

APPENDIX 1

Summary of Conclusions and Recommendations

Chapter 1: Where we are now.

1. We should continue to pursue the targeted Action Plan approach, maintaining the impetus for implementation and identifying ways of improving efficiency and removing obstacles to action.
2. We should use the biodiversity partnership to encourage integration of biodiversity into policies and programmes as part of the overall objective of sustainable development.
3. We should encourage the expansion of LBAP coverage and develop effective mechanisms for them to report on their own results and contribute to national goals.
4. We should press ahead with the development of the NBN and support the development of more comprehensive and up-to-date information sources and interactive reporting mechanisms for the whole biodiversity partnership.
5. We should ensure that the UKBAP retains a flexible and dynamic framework to respond to new knowledge and changing pressures.

Chapter 3: The Biodiversity Policy Framework

THE EUROPEAN CONTEXT

6. We would expect the UK to continue to play an active part in ensuring that the EU biodiversity strategy is implemented fully and effectively and in monitoring its progress.
7. We would expect the UK Government to continue to support the development of the PEBLDS as a vehicle for implementing aspects of the CBD in Europe which require action beyond national boundaries and in order to facilitate information exchange and assistance to the new democracies in central and eastern Europe.
8. We strongly support the NIBG's recognition of the importance of assessing habitat and species priorities and developing opportunities for joint action on an all-Ireland basis.

THE LEGAL FRAMEWORK FOR UK NATURE CONSERVATION

9. We welcome the new duties in England and Wales on Government Departments and the National Assembly for Wales to have regard to the purpose of the conservation of biological diversity in the exercise of their functions.
10. We recommend that the Government and the National Assembly take the earliest opportunity, in exercising their new duties under the Countryside and Rights of Way Act 2000, to explicitly support the continuation of the current UK BAP process and the current lists of HAPs and SAPs, pending any future systematic review by the whole UK partnership.
11. We welcome the Scottish Ministers' announcement. The Northern Ireland Executive should consider similar legislative biodiversity provisions to those contained in the Countryside and Rights of Way Act 2000 for England and Wales.

Chapter 4: The UK Biodiversity Action Plan: Principles and Objectives

PRINCIPLES

12. The essential elements of Partnership, Actions and Targets, Policy integration, Information and Public awareness remain central to the implementation of the UK Biodiversity Action Plan.

AIMS AND OBJECTIVES

13. The aims and objectives set out under paragraph 4.6 of this report should be adopted by our proposed new UK Biodiversity Partnership.

INDICATORS

14. The indicators identified in paragraphs 4.8 and 4.9 of this report should be adopted to monitor and report on future progress with the UK BAP.
15. We also consider that, in due course, an indicator showing the proportion of Action Plan targets achieved should be adopted.
16. We recommend that the UK continues to work with other countries, within the framework of the CBD, to develop a suite of indicators which can be used to assess the state of biodiversity generally and progress towards achievement of the primary aims of the BAP.

Chapter 5: The Structure of Delivery of the UK Biodiversity Action Plan

17. We have identified certain functions in paragraph 5.7 which remain important at the UK level, to be facilitated by UK co-ordination. In pursuing those functions, we make the following organisational recommendations for the future:
- 17.1 • The relevant Ministers from the UK Government and the Devolved Administrations should meet periodically to consider matters of common concern relating to the conservation of biological diversity.
- 17.2 • An extended UK Biodiversity Partnership should replace the current UKBG and meet annually. Membership should include all organisations that participate in the UK BAP at UK and Country levels. It would give the opportunity to exchange information about the activities of the Country Biodiversity Groups, receive reports from sub-groups and consider common support systems.
- 17.3 • There should be a small Standing Committee chaired by the Director of Wildlife and Countryside DETR with representation from the Chairs of the four Country Groups and the four statutory agencies as well as the non-statutory sector i.e. Biodiversity Challenge, business and industry and the farming/land management. The Committee's central responsibility would be to prepare issues for consideration at the annual meetings of the UK Biodiversity Partnership and maintain continuity between meetings.
- 17.4 • Much of the work agreed for UK co-operation should continue to be delivered by sub-groups. We see a continuing role for the Biodiversity Information Group, and the Biodiversity Research Working Group, reporting to the UK Biodiversity Partnership. The Targets Group and a Costings sub-group may need to continue to meet from time to time to guide the process of selection, management and review of the common list of Species and Habitat Action Plans. The Standing Committee would maintain a watching brief over the work of the sub-groups between meetings of the Partnership.
- 17.5 • The UK Biodiversity Secretariat in the Biodiversity Policy Unit of DETR should service the UK Biodiversity Partnership and the Standing Committee, the sub-groups as appropriate and be the focus for information and communication. The Secretariat should work closely with the Biodiversity Information Service of the JNCC support unit to develop, maintain and effectively utilise the Partnership's joint support and information mechanisms. The UK Secretariat should work in close liaison with the Country Secretariats to exchange information and identify relevant matters for UK consideration and action.

Chapter 7: The Habitat and Species Action Plans

ESTABLISHMENT OF THE ACTION PLANS

18. The completion of the 391 individual Species Action Plans and 45 Habitat Action Plans has been one of the great successes of the biodiversity process. It has only been possible because of the enormous efforts of a great many people from a wide range of sectors.

THE COSTS OF ACTION PLANS

19. In the light of the research report, the Costings sub-group should consider further what advice it can give to Lead Partners for the planning and monitoring of expenditure, and work with the Biodiversity Information Group to ensure that relevant reporting of costs is included in the main Action Plan reporting framework.

Chapter 9: Future direction for the Habitat and Species Action Plans

THE TARGETED APPROACH

20. Priority should be given to implementation of the existing 436 Action Plans over considering plans for additional habitats and species, unless the Targets Group identifies, in the light of emerging biological information, pressing needs that have not already been addressed and which might require a fast-track process for adoption.
21. The Targets Group should consider with some urgency whether those species confirmed to be extinct should remain priorities for the UK BAP or whether resources would be better expended elsewhere. Likewise, targets and priorities need to be re-evaluated for species discovered to be more numerous than previously thought and criteria for review should be established. The Group must also establish mechanisms to update time-limited targets as appropriate to ensure that the process remains relevant.
22. The lack of information regarding the status and distribution of priority habitats and species should be addressed as a matter of urgency. In addition to current surveys underway, this should involve identifying and collating existing sources of data. Development of the NBN must remain a high priority.
23. Lack of resources is perceived as one of the most significant constraints to progress by Lead Partners, but the costings research was not able to draw any generally applicable conclusions about the nature of these pressures. Country Groups should consider the extent to which resource gaps should be filled by specific funding programmes as well as supporting a general trend to encourage adjustments to other expenditure programmes to take account of biodiversity needs.

MANAGING THE PROCESS: MONITORING

24. Monitoring and reporting of conservation activities should automatically form part of the responsibilities of Lead Partners, Contact Points, and Action Plan Steering Groups. We need to ensure an effective exchange of information on, preferably through a web-based system, which should be supported by the development of review mechanisms, criteria and data standards.
25. We consider that the new database held in the Biodiversity Information Service of JNCC is an important resource for the UK Biodiversity Partnership. It should be maintained and improved to be a principal source of information for analysis and evaluation of the Action Plans, available as a service to the UK Biodiversity Partnership as a whole, Lead Partners, the Country Groups and LBAPs.

MANAGING THE PROCESS: COMMUNICATION

26. We believe that in order to facilitate improved communication throughout the biodiversity process there will be a need to invest considerably more resources into computer equipment, software, programming and training.
27. The single most important aid to better communication will be the establishment and on-going management of a 'user-friendly' and regularly up-dated UK biodiversity web site.
28. We believe briefing should be prepared by Lead Partners to guide local players, in particular LBAPs, and should be made available via the website and/or through regional fora.
29. LBAPs should make available information to Lead Partners via updating of the LBAP directory and through direct contact. Further guidance for Lead Partners on how potentially conflicting actions between Plans are to be resolved also needs to be drawn up.

