	British Museum (Natural History) and Marine Conservation Society.
NCC37	Hydrography of Loch Obisary, North Uist	To survey the physical character, water chemistry and ecology of this unique brackish loch, where there is a proposal for a fish farm.	1986/87	Scottish Marine Biological Association.
NCC38	Sublittoral Survey of the Wash	To survey the sublittoral benthos of the Wash, sampling both by diving and by dredging (in co-operation with the Eastern Sea Fisheries Committee).	1982/87	Individual divers.
NCC39	Survey and Conservation of Rare Arable Weeds	To identify areas suitable for the conservation of this severely threatened element of the British flora and to instigate conservation measures.	1986/87	In-house (in conjunction with Botanical Society of British Isles and Trusts for Nature Conservation).
NCC40	Survey of Amphibian Communities	To collect and collate data on sites for British amphibians other than the rare natterjack toad.	1986/89	Leicester Polytechnic.
NCC41	Survey of Marginal Hill Ground (ffridd) in Wales	To survey the vegetation and bird fauna of the enclosed but semi-natural land between intensive farmland and moorland in Wales, which is vulnerable both to agricultural intensification and to afforestation.	1986/88	RSPB.
NCC42	Survey of Chalk Grassland on Ministry of Defence Ranges on Salisbury Plain	To produce a detailed botanical description and assessment of the chalk grassland of the Salisbury Plain Training Area.	1985/87	In-house.
NCC43	Survey of Invertebrate Fauna of the New Forest Bogs	To determine the character of the invertebrate (especially spider) fauna of the bogs of the New Forest.	1981/87	In-house.
NCC44	Survey of Chalk Grassland in Kent	To determine the extent and botanical quality of the remaining chalk grassland in Kent.	1986/87	In-house.
NCC45	Survey of Hay Meadows of Durham Dales	To locate and assess the botanical quality of the surviving hay meadows of Durham.	1986/87	In-house.

NCC46	Entomological Survey and Resurvey of Magnesian Limestone Grassland in Durham	To assess the effects on the invertebrate fauna of transplanting turves from Thrislington Plantation, Durham, to permit dolomite quarrying.	1982/87	In-house.
NCC47	Phase 2 Survey of Grasslands of East Cumbria and Lancashire	To survey more fully grassland already identified as of some significance for conservation.	1986/87	In-house.
NCC48	Phase 2 Survey of Humberside	To survey more fully grassland and other sites identified in 1978 as of some significance for conservation.	1986/87	In-house.
NCC49	Phase 2 Survey of Norfolk Grasslands	To survey more fully grassland sites identified in a Phase 1 survey in 1985 by Norfolk Naturalists' Trust.	1986/87	In-house.
NCC50	Phase 2 Survey of Somerset Grasslands	To survey more fully grassland sites outside the Somerset Levels identified in 1982/83.	1986/87	In-house.
NCC51	Phase 2 Survey of Staffordshire Heathlands	To assess the conservation value of, harmful impacts on and management needs of heathlands in Staffordshire.	1986/87	In-house.
NCC52	Verification of Ancient Woodlands in Northamptonshire	To verify the status and boundaries of ancient woodlands provisionally identified in Northamptonshire (see NCC9).	1985/87	In-house.
NCC53	Refinement of Ancient Woodland Inventory for the Chilterns	To establish conservation priorities for the large area of Chiltern beechwoods provisionally identified as ancient and semi-natural (see NCC9).	1986/87	In-house.
NCC54	Woodland Surveys for Argyll, Speyside and Lochaber	To survey semi-natural broadleaved woodlands in Argyll and Bute and in Speyside, and both these and native pinewoods in Lochaber, using the National Vegetation Classification (see NCC 154), and to survey the bryophytes of the Argyll woodlands.	1980/87	In-house.
NCC55	Review of Survey Information for Scotland	To establish a data-base of published and unpublished information about the distribution of wildlife species and habitats in Scotland.	1986/87	In-house.
NCC56	Survey of Grasslands in Moray and Nairn	To assess the conservation value of selected grasslands in Moray and Nairn, including some within SSSIs notified for other reasons.	1986/87	In-house.
NCC57	Survey of Selected Grasslands in Perthshire	To resurvey the best grassland sites in Perthshire identified ten years ago, in order to assign their plant communities to the National Vegetation Classification (see NCC 154).	1986/87	In-house.
NCC58	Survey of the Chough Population in Scotland	To survey the population of the chough in Scotland as a baseline for future monitoring.	1986/87	In-house (jointly with University of Glasgow and Scottish Chough Group).
NCC59	Survey of the Vegetation of Silver Flowe NNR, Galloway	To prepare a vegetation map of Silver Flowe NNR as a basis for future monitoring and to explore ways of monitoring vegetation changes on a fine scale.	1985/87	In-house.
NCC60	Upland Vegetation Survey of Wales	To survey the vegetation of all the major upland blocks in Wales as a basis for SSSI selection and management.	1979/87	In-house.