Chapter 10: Local Biodiversity Action Plans

30. The UKBG urges the England Biodiversity Group to adopt the goal of 100% LBAP coverage and for all Country Groups to seek to ensure that LBAPs are comprehensive and effective.
31. We believe that Local Biodiversity Action Plans, incorporating authorities' action on local wildlife sites, should be a component of these wider community strategies. Local authorities should take account of biodiversity in their duties of achieving Best Value and make links to local quality of life indicators.
32. Country Groups should encourage LBAPs to increase the involvement of all sectors of the community in plan preparation and implementation, if necessary by the preparation of best practice guidance.
33. Lead Partners and Agencies should be clearer about what national actions and targets are best delivered through LBAP means.
34. Considerable further work is necessary to facilitate communication between LBAPs and leaders of national Action Plans. The aim should be to ensure that LBAP activity and results can be reported regularly and effectively to the national reporting framework by electronic means.

35. The individual Country Groups should consider the funding needs of their LBAPs in more detail and the possibility of funding strategies which support the goal of 100% effective LBAP coverage and implementation.
36. LBAPs should provide a stimulus to the development of local biological record centres as nodes of the NBN.

Chapter 11: The Management of Biodiversity.

LAND MANAGEMENT AND THE CONSERVATION OF HABITATS AND SPECIES

37. We welcome the continuing efforts being made to secure improvements in the extent and management of protected areas. However, sensitive land management beyond designated sites is necessary for biodiversity improvements and work continues to be needed to extend appropriate management practices to a landscape scale.

SPECIES-SPECIFIC CONSERVATION

38. We believe that agri-environment schemes should accommodate local prescriptive variation to take account of the requirements of individual species.
39. There is a need for training within academic institutions, professional and voluntary conservation organisations, in order to raise the skill base to deliver UK BAP objectives.
40. We welcome the Government's announcement of a fundamental review of the policy relating to the control of non-native, invasive species. We also welcome and endorse the guidelines produced by the Forestry Commission and Flora Locale regarding the use of native species.

Chapter 12: Biodiversity through Sustainable Development

41. As the House of Commons Select Committee states, greater efforts must be made by Government Departments and all public bodies to mainstream biodiversity considerations into all areas of public policy and programmes as part of sustainable development.

AGRICULTURE

42. Changes to the agri-environment schemes are welcome but will take time to produce biodiversity improvements and will still cover a relatively small proportion of farmland. More fundamental reform of the CAP should remain a central objective.
43. We welcome the fact that MAFF has adopted the need to reverse the downward trend in farmland birds as a Public Service Agreement target.
44. In the ways indicated in paragraph 12.20 it should be possible to develop a closer correlation between BAP objectives and delivery of agri-environment payments.

45. The change to area-based payments under the HFA scheme is a move in the right direction. But framing the scheme to ensure that there are biodiversity benefits will be important.
46. Agri-environment schemes will remain important to securing appropriate grazing levels in many parts of the uplands.
47. We believe the aim should be to develop an agreed understanding of the implications for biodiversity of the use of pesticides and to develop an approach, supported by the agro-chemicals industry, which combines appropriate regulatory controls with voluntary self-regulation and application of best practice.

WATER AND WETLAND MANAGEMENT

48. The opportunities for inter-action between LEAPs and Local Biodiversity Action Plans should be seized. LEAPs require adequate resources and can be a model for the ecosystem approach that will be required for the implementation of the European Water Framework Directive, adopted in December 2000.
49. We are pleased that there have already been significant improvements in water quality and management through policy adjustments, investment programmes and European Directives. These trends are broadly demonstrated by the results of CS 2000 and we would expect them to continue.
50. The statutory environment agencies are to be congratulated on their work in mainstreaming biodiversity into their policies and programmes. This should be continued with greater emphasis on a catchment or ecosystem approach (e.g. through LEAPs, implementation of the EU Water Framework Directive, Water Level Management Plans and Catchment Flood Management Plans).
51. Water companies and authorities have been amongst the most prominent business partners in the UK BAP and their contribution is highly valued.

FORESTRY

52. Over 50% of UK woodlands are probably still not managed formally in any way and increasing the area under sustainable management remains a challenge for the future.
53. Under the forestry strategies for each country, consideration should be given to the role of forestry in taking forward wider biodiversity objectives, including the local balance between woodland expansion and restoration of open semi-natural habitats.

DEVELOPMENT

54. We look forward to the issue of further planning guidance to improve the integration of biodiversity into the planning process and to encourage the adoption of alternative approaches to developments which can mitigate biodiversity damage, and create new biodiversity opportunities and enhancement.
55. The contents of Local Biodiversity Action Plans as part of Community Strategies should, we believe, increasingly become the touchstone for local planning decisions affecting biodiversity.

56. It is important that we continue to build on good practice and that the biodiversity and ecological expertise and understanding amongst developers and local planning authorities is reinforced.

COASTAL MANAGEMENT

57. The natural forces driving coastal change are very powerful and coastal managers should as far as possible seek to work with rather than against these forces. Working in partnership with land owners we should learn to accept dynamic coastlines and manage change. Significant habitat losses from coastal squeeze will need to be offset by habitat restoration or re-creation.

THE MARINE ENVIRONMENT

58. We believe that the likely outcomes of the Working Group on the Review of Marine Conservation are areas in which firm recommendations should be adopted by Government and we consider that they would represent a significant step forward in implementation of the marine Action Plans.
59. We recommend that the Government should take every opportunity to influence the adaptation of the Common Fisheries Policy towards more sustainable practices in the light of the substantial evidence of damage to marine biodiversity caused by fisheries.
60. In particular the Government's declared objective of prioritising integration of environmental objectives in the revision of the CFP in 2002 in pursuit of the Cardiff integration process is very important. The Government should consider supporting the Swedish Presidency's proposal that: 'A further objective [of the CFP] should be the adoption of an ecosystem approach in order to ensure sustainable sound and healthy ecosystems in Community waters, by restoring and/or maintaining their characteristic structure and function, productivity and biological diversity through the application of a more ecosystem based management.'

Chapter 13: Biodiversity and Society

BUSINESS AND BIODIVERSITY

61. We are encouraged by the work that many businesses are doing to take account of biodiversity and to integrate it more effectively into their operations. There are many examples of good practice and co-operation at national and local levels. The champions initiative has given rise to some successful partnerships and this should continue to be pursued as opportunities arise. However, much more needs to be done to ensure that business practice, long term, incorporates biodiversity considerations as part of sustainable development and sustainable use of resources. We acknowledge the ETRA Committee's observation that business should be more involved in biodiversity. We recommend that representatives of industry should be invited to participate more comprehensively in the biodiversity process at all levels in order to develop a more effective strategy for business involvement and understanding.

62. We welcome the decision of the Energy and Natural Environment Panel of Foresight to consider biodiversity as part of its future programme. We look forward to co-operating with them to develop an approach to consider the long-term conservation and sustainable use of biodiversity.

BIODIVERSITY IN URBAN AREAS

63. If our aim is to encourage everyone to appreciate biodiversity and incorporate it into changed behaviour, the BAP must reach into centres of human population – the boundary between town and country is not distinct.

RECREATIONAL VALUES OF BIODIVERSITY

64. Reform of common land legislation is seen as a mechanism to resolve some perceived conflicts between biodiversity and access, and we recommend that this be pursued.
65. We also recommend that management measures such as information provision, wardening, sensitive location of car parks and footpaths are taken to avoid adverse effects from the new right of access in England and Wales.
66. So whilst the risk for local conflict between access and biodiversity conservation clearly exists, there are wide and far-reaching benefits from encouraging the recreational appreciation of biodiversity by the public as a significant contribution to awareness-raising. Our efforts should be concentrated on ensuring that these benefits are fully realised.

PUBLIC AWARENESS AND EDUCATION

67. The process of implementing BAP actions now provides many opportunities for the media to develop interesting news stories featuring not only the species in question, but also the actual people involved in this work and what they are doing. Clear communication, with illustrations by example, can let others see what conservation work involves and inspire them to participate.
68. We consider that it is necessary to build on the references in the national curricula by working with the education community to develop the curriculum tools to reinforce these themes, including developing opportunities for young people to gain first hand experience of biodiversity.
69. More generally it will be for the Country Groups to explore ways in which the already strong public awareness of biodiversity can be further encouraged and channelled, perhaps through the identification of different possibilities for diverse sectors of the community.

Chapter 14: Large-scale influences on biodiversity

CLIMATE CHANGE

70. The biodiversity process provides a framework for the consideration of the long-term implications of climate change. Though there is still great uncertainty, it is clear that climate-induced responses must be a factor in the continuing management of the lists of

priority species and habitats and in planning actions to conserve them. It must also be taken into account more systematically in wider policy considerations which influence biodiversity.

AIR QUALITY

71. We recommend that research be commissioned to determine the extent to which future emission scenarios will affect the delivery of targets for SAPs and HAPs and the achievement of favourable condition of SSSI features as well as biodiversity as a whole.

Chapter 15: Knowledge for Biodiversity

INFORMATION

72. Development of a comprehensive survey and monitoring programme is essential to the effective operation of the target-led approach contained in the UK BAP. Responsibility for co-ordinating the implementation of survey, monitoring and autecological work must be clearly established.
73. The National Biodiversity Network is an essential mechanism that should continue to be developed as quickly as possible, consistent with building a sustainable structure.
74. Actions in the HAPs and SAPs to improve the information base remain essential and must be progressed. Collective approaches to support these actions can be provided by NBN, the developing biodiversity surveillance framework, the UK BAP and Country Group web sites and the new HAP/SAP database. Common mechanisms should be sought wherever possible to help implementation of the UK BAP.
75. An integrated framework for surveillance and monitoring of biodiversity is urgently required. This should build on existing programmes for particular species groups and biodiversity-based approaches such as CS2000, condition assessment of SSSIs and the Environmental Change Network.

RESEARCH

76. Research is vital to help deliver BAP objectives both for individual Action Plans and to address cross-cutting issues. Though much is already being done, the work undertaken by the BRWG to identify biodiversity research priorities and facilitate co-operation remains essential and collective action is needed to take forward the research priorities already identified and arising as a result of the analysis of Lead Partner reports. We therefore recommend that a UK Biodiversity Research Group continues to act as a forum for co-ordination and promotion of research in support of the delivery of UK BAP objectives and to promote synergies with the EU Platform on Biodiversity Research.

APPENDIX 2

The UK Biodiversity Action Plan Publications

Biodiversity: The UK Action Plan. 1994 HMSO London

Biodiversity: The UK Steering Group Report Vol 1: Meeting the Rio Challenge.
1995 HMSO London

Biodiversity: The UK Steering Group Report Vol 2: Action Plans.
1995 HMSO London

Government Response to the UK Steering Group Report
1996 Cm 3260 HMSO London

Tranche 2 Action Plans Volume I: vertebrates and vascular plants. UKBG
1998 EN Peterborough

Tranche 2 Action Plans Volume II: terrestrial and freshwater habitats. UKBG
1998 EN, Peterborough

Tranche 2 Action Plans Volume III: plants and fungi. UKBG
1998 EN, Peterborough

Tranche 2 Action Plans Volume IV: invertebrates. UKBG
1999 EN, Peterborough

Tranche 2 Action Plans Volume V: maritime species and habitats. UKBG
1999 EN, Peterborough

Tranche 2 Action Plans Volume VI: terrestrial and freshwater species and habitats. UKBG
1999 EN, Peterborough

Index to the Steering Group Report and Tranche 2 Action Plans. UKBG
2000 EN, Peterborough

Tranche 2 Action Plans Cost estimates: species. UKBG
2000 EN, Peterborough

Tranche 2 Action Plans Cost estimates: maritime habitats. UKBG
2000 EN, Peterborough

Tranche 2 Action Plans Cost estimates: terrestrial and freshwater habitats. UKBG
2000 EN, Peterborough

Tranche 1 and 2 Action Plans Cost estimates: a summary report. UKBG
2000 EN, Peterborough

APPENDIX 3

The 59 Steps

The 59 Steps were set out in *Biodiversity, the UK Action Plan* in 1994 as a series of actions against which future progress would be monitored. The UK BAP has developed considerably since those early days and the 59 Steps themselves no longer provide an appropriate framework for ongoing monitoring. But alongside other emerging priorities, the Steps have been taken forward through appropriate policies and programmes. Analyses of broad progress against them are incorporated in the relevant sections in the main body of this report. Here we map the original 59 Steps against the re-formulated UK BAP aims and objectives proposed in Chapter 3.

Some Steps continue to be relevant to action at the UK level. For many more, the means of delivery lie with the four countries of the UK and it will be for the separate Country Biodiversity Groups to consider how far these particular Steps remain a factor in their developing biodiversity strategies and priorities. This Appendix also identifies those of the 59 Steps that do not currently form part of the action under the UK BAP and which may be relevant to other obligations of the CBD which are delivered by other means.

Some general conclusions can be drawn from this correlation of the original 59 Steps with the current proposed aims and objectives:

- Habitat Action Plans and Local Biodiversity Action Plans are poorly addressed by the 59 Steps but covered within other areas of the UK BAP.
- Large scale impacts on biodiversity such as climate change are not covered by the 59 Steps.
- Significant areas of CBD implementation lie outside the current scope of the UK BAP.

PROPOSED UK BAP OBJECTIVES AND RELATED 'STEPS' RELEVANT TO UK AND/OR COUNTRY IMPLEMENTATION

- **Maintain and keep under review an overall strategy for the conservation and enhancement of UK biodiversity in the light of the biodiversity strategies of the four countries of the UK.**

No specific step identified.

- **Bring together all relevant sectors to work in partnership.**

No specific step identified.

- **Develop, implement and keep under review targeted action plans for the most important species and habitats.**

Step 33. Species Action Plans

Prepare plans for threatened species in priority order: globally threatened; threatened endemics; other threatened species listed in the relevant schedules and annexes to UK and EC legislation and international agreements to which the UK is a party; endangered and vulnerable species listed in Red Data Books, aiming to complete and put into implementation plans for at least 90% of the present known globally threatened endemic species within the next ten years.

- **To take direct measures to conserve species and habitat diversity, in particular through the conservation of threatened or protected species and important sites, and through the management or control of non-native species.**

Step 1. SSSI Management Plans

Ensure that summary management plans are prepared and where possible implemented, for each biological SSSI by the year 2004.

Step 2. Designate additional protected areas to fill gaps

Continue to designate additional protected areas to deal with acknowledged gaps in the existing coverage, e.g. in relation to freshwater habitats and species.

Step 3. Complete the ongoing designation process for SACs, SPAs and Ramsar sites

Complete the designation of all identified Special Protection Areas and Ramsar sites. Comply with the timetable for the designation of Special Areas of Conservation set down in the Habitats Directive by the year 2004.

Step 4. Mechanisms for protecting marine areas

Create mechanisms for the effective protection and management of key wildlife areas in the marine environment.

Step 7. Identifying prime biodiversity areas

Utilise existing knowledge to identify prime biodiversity areas in the UK based on best available levels of data recorded and agree a strategy to protect and enhance them involving all interested parties.

Step 11. Marine SACs and SPAs

Designate sufficient marine SACs and SPAs and ensure the mechanisms are in place for their effective conservation under the Habitats and Birds Directives.

Step 16. Local Nature Reserves

Encourage local planning authorities to make reasonable provision for Local Nature Reserves and natural green space in local plans and environmental charters.

Step 34. EN Species Recovery Programme

Continue English Nature's species recovery programme by adding at least 5 new species per year.

Step 35. Red Data books

Establish priorities for Red Data Books for the main taxonomic groups without them.

Step 36. Guidance on alien species and species restoration.

Update and publicise guidelines on translocations, re-establishments, introductions and re-stocking.

Step 42. Legal protection

Continue to give legal protection to threatened species, and prohibit both the persecution of protected species and the use of illegal means of killing/taking.