NCC61	Survey and Evaluation of Lowland Wetlands in Wales	To survey, classify and evaluate 163 lowland wetlands/peatlands in Wales identified in an earlier survey.	1983/87	In-house.
NCC62	Botanical Survey and Evaluation of Tenby Sand-dunes	To survey and evaluate the sand-dune vegetation within Tenby Cliffs SSSI as a basis for renatification.	1986/87	In-house.
2. Monitoring				
NCC63	Monitoring of Rare British Breeding Birds	To provide information on the breeding success of rare birds.	Renewed annually	Rare Breeding Birds Panel.
NCC64	Monitoring of the Peregrine Falcon	To assess the status and distribution of the peregrine falcon in southern Scotland and Cumbria.	1977/90	In-house.
NCC65	Lead Poisoning in Mute Swans	To monitor the impact of lead poisoning on mute swans, in particular on the River Thames.	1983/88	Edward Grey Institute of Field Ornithology, University of Oxford (funded jointly with RSPB, WRC and Thames WA).
NCC66	Birds and Pollution	To monitor residues of toxic chemicals in birds' tissues and eggs and to study their effects.	1983/89	NERC (ITE).
NCC67	Monitoring of Cliff-nesting Seabirds	To maintain long-term monitoring of cliff-nesting seabirds on the mainland of Orkney and on Skomer Island NNR (see also NCC79).	1981/89	In-house and Edward Grey Institute of Field Ornithology, University of Oxford.
NCC68	Services in Wildfowl Research	To study the populations, distribution and migration of wildfowl (including the organisation and reporting of the National Wildfowl Counts).	1971/90	Wildfowl Trust.
NCC69	Research and Advice in Ornithology	Survey, monitoring, the provision of national bird-ringing and nest-recording schemes, analysis of data and the preparation of special reports.	1970/90	British Trust for Ornithology.
NCC70	Butterfly Monitoring	To assess the status and distribution of butterflies on NNRs and some other sites.	1981/87	NERC (ITE).
NCC71	British Red Data Books on Invertebrates	To edit and prepare for publication British Red Data Books on insects and other invertebrates.	1983/89	In-house.
NCC72	National Countryside Monitoring Scheme	To quantify habitat change county by county, by comparison of dated aerial photographs, and to provide a framework for future monitoring.	1983/88	In-house (funded jointly with CCS).
NCC73	Biological Records Centre	To collect detailed records of the occurrence of wild plants and animals covered by recording schemes operating throughout the British Isles.	1982/87	NERC (ITE).
NCC74	Event Records System	To establish a computerised data-base on administration, management and research on NNRs.	1980/87	In-house.
NCC75	Site-related Data-base	To establish a computerised data-base on the location, size and habitats of sites of importance for nature conservation and on related case-work, loss and damage.	1982/87	In-house.
NCC76	Monitoring Changes in Semi-natural Woodlands	To monitor the development of stand types and associated changes in ground flora in selected unmanaged woodlands.	1985/88	In-house.

NCC77	Monitoring of Invertebrates of Roosecote Sands, Barrow-in-Furness	To assess the long-term damage to, or recovery of, the invertebrate communities of Roosecote Sands after sand-dredging to infill a dock at Barrow-in-Furness.	1983/87	University of Lancaster (funded by Vickers).
NCC78	Monitoring of Ravens in Dyfed-Powys	To assess the density and breeding performance of ravens in various parts of central Wales in relation to afforestation and carrion supplies and to compare the results with those of 1975/79.	1986	In-house.
NCC79	Development of Monitoring of Sea-bird Populations and Performance	To refine and test methods of monitoring breeding populations of sea-birds that are appropriate for volunteers and nature reserve wardens (see NCC 25 and 67).	1986/89	NERC (ITE) and others (funded jointly with NERC).
NCC80	Monitoring the Effects of Phosphate-stripping in the Bure Broads	To monitor phosphate storage, release and uptake patterns at the mud/water interface in the Bure Broads following the extension of phosphate-stripping to three sewage works on the Upper Bure.	1986/91	Anglian WA.
NCC81	Monitoring of Vascular Plant Distribution, Increase and Decrease	To record vascular plants from a selected sample of 10 km squares of the National Grid, for comparison with records in <i>Atlas of the British Flora</i> (1962) and as a basis for monitoring future change.	1986/90	Botanical Society of the British Isles (project officer assisted by members' voluntary survey).
NCC82	Analysis and Publication of Game Bag and Game-keepers' Records	To analyse and publish data derived from four schemes based on game bags and predator control from estates all over the country and going back to 1887, as a basis for assessing population changes of some common British mammals and birds.		Game Conservancy.
NCC83	Monitoring the Forestry Commission's Broadleaves Policy	To monitor the effects for nature conservation of the FC's new policy for broadleaved woodlands.	1986/87	In-house.
NCC84	Rare Plant Monitoring in Scotland	To monitor populations of three rare plant species and to investigate their habitat requirements.	Long-term	In-house.
NCC85	Monitoring New Woodland on Beinn Eighe NNR	To record or re-record trees in experimental plots within planted and regenerating woodland on Beinn Eighe NNR.	1985/87	In-house.
NCC86	Monitoring of the Red Kite in Wales	To monitor numbers and breeding success of the red kite in central Wales.	Long-term	In-house (jointly with RSPB and others).
NCC87	Monitoring of the Wetland Vegetation of Llangloffan Fen, South Pembrokeshire	To establish permanent quadrats in Llangloffan Fen on the basis of a previous survey, in order to monitor the vegetation for site management purposes.	1985/86	In-house.
3. Habitat Management				
NCC88	Breeding Waders of Machair	To monitor the relationship between changing farming practices and populations of breeding waders on machair in the Western Isles.	1985/87	Wader Study Group.
NCC89	Management of Woodland for Butterflies and Other Insects	To define the location of the best woodlands for butterflies and other insects and to draw up management proposals to counteract declines.	1985/88	NERC (ITE).