- **Encourage the preparation, implementation and review of Local Biodiversity Action Plans to support national biodiversity objectives and to take forward local priorities for action.**

No specific step identified.

- **Take steps to minimise the adverse impacts of human activity on biodiversity, both direct and indirect.**

Step 10. Coastal defence and flood protection

Continue to implement new approaches to coastal flood defence and coast protection which work with, rather than against, natural processes.

Step 19. Agricultural incentives

Continue to monitor existing financial incentives to encourage environmentally sensitive forms of agriculture to ensure they are having positive effects on the habitats and landscapes targeted and are thus contributing to biodiversity objectives. Tailor new incentives schemes planned under the agri-environment programme to complement existing schemes and keep under review.

Step 20. Regulations on pesticide and fertiliser storage

Enforce strictly regulations controlling the use and storage of environmentally damaging pesticides and fertilisers, if necessary introducing new measures.

Step 39. Reducing fishing effort

Seek to control levels of fishing effort in the UK fleet by a package of measures to reduce capacity (e.g. decommissioning) and fishing activity (e.g. restrictions on days spent at sea).

Step 54. Areas sensitive to shipping

Participate in the identification of sensitive areas at high risk from shipping.

- **Take steps to understand the effects on biodiversity objectives of large-scale influences such as ozone depletion and climate change and determine appropriate responses.**

No specific step identified.

- **Integrate biodiversity considerations into public policies and programmes.**

Step 5. Land use planning

Ensure biodiversity considerations are incorporated in the land use planning system.

Step 12. Estuary Management plans

Produce estuary management plans for 27 key estuaries in England by 1997, and in Scotland work towards the preparation of integrated management plans and co-operative framework for the implementation for Moray Firth, Solway Firth and the Firth of Forth by 1998, to be followed by other significant Scottish estuaries in due course. In Northern Ireland, complete plans for Strangford Lough and Belfast Lough.

Step 13. Coastal zone management plans

Promote the preparation of coastal zone management plans where required, following consultation on coastal policy discussion papers for England and Wales, stressing among other things, the importance of conserving and enhancing biodiversity. Issue a separate Scottish Consultation Paper covering coastal issues in due course.

Step 18. Greening CAP

Continue to support further “Greening” of the CAP while recognising the need to work within the framework of the reformed CAP, press for closer linkage between agricultural and environmental policies and objectives.

Step 21. Organic Farming

Support organic farming and encourage more extensive livestock farming in selected areas.

Step 23. Hedgerows

Continue to support measures for hedgerow management and restoration for England and Wales.

Step 24. Sustainable Forestry

Implement the Biodiversity aspects of the UK Sustainable Forest Programme.

Step 25 Woodland management

Continue to protect ancient semi-natural woodland and encourage forms of management which conserve their species characteristics.

Step 26. Woodland regeneration

Continue to encourage the regeneration of woodland.

Step 27. Woodland re-structuring

Encourage the restructuring of even-aged plantations to create more varied forest with a mixture of types and ages of trees, including the implementation of forest design plans in State Forests.

Step 28. Woodland expansion

Continue to encourage a steady expansion of woodland and forest cover.

Step 29. Woodland management and expansion

Encourage the extension and creation of native woodlands, including extending the area of Forestry Commission Caledonian Forest (native pine and broadleaved).

Step 31. New National Forests

Support the creation of a new National Forest in the English Midlands, and the creation of multi-purpose woodlands in Scotland’s central belt through the Central Scotland Woodlands initiative.

Step 38. Regulating Fisheries

Continue to have regard to the need to conserve marine fauna and flora in carrying out the Government’s duty to regulate fisheries.

Step 46. Statutory policies and programmes

Incorporate environmental principles, including biodiversity, in their (Government and its Agencies) policies and programmes.

- **Encourage more integration of biodiversity considerations into business policies and practices to support the delivery of biodiversity objectives.**

Step 44. Tourism

Encourage the tourism industry to include more information about the need for environmental conservation in its promotional literature, and to develop necessary skills to provide high quality information and interpretation, including information about local biodiversity.

- **Take steps to increase public awareness of biodiversity issues.**

Step 15. Public involvement in marine reserves

Utilise Voluntary and Statutory Marine Reserves and other related initiatives as mechanisms to involve individuals and communities in practical marine conservation work.

Step 17. Support urban biodiversity initiatives

Continue to support voluntary sector initiatives aimed at enhancing the conservation value of urban and urban fringe land, for example continued support to the Groundwork Trust Movement, enabling more urban trusts to be established, and to the Royal Society for Nature Conservation to enable it to extend its "Environment City" scheme in co-operation with local authorities. In Scotland continue Scottish Natural Heritage's Countryside Around Towns programme to enhance the value of degraded land and continue to underpin UK2000, Scotland's role in forging partnerships between private, voluntary and public sectors for environmental purposes.

Step 30. Community woodlands

Support the creation of community woodlands near population centres.

Step 32. Urban tree planting

Continue to encourage urban tree planting and care through research, support to voluntary organisations, and urban regeneration initiatives.

Step 43. Non conservation orientated voluntary organisations

Encourage voluntary bodies involved in tourism and heritage activities to raise funds for initiatives on the conservation of biological resources.

Step 45. Publicity Strategy

Consider a publicity strategy to explain the meaning and importance of biodiversity and explain what needs to be done to conserve and enhance it. The campaign could: support initiatives that enhance people's understanding of what is special about their local environment; encourage the creation of a network of community wardens, support initiatives that promote local action to conserve local biodiversity.

Step 47. Environmental education in Scotland

Encourage where possible the adoption of agreed measures arising out of the Scottish Working Group Report, "Learning for Life", and the adoption of measures proposed in the Toyne Report.

Step 48. Citizens network

Establish a Citizens Environment Network to carry the message to individuals throughout local communities.

- **Identify, undertake and keep under review research and monitoring to support implementation of other objectives.**

Step 6. Land cover surveys

Improve the database of the countryside surveys of Great Britain and Northern Ireland, while further developing the Scottish Office Land Cover of Scotland Survey.

Step 9. Marine Nature Conservation Review

Complete the Marine Nature Conservation Review under the aegis of the Joint Nature Conservation Committee.

Step 14. New approaches to coastal defence

Undertake further research to assess the scope for enhancing sea defence and habitat creation through managed set back of the coast, linking research projects around full scale trials.

Step 22. New approaches to environmental management

Expand government research on environmental management, and continue to support advice to farmers to help them to identify and adopt environmentally beneficial management practices, which will conserve and where practicable, enhance wildlife habitats on their land.

Step 40. Fisheries research

Ensure that fisheries research continues to provide effective understanding of the natural processes that control the production and survival of fish and shell fish larvae; the means of making accurate and timely assessment of topical issues such as the inter-action between towed gear and the sea bed and by-catches.

Step 49. Impact of recreation

Promote a co-ordinated programme of research through the Government's environment agencies to include understanding of the impact of recreation on biodiversity and to develop visitor management techniques to reduce negative effects, e.g. the sustainable tourism project in Northern Ireland.

- **Develop and maintain comprehensive and accessible biodiversity information systems linking national and local records, standardised as necessary.**

Step 8. Natural Areas and Natural Heritage Zones

Revise the Natural Area Map for England in 1994, completing a strategy for 6 natural area schemes with key objectives by 1995. In Scotland, publish maps of biogeographical zones by 1995.

Step 50. Biodiversity information

Improve the accessibility and co-ordination of existing biological datasets; provide common standards for future recording.

STEPS THAT RELATE TO ELEMENTS OF CBD IMPLEMENTATION THAT ARE BEING DISCHARGED THROUGH MECHANISMS OTHER THAN THE UK BAP

UK contributes to the implementation of the CBD through a number of activities co-ordinated outside the specific UK BAP processes. The Steps dealing with these topics are listed below. Some, such as the other international conventions mentioned, do however provide an important context within which many elements of the UK BAP are delivered.

BIOTECHNOLOGY

Step 37. Protecting genetic resources

Review microbial (and possibly botanically and animal) genetic resources, and then consider whether to develop a formalised strategy for future ex-situ conservation of genetic resources taking account of international obligations and development in this field.

INTERNATIONAL CONVENTIONS

Step 41. Bonn Convention agreements

Draw up priority action statements to guide UK implementation of the new agreements on European Bats and small cetaceans of the Baltic and North Seas.

Step 51. CBD

Participate actively at all levels of the biodiversity convention.

Step 52. Other biodiversity related conventions

Play an active part in developing effectively existing international conventions for nature conservation, particularly CITES, the Bern, Ramsar and Bonn Conventions and the specific agreements under the last of these.

Step 55. ASCOBANS

Participate fully in the Agreement on the Conservation of Small Cetaceans in the Baltic and North Seas (ASCOBANS) which will improve on an international scale measures for conservation management and research.

EUROPEAN INITIATIVES

Step 53. Conservation in Europe

Play a full part in ensuring a sound scientific basis for conservation in Europe.

Step 56. DG Research

Take full account of the EC fifth Environmental Action Programme in respect of its implications for biodiversity.

OVERSEAS TERRITORIES AND AID TO DEVELOPING COUNTRIES

Step 57. Assisting developing countries

Assist the conservation and sustainable use of biological resources in countries otherwise unable to afford it.

Step 58. Aiding developing countries

Through the aid programme, support national development programmes in developing countries that aim at or involve the conservation and sustainable use of biodiversity; and assist developing countries to take action to conserve biodiversity in the global interest through the Global Environmental Assistance programme.

Step 59. Overseas Territories

Encourage individual Dependent Territories to develop strategies for biodiversity conservation, including updating existing legislation and developing new legislation to protect species and habitats as appropriate.

APPENDIX 4

The UKBG and Country Biodiversity Groups

UK Biodiversity Group

MEMBERSHIP

British Trust for Conservation Volunteers (BTCV)
Centre for Hydrology and Ecology (CEH)
Confederation of British Industry (CBI)
Country Landowners Association (CLA)
Countryside Council for Wales (CCW)
Department of the Environment, Northern Ireland (DOE)
Department of the Environment, Transport and Regions (DETR)
English Nature (EN)
Environment Agency (EA)
Forestry Commission (FC)
Greater London Authority (GLA)
Joint Nature Conservation Committee (JNCC)
Local Government Association (LGA)
Ministry of Agriculture, Fisheries and Food (MAFF)
National Assembly for Wales
National Farmers Union (NFU)
Natural Environment Research Council (NERC)
Natural History Museum (NHM)
Royal Society for the Protection of Birds (RSPB)
Scottish Executive (SE)
Scottish Natural Heritage (SNH)
Wildlife Trusts (WT)

TERMS OF REFERENCE

The United Kingdom Biodiversity Group (UKBG) provides the strategic leadership for the biodiversity process. In particular, UKBG is charged by Government to:

- oversee and co-ordinate the implementation of the UK Biodiversity Action Plan;
- monitor and evaluate national biodiversity targets;
- report on progress towards, and means of overcoming obstacles to, achieving the Plan's objectives and targets; and,
- advise Government on how best to secure progress in achieving the foregoing objectives.

UKBG will seek to ensure that:

- every encouragement is given to the incorporation of biodiversity objectives and targets into the full range of relevant policies both within Government and in other sectors;
- a consistent and effective approach is adopted throughout the UK, commensurate with differences in the institutional framework in the four countries;
- common protocols are set for developing and implementing species and habitats action plans and reporting on their progress;
- a framework of consistent and appropriate data, information and research is provided;
- national priorities are translated into local action;
- appropriate strategies for education and public involvement in, and awareness of, biodiversity are developed and delivered; and
- adequate resources are identified, sought and, if possible, found.

UKBG comprises representatives of all major interests in biodiversity, including Government Departments, Local Government, statutory agencies, business and commerce, land management and voluntary conservation organisations. It is chaired by an officer of the Department of the Environment, Transport and the Regions which also provides its Secretariat.

Scottish Biodiversity Group

MEMBERSHIP

Aberdeen City Council
CBI Scotland
Community Learning Scotland
Convention of Scottish Local Authorities
Crofters Commission
Defence Estates (Lands)
Falkirk College
Farming and Wildlife Advisory Group (FWAG)
Forestry Authority/Commission
Learning and Teaching Scotland
National Farmers' Union of Scotland
Plantlife
Royal Botanic Gardens, Edinburgh (RBG)
RSPB Scotland
Scotch Whisky Association
Scottish Agricultural College
Scottish Airports
Scottish Association of Marine Science
Scottish Crofters Union
Scottish Environment Protection Agency (SEPA)

Scottish Executive (SE)
 Scottish Fishermen's Federation
 Scottish Landowners' Federation
 Scottish Natural Heritage (SNH)
 Scottish Power
 Scottish Wildlife Trust
 Shanks Ltd
 South Lanarkshire Council
 SportsScotland
 The Wildlife Trusts
 United Distillers and Vintners
 University of Aberdeen
 University of Edinburgh
 Youngs Chartered Surveyors

TERMS OF REFERENCE

- Report and liaise as appropriate with UK/Country groups etc.
- Liaise with Targets Group.
- Liaise on good practice and consistency in the preparation of Local Action Plans.
- Liaise with the Information Group on information and data.
- Promote public awareness and involvement through Government stimulated action, local action, promoting programmes of action by key sectors including environmental education.
- Provide regular progress reports to the UK Biodiversity Group.

England Biodiversity Group

MEMBERSHIP

British Trust for Conservation Volunteers (BTCV)
 Department of the Environment, Transport and Regions (DETR)
 East Sussex County Council
 English Nature (EN)
 Environment Agency (EA)
 Forestry Authority
 Government Office for the South West (GOSW)
 Ministry of Agriculture, Fisheries and Food (MAFF)
 Ministry of Defence Conservation Office (MOD)
 National Farmers Union (NFU)
 National Trust (NT)
 Plantlife
 Royal Society for the Protection of Birds (RSPB)
 Wildlife Trusts (WT)

TERMS OF REFERENCE

The England Biodiversity Group's aim is to promote the conservation and enhancement of biodiversity in England within the framework set by the UKBG and with the full co-operation of partners at the national, regional and local levels.

In particular, the England Group:

- acts as a focal point for national biodiversity partners to come together to co-ordinate actions;
- provides a conduit for the transmission of information to and from the national, regional and local levels;
- seeks to promote public understanding and awareness of biodiversity; and
- develops a continuing overview of the biodiversity process through its supervision of reporting and monitoring.

The England Group delivers its remit by:

- inviting membership from all major national interests in biodiversity;
- encouraging the adoption by all its members of common principles towards the operation of their policies and programmes as they affect biodiversity;
- creating a framework within which the monitoring and reporting of biodiversity activity can be brought together to form a coherent national picture;
- maintaining strong links with the major actors in the biodiversity process, giving special attention to regional initiatives and the evolution of local biodiversity action;
- developing a strategic programme of action to promote public awareness of biodiversity, focusing on those groups and actors with the most influence.

The England Group aims to maintain the strongest links to UKBG, to regional and local biodiversity initiatives including especially local authorities, and with its sister Country Groups in Northern Ireland, Scotland and Wales. As necessary, it sets up sub-groups and/or working parties to pursue specific ends.