NCC90	Review of Butterfly Conservation Priorities in Southern England	To identify the most important butterfly sites in southern England and make proposals for their conservation and management.	1985/87	In-house.
NCC91	Management Review of Grasslands	To produce a booklet on grassland management for nature conservation.	1985/86	In-house.
NCC92	Sand-dune Management Studies	To examine the effects of various levels of grazing on sand-dune vegetation.	1985/88	NERC (ITE).
NCC93	Management of Lowland Wet Heaths in South Wales.	To prepare a handbook on the management of lowland wet heaths based on field trials in South Wales.	1985/87	In-house.
NCC94	Effects of Grazing in Upland Woods	To provide information and advice on the impact of stock-grazing on upland woods.	1985/87	Hill farming Research Organisation.
NCC95	Survey of Rich-fen Vegetation (including Crymlyn Bog)	To assess the effects of nutrient enrichment on fen vegetation (see also NCC113).	1985/87	University of Sheffield, partly funded by BP.
NCC96	Effects of Fertiliser Applications — Somerset Levels	To examine the effects of nitrogen fertiliser on herb-rich grasslands on peat soils.	1986/90	Animal and Grassland Research Institute (funded jointly with MAFF and DOE).
NCC97	Romney Marsh Management Studies	To assess the impact of various management techniques on ditch flora and fauna and water chemistry.	1985/88	University of Loughborough (funded jointly with Southern WA).
NCC98	Effects on Butterfly Populations of Pesticide-free Headlands	To assess the effects on butterfly populations of not spraying headlands around cereal fields with agricultural pesticides.	1985/88	Game Conservancy.
NCC99	Review of Urban Nature Conservation Research	To review research carried out on urban nature conservation.	1985/87	Ecological Parks Trust.
NCC100	Hydrological Studies on the Somerset Levels	To evaluate the pumped water data from the Somerset Levels over the last 20 years and to monitor water levels.	1986/88	NERC (Institute of Hydrology).
NCC101	Coastal Cliff-top Management Study	To investigate the effects of grazing and burning on coastal cliff-top grassland and heathland and to make proposals for monitoring and management.	1986/89	University of Lancaster.
NCC102	Conservation of Geological Features in Disused Quarries	To identify and analyse the key factors affecting the feasibility of conserving rock-faces in disused quarries and to prescribe appropriate solutions.	1986/88	Imperial College.
NCC103	Management of New Forest Heathland	To study the open forest communities of the New Forest and to develop a long-term management strategy.	1986/88	In-house.
NCC104	Conservation Management for Moths	To review existing knowledge of the habitat management requirements of rarer macro-moths, to draw up general management guidelines and to identify where further research is required.	1986/89	In-house.
NCC105	Peatland Management Handbook	To review relevant literature and management techniques currently employed on peatland nature reserves.	1986/87	In-house.

NCC106	Effects of Surrounding Forestry Management on the Irthinghead Mires, Northumberland	To repeat a detailed vegetation survey of Coom Rigg Moss NNR made in the late 1950s to assess any changes brought about by extensive surrounding afforestation.	1986/87	NERC (ITE).
NCC107	Grazing and Burning Management of Upland Sites	To establish the limits of acceptable upland management from the point of view of nature conservation, as a basis for SSSI management agreements.	1986/89	In-house.
NCC108	Entomological Aspects of Scottish Pine and Birch Woods	To study the distribution and habitat requirements of the insects of native Scottish pine and birch woods and the implications for management.	1986/87	University of Aberdeen.
NCC109	Principles for Nature Conservation in Towns and Cities	To investigate the implementation by local authorities of nature conservation practices in urban areas.	1985/87	Midland Environment Ltd.
NCC110	Nature Conservation in New Conifer Forests	To describe the main habitats of upland conifer forests and to identify means of improving their design and management for wildlife.	1986/89	NERC (ITE) (funded jointly with FC).
4. Impact Studies				
NCC111	Impact of Land Drainage on Wildlife	To study land-use changes following four drainage schemes, to assess their impact on the flora and to publish findings of general relevance.	1982/87	NERC (ITE).
NCC112	Eutrophication Problems in Loch Leven	To construct a nitrogen and phosphorus nutrient budget for Loch Leven with a view to rehabilitating its flora and fauna.	1984/87	NERC (ITE) (funded jointly with Scottish Office and Tayside RC).
NCC113	Advice on Hydrology — Crymlyn Bog, Newham Fen and Sandwich Bay	To monitor the hydrology of the sites and advise on the effects of various management impacts.	1984/90	NERC (Institute of Hydrology).
NCC114	Nutrient Assessment — Malham Tarn and Esthwaite Water	To examine the effects of eutrophication and of remedial action on water and mud chemistry and on flora.	1985/87	FBA and University of Loughborough.
NCC115	Effects of Acidification on Lichens	To review the impact of acid deposition on corticolous lichens and to establish a monitoring programme.	1985/88	British Museum (Natural History).
NCC116	Effects of Acidification on Freshwater Plants and Invertebrates	To review the impact of acid deposition on freshwater plants and invertebrates in Scottish sites and establish a monitoring programme.	1985/87	NERC (ITE).
NCC117	Effects of Forestry Practice on Wildlife	To compile a review of the ecological effects of various forestry practices in the North Temperate Zone.	1985/87	Dept of Forestry, University of Oxford.
NCC118	Hydrology and Drainage of Mire Systems	To study the implications of hydrological changes in mire systems following the cutting of drainage channels and peat extraction.	1985/88	University of Dundee.
NCC119	Invertebrates and Birds in the Wash	To investigate the relationship between wintering birds and their invertebrate prey in the Wash in order to predict the effects of further land-claim.	1985/88	NERC (ITE) (funded by DOE).
NCC120	Impact of Marine Fish-farming	To examine the ecological impact of marine fish-farming and to establish guidelines for the selection and operation of fish-farming sites.	1985/88	University of Stirling and Scottish Marine Biological Association (principally funded by HIDB).