Wales Biodiversity Group

MEMBERSHIP

British Trust for Conservation Volunteers Cymru (BTCV Cymru)
Country Landowners Association Wales (CLA)
Countryside Council for Wales (CCW)
Environment Agency (EA)
Farmers' Union of Wales
Forestry Commission Wales (FC Wales)
Farming and Rural Conservation Agency (FRCA)

Glamorgan Wildlife Trust
 Ministry of Defence (MOD)
 National Assembly for Wales (NAW)
 National Botanic Garden of Wales
 National Farmers Union Wales (NFU Wales)
 National Museums and Galleries of Wales (NMGW)
 National Trust (NT)
 North Western and North Wales Sea Fisheries Committee
 Snowdonia National Park Authority
 South Wales Sea Fisheries Committee (SWFSC)
 Trinity College
 Wales Wildlife and Countryside Link/ RSPB (LINK/RSPB)
 Welsh Local Government Association (WLGA)
 Welsh Water

TERMS OF REFERENCE

The role of the Wales Biodiversity Group is to promote, monitor and advise the National Assembly for Wales on action to maintain and enhance biodiversity in Wales. Specifically, the WBG:

- stimulates action and monitors progress on the implementation of Species and Habitat Action Plans;
- promotes good practice in the preparation and implementation of Local Biodiversity Action Plans, and monitors progress with local delivery of biodiversity objectives;
- promotes awareness of and involvement in biodiversity and monitors progress;
- maintains an overview of the range of biodiversity action by different sectors in Wales and assess its overall contribution to maintaining and enhancing biodiversity;
- considers how funding might be encouraged from key partners for biodiversity activities in Wales;
- reports to the National Assembly on progress in implementing the UK Biodiversity Action Plan in Wales, identifying the key policy issues, and advises on the implication for future strategy in Wales; and
- liaises with the UK Biodiversity Group to report on progress and future plans in Wales and to co-ordinate approaches to common issues where appropriate.

Northern Ireland Biodiversity Group

MEMBERSHIP

Ballymena Borough Council
Banbridge District Council
Department of Agriculture and Rural Development
Confederation of British Industry (CBI)
Department of the Environment Northern Ireland (DOE)
Fisheries consultant
National Trust (NT)
Northern Ireland Agricultural Producers Association
Royal Society for the Protection of Birds (RSPB)
Ulster Farmers Union
Ulster Museum
Ulster Wildlife Trust

TERMS OF REFERENCE

The main objectives of the NIBG are to:

- oversee the development of the Northern Ireland Biodiversity Strategy;
- promote public awareness of and involvement in biodiversity conservation in Northern Ireland; and
- oversee the development and implementation of Habitat and Species Action Plans relevant to Northern Ireland.

The main tasks of the NIBG are to:

- prepare the draft NI Biodiversity Strategy;
- oversee the launch of a consultation on the draft Strategy;
- promote and stimulate action to implement individual Habitat and Species Action Plans;
- promote public awareness of and involvement in biodiversity conservation through action by central and local Government and the private and voluntary sectors and through environmental education;
- report on progress to the UK Group; and
- liaise as appropriate with the UK Group and other country and sub-groups.

APPENDIX 5

Lead Partners and Agencies for Habitat and Species Action Plans

HABITAT ACTION PLANS	
LEAD AGENCY	HABITAT ACTION PLAN
CA	Limestone Pavements
CCW	Purple moorgrass, Lowland meadows, Upland calcareous grassland, Maritime cliffs and slopes, <i>Modiolus modiolus</i> beds
DETR	<i>Lophelia pertusa</i> reefs
DOENI	Tidal rapids, Seagrass beds
EA	Chalk rivers, Aquifer fed naturally fluctuating water bodies, Eutrophic standing waters, Coastal saltmarsh, Mudflats
EN	Reedbeds, Grazing marsh, Lowland heathland, Saline Lagoons, Lowland dry acid grassland, Lowland wood pasture and parkland, Upland heath, Raised bog, Lowland calcareous grassland, Coastal vegetated shingle, <i>Sabellaria alveolata</i> reefs, <i>Sabellaria spinulosa</i> reefs, Sublittoral sands and gravels, Littoral and sublittoral chalk, Fens
FC	Upland oakwood, Native pinewoods, Wet woodland, Upland mixed ashwoods, Lowland beech and yew woodland
MAFF	Cereal field margins, Ancient and species rich hedgerows, Upland hay meadows
SEPA	Mesotrophic lakes,
SNH	Blanket bog, Machair, Coastal sand dune, Maerl beds, Mud habitat in deep water, <i>Serpula vermicularis</i> beds
Tba	Sheltered muddy gravels

SPECIES ACTION PLANS			
LEAD PARTNER/AGENCY	NO.of SAPS	LEAD PARTNER/AGENCY	NO.of SAPS
Environment Agency	18	The Mammal Society	1
The Game Conservancy Trust	4	MAFF	3
The Wildlife Trust	22	English Nature	88
JNCC	4	Bat Conservation Trust	4
Countryside Council for Wales	17	UK Red Squirrel Group	1
SERAD	1	Scottish Executive	1
British Herpetological Society	1	Herpetological Conservation Trust	5
The Natural History Museum	7	DoE (Northern Ireland)	4
Scottish Natural Heritage	25	World Wildlife Fund – UK	5
Leeds University	5	PTES	2
The National Trust	7	Butterfly Conservation	47
Froglife	1	Plantlife	64
Royal Botanic Gardens – Edinburgh	16	The Cypripedium Committee	1
Royal Botanic Gardens – Kew	3	British Waterways	2
National Botanic Garden – Wales	1	Action for Invertebrates	8
Royal Botanic Gardens – Wakehurst Place	1	Botanical Society for the British Isles	1
The Broads Authority	1	Wildfowl & Wetlands Trust	1
RSPB	35	Cairngorm Partnership	2
Forestry Commission	7	Shetland Amenity Trust	1
Balfour Browne Club	7	Forest Enterprise	6
The British Entomological and Natural History Society	2	Centre for Ecology and Hydrology	1
Dartmoor National Park Authority	1	Aculeate Conservation Working Group	15
Bombus Working Group	5	CABI Bioscience	3
Marine Conservation Society	2	Shark Trust	1

APPENDIX 6

Lead Partner Reporting and reporting framework

The monitoring and reporting of progress in implementing the priority species and habitat Action Plans is fundamental to the success of the UK BAP process. For the first reporting round, the UKBG decided that a flexible, structured reporting format should be developed. In 1997 the JNCC's Biodiversity Information Service undertook this work, on behalf of the UKBG, building on earlier work by the Targets Group and Biodiversity Information Group.

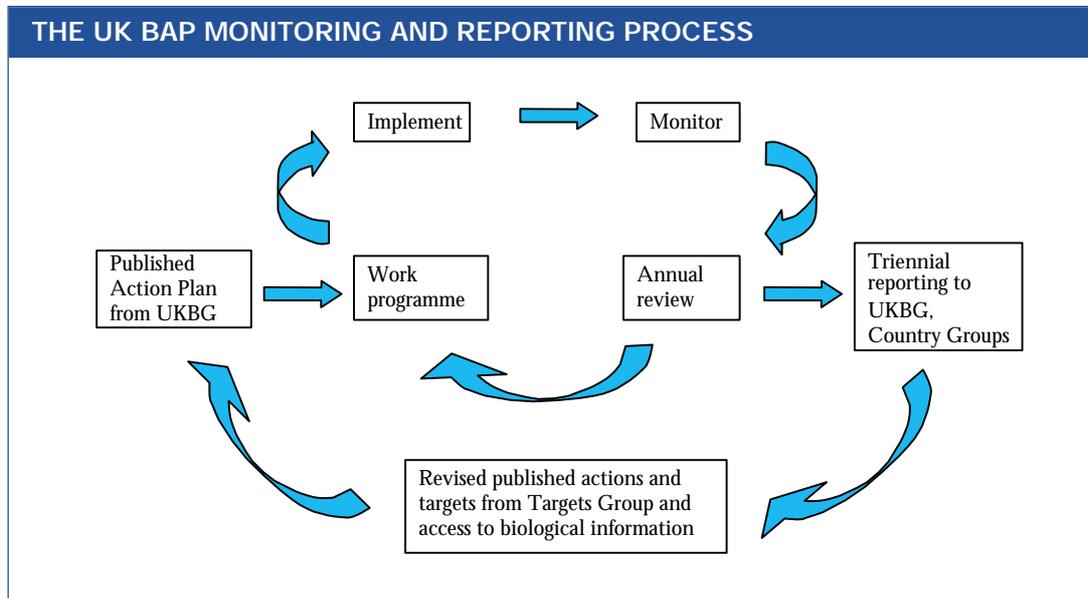
It was decided that the purpose of reporting is:

1. To inform the strategic review of the overall aims and objectives of the UK Biodiversity Action Plan.
2. To assist Lead Partners (together with Steering Groups where these existed) in managing an effective programme of implementation for individual species and/or habitat Action Plans.
3. To provide information which can be used to raise awareness about the status of UK biodiversity, data availability and areas of expertise.

The first round of reporting focused on implementation of national plans by Lead Partners; future reporting will encompass progress made by LBAPs. Prototype reporting formats were trialed extensively in 1997/98 by around 20 Lead Partners and an electronic reporting form and supporting interpretative guidance were developed. In February 1999, all Lead Partners were asked to evaluate progress towards meeting the biological targets and implementing the actions specified in the Action Plans and assess change in biological status since plan publication. Lead Partners also outlined key successes, constraints and future proposed implementation action. By September 1999, 358 reports were received, representing a response rate of over 80%. Most of the plans not reported on were those in tranche 2, volumes V and VI, which were not published until October 1999.

To manage and analyse the responses of Lead Partners, a framework was designed to structure the information, which was then entered into a database. This involved assigning keywords to the comments made by Lead Partners, and categorising the threats, targets and actions specified in the original plans. These data were then related to the Lead Partner's assessment of progress, thus enabling general topics (e.g. air pollution or agriculture) or areas of successes and constraints to be identified. Examples of outputs from the Lead Partner database can be found in chapter 8.

The reporting framework established is scaleable and flexible and will be developed further to support future implementation, monitoring and reporting of UK, regional and local plans. Its aim will be to improve the co-ordination within the UK BAP by sharing information on the progress being made and the types of conservation activities being carried out across the UK. The Lead Partner database and reporting framework will be available on the biodiversity website (www.ukbap.org.uk).



The UK BAP monitoring and reporting process. A work programme is devised to implement the actions specified in the published Action Plans. This programme is implemented and the outcomes of the activities are monitored and reviewed annually. This review in turn informs the next year's work programme, and also feeds into a triennial reporting round to the UKBG (in future the UK Biodiversity Partnership) and Country Groups. The triennial reporting round is an opportunity for Lead Partners to propose changes to the published targets, which must be approved by the Targets Group. These new targets, if approved, then help inform the next round of work planning.

APPENDIX 7

Executive Summary of Research into the costs of the Action Plans by Baker, Shepherd, Gillespie

This research provides up to date information on the costs of implementing a number of the tranche 1 UK Biodiversity Action Plans. Thirteen HAPs and seventeen SAPs were selected for investigation.

The principal aim of the research was to identify the costs incurred to date under these Action Plans and to improve our understanding of the factors that influence the cost of implementing Action Plans and the recording and reporting of costs. In addition, the study also sought to review funding availability and to recommend a method for future continuous monitoring and evaluation of Action Plan costs.

The cost information gathered (reported costs) has been compared with the indicative costings published in the UK Steering Group Report (1995). The indicative costings were based on broad assumptions about the actions that might be undertaken in order to implement the Action Plans. The comparison of reported and indicative costs indicates where progress has been more or less than it was assumed would take place during the preparation of the indicative costings. It is only in this context that this assessment has been made and no judgement of whether the reported progress is reasonable or not should be inferred.

The reported costs for some Action Plans do not represent the total actual cost of implementation to date as some data for areas of known expenditure have not been available. At present, information on many of the implementation costs is not available in a format that lends itself to easy and continuous monitoring, particularly at an individual Action Plan level. In addition, many costs are not available at all or are available in a format that can not be readily assigned to particular Action Plans or actions within Action Plans. As a result, the information that has been gathered in this study should be regarded as illustrative only.

The indicative costings provide a guide to the costs of implementing the UK BAP that were anticipated in 1995. Where there is sufficient explanation of the basis of the indicative costs, it has been possible to make comparisons with the reported costs, which has provided an insight into why the reported costs of implementing the Action Plans have differed. In many cases the reported actions and costs appear to differ from the anticipated actions and costs for a number of reasons:

1. **Missing data** has been a significant problem for this study, as a result of either:
 - 1.1. Lack of time to gather data that is widely dispersed amongst a variety of organisations and individuals
 - 1.2. Cost data not held in a format that allows the data to be readily assigned to particular Action Plans
 - 1.3. Cost data not being available (at all).
2. **Differences in the delivery of targets and actions** can also affect the costs when compared to the indicative costing either because progress against targets has been more or less than anticipated or because actions have been dropped or new ones added since the publication of the Action Plan.
3. **Differences in the cost of particular actions, compared to those assumed in the indicative costings**, have arisen in some cases. This can also be affected by changes in delivery mechanisms.
4. **Actions and costs altered by the implementation of other government policies** can have a significant impact on the cost of implementing an Action Plan.
5. **Uncertainty about assigning expenditure** can also influence the size of the reported costs. Particular areas of uncertainty relate to the allocation of baseline costs and costs incurred where there are other benefits in addition to those of biodiversity conservation (for instance, landscape conservation).

A summary of differences between predicted and reported costs and the principal reasons identified for the greater or lower reported costs.

	Higher than predicted cost	Lower than predicted cost	Missing data	Differences in the delivery of actions and targets	Differences in cost of actions	Impact of other policy changes	Uncertainty about assigning costs
Habitats							
Chalk Rivers		✓	✓			✓	
Mesotrophic Lakes	–	–		✓ (Note 1)			
Reedbeds	✓			✓ (Note 2)	✓		
Seagrass Beds		✓		✓ (Note 3)			
Saline Lagoons		✓	✓ (Note 4)	✓ (Note 5)			
Upland Oak Woods		✓	✓ (Note 4)	✓ (Note 5)			
Native Pine Woods		✓	✓		✓		✓
Limestone Pavement		✓	✓ (Note 4)	✓ (Note 5)	✓ (Note 6)		
Lowland Heathland		✓	✓ (Note 4)	✓ (Note 5)			
Purple Moor Grass and Rush Pasture	✓			✓ (Note 2)	✓		✓
Coastal and Floodplain Grazing Marsh		✓	✓ (Note 4)	✓ (Note 5)			
Cereal Field Margins	✓			✓ (Note 7)	✓		
Ancient and Species rich Hedgerows	✓			✓ (Note 7)	✓		
Species							
Corncrake		✓		✓			
Skylark	✓			✓			
Otter	✓			✓ (Note 8)			
Red squirrel		✓					
Great Crested Newt and Sand Lizard	(Note 9)	(Note 9)					
Allis and Twaite Shad		✓		✓ (Note 3)			
Southern Damselfly	✓			✓ (Note 7)			
Marsh Fritillary Butterfly	✓			✓ (Note 7)			
Stag Beetle	✓			✓ (Note 7, 10 & 12)			
White-clawed Crayfish		✓	✓				
Freshwater Pearl Mussel	✓			✓ (Note 7)			
Starfruit	✓			✓ (Note 7, 10 & 12)			
Shore Dock	✓			✓ (Note 7)			
Devil's Bolete Fungus	✓			✓			
Green Shield Moss		✓ (Note 11)					
River Jelly Lichen		✓ (Note 11)					
Notes							
1 Although costs are similar in total this appears to be due to some costs that were anticipated not being incurred and other costs incurred but not anticipated							
2 More than anticipated progress against targets							
3 Less progress against anticipated targets and actions							
4 Missing data on habitat maintenance costs							
5 Less progress than anticipated against creation targets							
6 Less expenditure on revocations than expected							
7 Additional costs arising from more action than anticipated							
8 Significant additional action undertaken that was not anticipated							
9 No comparison has been made as there is insufficient cost data available							
10 New actions carried out							
11 No comparison has been made as there is no detailed explanation of the basis of the indicative costing							
12 New and/or revised targets							

HAP costings

For four of the sample HAPs the recorded costs are higher than the original estimates. These are Cereal Field Margins, Ancient and Species-rich Hedgerows, Reedbeds, and Purple Moor Grass and Rush Pasture. Only the Mesotrophic Lakes HAP has exhibited little change from the predicted costs, whilst the remaining HAPs have all exhibited lower than anticipated costs.