NCC121	Trees and Air Pollution	To undertake a desk study to assess the nature and extent of damage to British trees by air pollution and to identify relevant future survey, monitoring and research.	1985/86	Imperial College.
NCC122	Effects of Recreational Pressure on the Breeding of Golden Plovers	To investigate the role of human disturbance in the decline in number of golden plovers breeding in Britain.	1986/89	University of Manchester.
NCC123	Land-use and Bird Habitats on Islay	To survey the use of habitats on Islay by birds listed in the EC Birds Directive and to define land-use practices required to maintain their habitats and populations.	1986/87	In-house.
NCC124	Agricultural Reclamation of Coastal Cliff-tops	To assess the impact of ploughing, drainage and other agricultural activities on coastal cliff-tops by comparing previous vegetation studies with up-to-date aerial photography and field survey.	1986/87	University of Bristol, University College of Cardiff and In-house.
NCC125	Vegetation Survey and Impact Assessment at Dungeness	To make a detailed appraisal of the surviving vegetation of the Dungeness shingle and an impact assessment of past changes and threats from potential developments.	1986/90	In-house.
NCC126	Impact of Fossil-collecting on Vulnerable Palaeontological Localities	To investigate the lateral extent of fossil beds vulnerable to collectors, as a basis for a consistent and justifiable long-term conservation policy.	1986/88	Not yet arranged.
NCC127	Effects of Shooting on Curlew Population	To use a colour-ringing programme begun on the Tees Estuary in 1976 to assess whether mortality of curlews from shooting (now illegal under the Wildlife and Countryside Act 1981) was additive or compensatory to natural mortality.	1986/88	University of Durham.
NCC128	Shetland Fish-farming Impact Survey	To survey potential and existing fish-farming sites in the voes and sounds of Shetland, to assess their marine biological importance and suitability for fish-farming and to make recommendations.	1986/87	Field Studies Council and others (funded jointly with Shetland Island Council and Shetland Salmon Producers Association).
NCC129	Impact of Water Abstraction on Fen Hydrological Processes	To identify and quantify the major lines of water flux in a range of East Anglian fens and the likely effects of groundwater abstraction schemes.	1986/90	University of Birmingham (funded jointly with Anglian WA and Broads Authority).
NCC130	Impact of Pesticide Drift	To review existing data about tide drift and effects of pesticides on non-target animals and plants and to predict circumstances likely to be damaging to wildlife.	1986/87	NERC (ITE).
NCC131	Case Study of Eutrophication in Loch Eye	To investigate the nutrient budget of Loch Eye, Ross and Cromarty, a naturally eutrophic lake on Old Red Sandstone with a very diverse flora and fauna now threatened by increased algal blooms.	1986/88	NERC (ITE).
NCC132	Decline of Higher Plants in the Norfolk Broads	To investigate possible causes of the decline of macrophytes in the Norfolk Broads and to conduct experiments aimed at re-establishing a macrophyte-dominated ecosystem.	1986/88	University of East Anglia.

NCC133	Mountain Plateau Ecology	To evaluate actual and potential impacts of ski developments and other recreational use on soil, vegetation and fauna in two Scottish mountain plateaux, one with an existing development, the other where development is proposed.	1986/89	In-house.
NCC134	Agriculture and the Environment	To award grants and studentships for research into the present and likely future interactions between agriculture and the populations and processes of the natural environment.	1986/90	Special topic programme (funded jointly with NERC).
NCC135	Effects of Nest Predation on Populations of Golden Plovers and Other Moorland Waders	To test whether the presence of crows and gulls causes poor breeding success in golden plovers and other moorland waders and whether adjacent afforestation increases predator pressure.	1986/89	NERC (ITE) (funded jointly with NERC).
NCC136	Review of Rhododendron Threat and Control Methods	To undertake a review of existing information about the impact of <i>Rhododendron ponticum</i> on native vegetation and about methods of control.	1986/87	In-house.
NCC137	Impact Studies in Scotland	To survey the botanical interest of the Glengarry site for the proposed ELF transmitter and to study the possible effects of the new Dornoch-Golspie railway line.	1986/87	In-house.
5. Autecological Studies				
NCC138	Rare Vascular Plant Conservation	To support the University Botanic Garden, Cambridge, in propagating rare species for use by research workers and for display.	1982/87	University of Cambridge.
NCC139	Population Ecology Conservation of Bats	To monitor populations of rare bats and investigate conservation problems, including the effects of pesticides.	1985/89	NERC (ITE).
NCC140	Analysis of Rothamsted Data on Moths	To analyse the long-term findings on moths of Rothamsted Experimental Station's monitoring programme.	1985/86	Rothamsted Experimental Station.
NCC141	Whooper Swans and Lead in the Ythan Estuary	To investigate lead poisoning in whooper swans from gunshot pellets.	1985/87	University of Aberdeen.
NCC142	Corncrakes in the Western Isles	To study the habitat usage and requirements of corncrakes as a basis for conservation measures.	1985/89	NERC (ITE).
NCC143	Ecology of Woodland Fritillary Butterflies	To study the autecology of four or five species of fritillary and to test appropriate management techniques.	1985/89	NERC (ITE).
NCC144	Eutrophication Effects — Bosherton Lake	Having constructed a nitrogen and phosphorus nutrient budget for Bosherton Lake, on Stackpole NNR in Pembrokeshire, to research the chemical and biological factors affecting the survival of <i>Chara</i> species (stoneworts).	1983/87	University College of Swansea.
NCC145	Breeding Performance and Feeding of Terns in Shetland	To develop methods of investigating any relationship between poor breeding performance of terns in Shetland and increased industrial fishing for sand-eels.	1986	University of Durham.

NCC146	Ecology of the Capercaillie	To test hypotheses on the population dynamics of capercaillie in order to discover reasons for their decline and to advise on habitat management and appropriate shooting levels.	1986/89	NERC (ITE) (funded jointly with NERC).
NCC147	Ecology of the Dormouse	To study the ecology and habitat requirements of the dormouse and the effects of various forms of woodland management on population density.	1986/89	Royal Holloway and Bedford New College, London.
NCC148	Status and Distribution of the Wildcat	To investigate the status and distribution of the wildcat in Scotland.	1985/87	In-house.
6. Socio-Economic Studies				
NCC149	Integrated Rural Development Plan — Peak District National Park	To evaluate by experimental trials the application of an integrated programme of rural development in the Peak District National Park.	1982/89	Peak Park Planning Board (funded jointly with CC, DOE, MAFF, DC, FC and others).
NCC150	Socio-economic Studies in the Culm Measures	To appraise ways of integrating various land-uses in the Culm Measures, Devon.	1985/86	Dartington Institute (funded jointly with CC and others).
NCC151	People and Nature in Cities	To develop methods of assessing social needs as a basis for selection and use of urban wildlife sites.	1985/87	Ecological Parks Trust.
NCC152	Agricultural Structures Policy and Nature Conservation in Upland Grampian	To analyse structural change and its impact on upland Grampian agriculture and to assess farmers' attitudes to conservation and means of promoting it.	1985/86	North of Scotland College of Agriculture.
NCC153	Rural Data-base	To develop a rural data-base at the University of Essex.	1986/89	ESRC (funded jointly with DOE and others).
7. Miscellaneous				
NCC154	National Vegetation Classification	To provide a complete description and classification of British plant communities for publication by Cambridge University Press.	1976/89	University of Lancaster.
NCC155	Entomological Bibliography	To provide an information base to support the Invertebrate Site Register (NCC4).	1985/87	In-house.
NCC156	Reintroduction of Sea-Eagles	To reintroduce the white-tailed sea-eagle to Scotland from Norway.	1975/90	In-house.
NCC157	Creating Attractive Grassland	To investigate and test large-scale techniques for developing flower-rich grasslands from seed.	1984/87	NERC (ITE).
NCC158	Geological Guide to the Malverns	To prepare a geological guide-book to the Malvern Hills describing specially selected sites of lesser conservation value to divert educational use from SSSIs suffering damage.	1986/88	D Bullard.
NCC159	Geological Guide to Wenlock Edge	To prepare a similar geological guide-book to alternative sites on National Trust land on Wenlock Edge, Shropshire.	1986/87	In-house.

Contact for Enquiries: D Langslow, Nature Conservancy Council, Northminster House, Peterborough PE1 1UA (0733-40345).

Research Programme 1986/87

The total research programme of the SDD and other parts of the Scottish Office includes a wide range of topics with some bearing on rural development and conservation. The following projects are most closely related to countryside recreation. For a full list of government sponsored research of this kind in Scotland the programmes of the government agencies should be taken into account.

<i>Project Title</i>	<i>Objectives</i>	<i>Timescale</i>	<i>Comments</i>
SDD1	Potential of Dis-used Railway Paths as Cycle Routes	Assessment of feasibility of incorporating disused rail tracks in cycle route networks.	1984/86 13 potential routes identified.
SDD2	Factors Influencing Cycling in Scotland	Sample surveys in 6 case areas to identify pros and cons of cycling.	1984/86 Postal surveys followed by interviews.
SDD3	Tourist Route Signposting	Assessment of principles and standards.	1986/87 Joint study with STB.
SDD4	Inventory of Historic Gardens and Landscapes	Survey of 250 selected areas to assess design, condition and use.	1984/86 Land Use Consultants for SDD/CCS.
SDD5	Bowmont Valley Survey	Study of effects of upland land improvement on the evidence of historic settlement patterns.	1986/89 Study by Edinburgh University (Dept of Archaeology).
SDD6	Variations of Acid Deposition by Altitude	Monitoring of conditions in upland areas.	1984/87 Warren Spring Laboratory for SDD Engineers.
SDD7	Acidification of Inland Waterways	Monitoring of water condition.	1985/87 Solway River Board for consortium.
SDD8	Natural River Communities as Indicators of Water Quality	Vegetation surveys in selected rivers.	1985/88 Addition of Scottish sites to FBA study.
SDD9	Effect of Afforestation on Water Catchment Yield	Assessment of loss of water supply.	1983 start Joint study with FC etc.
SDD10	Conservation, Countryside and Planning	To develop guidelines for advice to farmers on conservation.	1983/86 Study by ESCA.
SDD11	Lower Input Farming	To test new farming systems which reduce environmental conflicts and use of energy.	1984 start Study by ESCA.
SDD12	Monitoring of Vegetation and Land Condition	Use of remote sensing techniques in land resource surveys.	1983 start Study by MISR.
SDD13	Allocation of Land Between Farming and Forestry	Modelling of factors in land use decisions.	1985 start Study by HFRO.
SDD14	Wild Geese in Western Isles	Assess damage to crops by greylag geese.	1984 start NOSCA with NCC, RSPB.
SDD15	Survey of Peat Resources	Evaluate quantity/quality of peat cover and potential uses.	1983 start MISR project.
SDD16	Survey of Bracken Problems	Assessments of bracken infestation by various survey methods.	1984 start MISR project.

Note Projects 10-16 are from the wide-ranging research programmes of the DAFS and associated colleges and institutes.

Contact for Enquiries: P McGovern, Scottish Development Department, Room 6062, New St Andrew's House, Edinburgh EH1 3SZ (031-556-8400 ext 5274).

Research Programme 1986/87

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>	
Continuing Research				
SSC1	Planning Data Management Service (PDMS)	To update computerised information for analysis of a range of planning problems.	Continuing	c 15,000 facility records.
SSC2	Review of Council Grant Aid	Analysis of SSC capital and revenue grants by sport and local authority, to guide policy reviews.	Continuing	In-house.
Current Research				
SSC3	Aspects of Fitness Testing	To review methods and effects of fitness testing.	Oct 1984/ Sept 1986	Centre for Leisure Research. Funded by Health Promotion Research Trust.
SSC4	Sport, Physical Recreation and Young People	To provide a database for sports development policy in relation to this target group.	March 1985/ March 1989	Aberdeen University (Leo Hendry). Funded by Health Promotion Research Trust. May be extended after 4 years.
SSC5	Management Information System for Sports Centres and Swimming Pools (MIS)	To evolve a management information system based on computerised data collection.	1985/87 (likely)	In association with SC. Details in SSC Information Digest FM2. Four Scottish installations.
SSC6	Effectiveness of Campaign to Increase Participation in 13-24 Age Group	Monitoring of Ever Thought of Sport Campaign at beginning and end of and halfway through its 2-year duration.	1985/87	1st phase In-house; 2nd phase (from March 1986) carried out by ASH.
SSC7	Digest of Sports Statistics	To produce UK statistics on participation at club level through survey of governing bodies.	1985/86	Jointly sponsored with SCs. Carried out by Centre for Leisure Research.
SSC8	Survey of Use of Ice-Rinks	Information and planning advice, calibration of supply/demand model.	1985/86	Surveys conducted by System Three Scotland. Analysis by System Three/PDMS.
SSC9	Impact of Development Plan Process on Planning for Sport	Analysis of relation between structure plans and provision, to inform advice to and training for local authorities.	1985/86	SSC-sponsored research by graduate student at Dundee University.
SSC10	Viral Infections in Athletes	To assess the effects of intercurrent illness and performance in Scottish athletes during training and competition.	Nov 1985/ March 1986	J A Roberts, Western Infirmary, Glasgow and SAAA. Grant-aided by SSC from new Research Grants Scheme.
SSC11	Analysis of 1983 GHS Leisure Data	To produce Scottish statistics on sports participation for basic planning.	Dec 1985/ July 1986	Jointly sponsored with CCS; part of wider-based project with SC and CC. Carried out by Henley Centre for Forecasting.
SSC12	Needs Assessment for Special Groups	To prepare a design brief to expedite commissioning of research into needs of special groups.	Dec 1985/ July 1986	Undertaken by Centre for Leisure Research.

SSC13	Strathclyde Leisure Pools Study	Completion of work on swimming pools and leisure pools; calibration of supply/demand model.	1986/89	Carried out by System Three Scotland.
SSC14	Sponsorship of Sport	To assess attitudes to and participation in sports sponsorship by leading Scottish companies.	Feb 1986/ April 1986	Update of previous work, by questionnaire; In-house.
SSC15	Review of Research	To identify recent and current research studies in Scotland and elsewhere relevant to the work of the Council.	Feb 1986/ Nov 1986	Carried out by Centre for Leisure Research.
SSC16	Sources of Funds for Sport	To prepare for publication a directory of sources of funds for development of sport in Scotland.	Feb 1986/ Aug 1986	Undertaken by Dept of Geography, University of Edinburgh.

Committed New Research

SSC17	Use of Indoor Bowling Facilities	Information and planning advice, calibration of supply/demand model.	1986/88	Facility and household interviews.
SSC18	Governing Body Proficiency Schemes	To prepare for publication an annotated directory of proficiency schemes in Scottish sports.	1986	In co-operation with Central RC (Sports Development Scheme).
SSC19	Evaluation of Leisure Association for the Elderly	To evaluate the effectiveness of a local authority scheme to encourage sports participation by the elderly.	1986	In co-operation with Cunninghame DC.
SSC20	Local Authority Information Services for Sport	To evaluate local systems of dissemination of information about sport and to make recommendations on good practice.	May 1986/ Dec 1986	Three phases: questionnaire, pilot project/case study, and manual of good practice. Combination of In-house and consultancy.

RESEARCH PUBLICATIONS 1985/86

SSC(P) 1	<i>Synthetic Surfaces: Outdoors</i> , (Information Digest FD 15), April 1985.
SSC(P) 2	<i>Artificial Ski Slopes in Scotland</i> , (Information Digest FD 16), July 1985.
SSC(P) 3	<i>Charges for Sport Facilities: Scotland 1984/85</i> , (Information Digest FM6), October 1985.
SSC(P) 4	<i>Sports Update: Medicine and Sciences (SUMS)</i> , (Bulletin to inform those involved in sports medicine and sciences about current developments), 3 pa.
SSC(P) 5	<i>Research Grants Scheme: Guidelines and Application</i> , (leaflet), April 1986.

Contact for Enquiries: Gillian Shepherd, Head of Information Services, 1 St Colme Street, Edinburgh EH3 6AA (031-225-8411).

Research Programme 1986/87

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>	
Annual Research				
STB1	Accommodation Occupancy Survey	To determine occupancy rates in tourist accommodation.	Continuous	Hotel survey runs Jan-Dec Self-catering and Caravan (Static and Touring) and Camping Site surveys run Apr-Oct. Undertaken by Centre for Leisure Research.
STB2	Survey of Visitor Attractions in Scotland	To obtain information on the number of visitors to a range of attractions in Scotland.	Annual	Retrospective postal survey of the previous year carried out in Jan/Mar. In-house survey and analysis.
STB3	National Survey of Tourism in Scotland (NSTS)	To monitor tourist trips undertaken by British residents in Scotland.	Continuous	Monthly survey of around 2,700 adults. Carried out by Survey Research Associates.
STB4	International Passenger Survey (Secondary Analysis)	To examine the volume, expenditure, and characteristics of overseas visitors to Scotland.	Annual	Managed by BTA/ETB with special analysis of visitors to Scotland.
STB5	The Supply of Tourist Accommodation in Scotland	To update STB's data on the supply of tourist accommodation.	Annual	Data obtained through STB's scheme for the registration of tourist accommodation. Analysed by Planning Data Management Service.
STB6	Marketing Follow-Up Study	To evaluate the effectiveness of STB Promotional campaign.	Annual	Various surveys of consumers and the travel trade. Undertaken by Survey Research Associates, Travel & Tourism Research, British Market Research Bureau and some in-house analysis.
Current Research				
STB7	'Ski Holiday Scotland' — Survey of Advertisers	To investigate response to advertisements in this brochure.	May 1986	Joint project of STB/HIDB.
STB8	'Surprising Scotland' — Survey of Advertisers	To investigate response to advertisements in this brochure.	July 1986	In-house STB project.
Tentative New Proposals				
STB9	Leisure Day Trips Study	To determine the size and extent of the leisure day trip market in Scotland.	1986/87	A possible jointly funded project by the STB and a number of other Scottish agencies.
STB10	Tourist Routes Signpost Survey	To assess the extent to which signposting of tourist routes affects travel behaviour.	1986/87	A project in conjunction with the SDD.

A survey of owners and UK developers of timeshare property. This survey will be conducted by the Tourist Advisory Group. It will be jointly sponsored by the BTA and the National Tourist Boards.

RESEARCH PUBLICATIONS 1985/86

STB(P) 1 *Research and Planning Information Handbook*, Loose leaf binder containing factsheets and research summaries, updated on a quarterly basis, 50% discount for educational establishments.

Contact for Enquiries: Brian Hay, Research Manager, Scottish Tourist Board, 23 Ravelston Terrace, Edinburgh EH4 3EU (031-332-2433).

THE SPORTS COUNCIL

Research Programme 1986/87

Sports Council Programme (selected).

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>	
Research in Progress				
SC1	Sports Centre Management Information System (MIS) Feasibility	To develop, install and monitor the effectiveness of computerised management information systems in large sports centres.	1983/86	In association with SSC. Second system computers introduced into standardised SASH sports halls.
SC2	Access to the Countryside for Recreation and Sport	To assess current availability and value of access provision for sport and recreation in relation to the needs of users and attitudes of providers.	1983/86	Centre for Leisure Research. Jointly funded by CC.
SC3	Land-based Motor Sports	To study problems of off-road motor sports in two SC regions.	1985	Carried out by M Elson, Dept of Town Planning, Oxford Polytechnic. Case studies in Hants and Lancs. See SC(P) 7 & 8.
SC4	Participation	Monitor demonstration schemes to increase sports participation. In Phase 1, monitoring Health & Fitness, Liverpool Health Authority; Working Men's Clubs, Cleveland; Women's Institutes, Eastern Region; Women's Motivator, Norwich; Comsport (Action Sport Northampton suburbs and nearby villages); Active lifestyles; School leavers, Coventry. In Phase 2, monitoring Sports counselling (Southampton); Pub-based programmes (E & SW regions); Sport at the workplace (Leicester). Phase 3 Schemes under negotiation.	1984/88	Monitoring by: Mike Fitzjohn, Malcolm Tungatt, North West Office. Internal progress reports.
SC5	UK Sports Research	Fourth Register of Sports Research for Council of Europe.	1985/86	Compiled by J Hardy.
SC6	Standards for Constructing and Maintaining Sports Turf.	To derive a specification for constructing pitches, base drainage and a surface.	1984/88	Sports Turf Research Institute, Bingley.
SC7	Monitoring Prototypes	To establish prototype pitches in different microclimates of selected modes of construction.	1984/87	University College of Wales, Aberystwyth.
SC8	Sports Turf	To provide a general advice, information and education service.	1984/87	Sports Turf Research Institute, Bingley.
SC9	General Household Survey, 1983	Analysis of the 1983 Survey including ACORN residential types.	1984/85	Henley Centre for forecasting, jointly with SSC, CC and CCS. Reports due summer 1986.
SC10	Public Sports Programmes for Disadvantaged Groups	To examine the objectives, methods and marketing of local authority programmes, Phase 1 for unemployed people.	1985/86	S Glyptis, Loughborough.
SC11	The Economic Impact of Sport	To evaluate the contribution of sport to job and income creation, taxation, and trade (in conjunction with other Council of Europe countries).	1985/86	Henley Centre for Forecasting.
SC12	Improved Public Income Expenditure Data	To see how public income and expenditure data on sport could be improved.	1985/86	Not yet decided.

New Projects

SC13	Air and Water Motor Sports	To examine the planning and management problems of these sports.	1986/87	M Elson, Oxford Polytechnic.
SC14	Locating New Facilities	To test the need for facilities in the Northern Region using a supply-demand model.	1986/87	Planning Data Management Services, University of Edinburgh.
SC15	Costs in Use of Sports Surfaces	To identify capital and maintenance costs of a range of artificial surfaces compared with natural turf.	1986/89	Not yet decided.
SC16	The Whole Life Cost of Sports Buildings	To look at the costs of buildings including wear and tear, replacement.	1986/87	Not yet decided.
SC17	The Changing Indoor Sports Centre	To see how long established leisure centres have adapted their designs and management to changing leisure demands.	1986/88	Not yet decided.

Sports Council/Economic and Social Research Council Joint Panel on Leisure and Recreation

SC18	Analysis of People's Concepts of Leisure	To elucidate individuals' conceptualisation of leisure and its meaning in their lives.	1980/83	Carried out by J Stockdale, Dept of Psychology, London School of Economics. See SC(P) 1.
SC19	Rationale for Public Sector Investment in Leisure	To study the development of public policy and institutions in leisure/recreation and implications for the future.	1981/83	Carried out by Centre for Leisure Research. Report due spring 1986.
SC20	Leisure and the Unemployed	To study the life styles and leisure behaviour of unemployed people.	1981/83	Carried out by P Kelvin, Dept of Psychology, University College, London.
SC21	Perspectives on Leisure Around Retirement	To study changing patterns of leisure activity by a sample of people before and after retirement.	1980/83	Carried out by TRRU, University of Edinburgh. See SC(P) 3.
SC22	Leisure and the Home	To investigate the nature and extent of home-based leisure and the way in which environment, house design, and family/household composition affect leisure behaviour.	1983/85	Carried out by S Glyptis, Dept of PE & SS, University of Loughborough. Complex sample survey of different house and household types in Notts. Report due Spring 1986.
SC23	Leisure and Gender	To investigate the social and psychological constraints on adult women's leisure life-styles and how these are sustained.	1983/85	Carried out by E Green and D Woodward, Dept Applied Social Studies, Sheffield City Poly. Interview survey plus ethnographic work. Report due summer 1986.
SC24	The Role of the Voluntary Sector in Leisure Phase II	To investigate the internal dynamics and external relationships of voluntary leisure groups.	1983/84	Carried out by J Bishop and P Hoggett, School for Advanced Urban Studies, University of Bristol. See SC(P) 3.

RESEARCH PUBLICATIONS 1985/86

SC(P) 1	Stockdale, J (1985), <i>What is Leisure?</i> (with ESRC).
SC(P) 2	Long, J (1985), <i>Continuity and Change: Leisure around retirement</i> , (with ESRC).
SC(P) 3	Bishop, J and Hoggett, P (1985), <i>The Social Organisation of Leisure: Voluntary Groups in their context</i> , (with ESRC).
SC(P) 4	Glyptis, S, Kay, T and Donkin, D (1986), <i>Sport and Unemployment</i> .
SC(P) 5	Rigg, M (1986), <i>Action Sport: Evaluation Summary</i> .
SC(P) 6	Centre for Leisure Research (1986), <i>A Digest of Sports Statistics for the UK</i> , 2nd Edition.
SC(P) 7	Elson, M, Buller, H and Stanley, P (1986), <i>Motorsports: From image to reality</i> .
SC(P) 8	Elson, M, Buller, H and Stanley, P (1986), <i>Providing for motor sports: a handbook</i> .

Contact for Enquiries: M Collins, Sports Council, 16 Upper Woburn Place, London WC1H 0QP (01-388-1277).

WALES TOURISM BOARD

Research Programme 1986/87

<i>Project Title</i>	<i>Summary of Objectives</i>	<i>Timescale</i>	<i>Comments</i>
Continuous/Annual Research			
WTB1	British Tourism Survey (BTS)	Comprehensive monthly survey of all overnight trips taken by British residents, plus an annual survey of Britons' holiday taking at home and abroad.	Continuous/Annual Combines two previous tourism surveys: the British Home Tourism Survey and the British National Travel Survey.
WTB2	International Passenger Survey (Secondary Analysis)	To examine the volume, value and characteristics of overseas visitors to Britain.	Annual The survey is sponsored by DEM. BTA and the tourist boards pay for extra data collection and analysis on specified topics, for instance the regional distribution of overseas tourism throughout Britain.
WTB3	Welsh Hotel Occupancy Survey	To provide a monthly measure of demand among a representative sample of hotels.	Monthly Survey undertaken by WTB; regular monthly bulletins and annual report issued to participating hotels, trade associations and other subscribers.
WTB4	Survey of Attendance at Visitor Attractions in Wales	To provide an annual measure of attendance at major tourist attractions.	Annual Postal enquiry by WTB; findings published annually.
WTB5	Demand Monitoring Survey	To provide information on short term demand trends among a representative sample of tourist operators.	Telephone survey by WTB during peak months.
Current Research			
WTB6	Severn Valley Tourism Study	To develop an overall tourism development and marketing strategy for Severn Valley and identify priority projects to be developed in partnership by the public and private sectors.	1985/86 With Powys County Council, Montgomery DC and Mid Wales Development; due for completion Spring 1986.
WTB7	Study of Holiday and Recreation Demand among Welsh Residents	To provide detailed information on the volume and characteristics of holiday and recreation demand among Welsh residents.	1985/86 Ad-hoc household interview survey (1,000 individuals); report in production.
WTB8	Surveys of Visitors to Welsh Tourist Attractions	To provide information on the profile and behavioural characteristics of visitors to selected tourist attractions.	1985 Site surveys of selected attractions undertaken July/August 1985. Report in preparation.
WTB9	Study of the Short Break Market	To assess the current scale and nature of the short break holiday market, and to identify user characteristics and needs.	1985 Postal survey of product users, report in preparation.
WTB10	Study of Farm Tourism Visitors	To assess the characteristics and product needs of farm tourism visitors.	1985 Telephone survey of product users; report in preparation.
WTB11	Marketing Effectiveness Studies	Series of interlinked studies to evaluate impact and effectiveness of specific WTB marketing initiatives.	1986/87 Programme in preparation.

WTB12	Study of the Social and Cultural Impact of Tourism	To examine and report upon the social and cultural impact of tourism upon host communities and to make practical recommendations aimed at enhancing, through tourism, Wales' unique cultural, linguistic and social traditions.	1986/87	Study commenced January 1986.
 New Research				
WTB13	Tourism Manpower Study	To update and refine existing knowledge of the structure of tourism employment in Wales.	1985/86	Study under consideration.
WTB14	Study of Tourism in Rural Areas	To examine and report upon the structure of the farm tourism sector and to consider tourism's contribution to the economy of these areas.		Study under consideration.

RESEARCH PUBLICATIONS 1984/1985

Annual Publications

- WTB(P) 1 *British Home Tourism Survey* (1984), (with BTA, ETB).
 WTB(P) 2 *Hotel Occupancy in Wales* (1985).
 WTB(P) 3 *Research Factsheets*.

Other Publications

- WTB(P) 4 *Inland Water in Wales — Development Opportunities for Tourism, Recreation and Sport* (jointly with Welsh Water Authority, Sports Council for Wales, Mid Wales Development).
 WTB(P) 5 *Attitudes to Wales as a Tourist Destination*.

Contact for Enquiries: E Owen, Wales Tourist Board, Brunel House, Fitzalton Road, Cardiff CF1 9LJ (0222-499909).

KEYWORD INDEX TO RESEARCH PROJECTS

FACILITIES AND PHYSICAL ENVIRONMENT

LEISURE FACILITIES

sports facilities

active outdoor pursuits facilities

casual outdoor pursuits facilities

touring facilities

educational facilities

PHYSICAL ENVIRONMENT

natural environment

landscape

forests

grasslands

heathlands

wetlands

coasts

recreational waters

uplands

flora and fauna

animal life

plant life

man-made environment

common lands

linear routes

urban parks

rural parks

resorts

gardens

farmland

visitor attractions

housing

urban fringe

areas of special need

geological features

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