Of the four HAPs that have exhibited higher than anticipated costs the reasons for the differences have been identified as:

- (a) More than expected progress against the targets and higher generic costs (Reedbeds)
- (b) More than expected progress against the targets (Purple Moor Grass and Rush Pasture)
- (c) Additional costs of actions not included in the indicative costing (Cereal Field Margins and Ancient and Species-rich Hedgerows).

Unlike the other HAPs data from the major areas of expenditure were readily available for *Reedbeds*, *Cereal Field Margins* and *Ancient and Species-rich Hedgerows*. The higher than anticipated costs associated with the *Purple Moor Grass and Rush Pasture* HAP need to be treated with some caution because actual cost data was only readily available from one major area of expenditure (ESA payments in Northern Ireland). Despite this the difference between the anticipated and reported costs was identified as being due to more than expected progress against the published targets.

Of the eight HAPs that have exhibited lower than anticipated costs the reasons for the differences have been identified as:

- (a) Missing cost data (all except *Seagrass Beds*)
- (b) Less than predicted progress against the targets, in particular habitat creation targets (all except *Native Pine Woods and Chalk Rivers*)
- (c) Changes due to actions being undertaken under other government policy activities (*Chalk Rivers*)
- (d) Changes in generic costs (*Native Pine Woods* and *Limestone Pavements*).

The unavailability of data in a form that can be assigned to particular HAPs has presented a significant barrier to collating actual cost data and comparing this to the indicative costings. As a result, for some HAPs and SAPs it has proved difficult to determine whether costs have actually been more or lower than anticipated and what the reasons might have been for any difference.

Agri-environment schemes and other government expenditure meet a major part of the cost of implementing a number of the HAPs. For some HAPs it has not been possible to determine the relevant agri-environment scheme expenditure with any precision. This is particularly a problem for the grassland HAPs. When this data cannot be accurately collated it will have a significant impact on reported costs at any given time.

Where cost information is available, one of the key reasons for lower reported costs than suggested by the indicative costings seems to be slower progress than was anticipated in 1995. This appears to be the case for the *Seagrass Beds* HAP, where the reported costs are only about one-tenth of the indicative costing. This may also partly explain the difference in the *Upland Oak Wood* HAP costings. In some cases, lower costs for specific actions are likely to be an important factor, for example in the case of the *Limestone Pavement* HAP, where reported costs are two-fifths of the indicative costing. Alternatively, where some of the actions have been undertaken for other policy purposes, for example for the *Chalk Rivers* HAP, the costs attributable to the HAP have been reduced accordingly (with reported costs of about one-third of the 1995 indicative costing).

SAP costings

Of the 17 sample SAPs the reported costs were higher than estimated in 1995 in 10 cases. For two, *Great Crested Newt* and *Sand Lizard*, insufficient cost data were available to undertake a meaningful analysis. For the remaining 5 SAPs the recorded costs were lower than anticipated in 1995.

For those SAPs with higher than anticipated costs, a key reason for the additional expenditure has been higher levels of implementation over that which was apparently assumed in the indicative costings. Examples of this occur in the case of *Otter* SAP, where reported costs are about three times the indicative costing, the *Southern Damsel* SAP and the *Marsh Fritillary Butterfly* SAP, where the extent of actions has been much greater than anticipated.

To a lesser extent new actions and revisions to targets have also contributed to higher than anticipated expenditure. Revised targets are a factor, for instance, for the *Stag Beetle* and *Starfruit* SAPs, where the reported costs are twice and four-times the indicative costings respectively and it is likely that target revision has been a contributory factor.

In the *Skylark* and *Corncrake* SAPs, the reported costs are similar or marginally higher than those predicted. Despite this similarity, the information available suggests that there has been a change in emphasis in the actions compared to those assumed for the indicative costing and the possibility of missing data means that higher costs than reported may have been incurred. One particular area of missing cost data for the *Skylark* SAP is expenditure on general countryside management measures though it should be noted that such costs were often also missing from the indicative costings.

Whilst the Review and Assessment Form for the *Skylark* SAP acknowledges the implementation of new or revised agri-environment schemes, it seems quite difficult to attribute any of this expenditure to the *Skylark* specifically, which is more likely to be benefiting from improved, more sympathetic management of lowland farmland generally. This has important implications for the reporting of actual costs. The extent to which general agri-environment measures contribute to the implementation of this SAP is unclear, however, the cost could potentially be substantial.

The reported costs for five of the sample SAPs were substantially lower than estimated in 1995. Where comparisons are possible, missing data and delayed actions are thought to explain much of the difference, for example in the case of the *Allis and Twaite Shad* and *White-clawed Crayfish* SAPs, where the reported costs were less than half the indicative costings in each case.

Funding

The investigation of the 30 sample Action Plans and the survey of non-government organisations indicates that funding for biodiversity work is provided by a wide variety of sources. Principal funding sources, however, remain government departments and agencies through grant awards or through annual expenditure on work programmes.

The investigation of external funding for Action Plan activities by non-government organisations indicates that the types of project that are most frequently put forward for funding, or the most successful in attracting funding, or both, are those that focus on habitat management and protection, survey and monitoring and species management. Those projects that relate to habitat management also tend to attract the larger awards.

According to the sample of organisations contacted in this study, habitat creation is not so well supported, or it may not be put forward for funding as often as existing habitat and species management. This may be due to higher priority being given to ensuring existing habitats remain in good management rather than the creation of new habitats. It may also be due to the relatively higher costs of habitat creation or because organisations pursue other mechanisms, such as planning gain, to promote habitat creation through private business and industry funding.

There is also an apparent high level of external funding for management and co-ordination of Local Biodiversity Action Plans.

Investment in people, in terms of staff posts and training, is low down the list of projects that have received external funding in the sample. It is not known if this is because these categories of work are not successful in attracting funding or if fewer bids for funding for staff posts and training are made.

All of the major sources of funding described in this study and reported by the consultees are still available for future biodiversity work. What is not known, however, is how the sources will change their funding priorities over the coming years. It is likely that major government grant schemes such as agri-environment schemes and forestry grants will continue to be provided and are in fact the major sources of potential funding for implementing the Action Plans and the HAPs in particular. The future of funding through non-government sources such as Landfill Tax Trust, and private business sponsors are less certain and may change in terms of their funding priorities or the level of funding they provide.

Future monitoring of costs

The study has highlighted a number of difficulties associated with the development of a continuous monitoring and evaluation system of the costs of individual Action Plans. These also reflect the more general need for improved monitoring of Action Plan activities and progress. The production of costed work plans to provide up to date baselines against which future expenditure can be monitored is a key requirement that needs to be developed and which should underpin future monitoring.

For sources of major expenditure, further work is needed (and is being undertaken) to develop the databases held by government and agencies so that more detailed information can be extracted in future. Nevertheless, there will remain some expenditure for which

decisions on their assignment to individual Action Plans will require informed judgement (for instance to avoid double-counting or omitted expenditure). For other sources of expenditure, the development of the JNCC database to include information on costs is expected to provide a way forward.

For monitoring purposes, further work to estimate costs may be useful in cases where it is not feasible to collect all the actual cost information. If information is available or can be estimated about actions being taken (for example from the reporting and assessment forms) then updated actual cost estimates could be made using updated and standardised assumptions about generic costs, to supplement the monitoring of the actual costings.

Guidance can be given to help standardise the data and to avoid inclusion of expenditures which are not 'additional' and would be incurred without the UK BAP. Despite this the interpretation of the data will require judgements to be made about the costs of actions which have been undertaken for other policy purposes.

Ideally a future automated method for monitoring and evaluating BAP costs would:

- (a) Regularly access and collate identified BAP cost data in a standard format.
- (b) Analyse BAP cost data and report on the cost of individual actions and groups of actions and cost progress towards achieving BAP targets.
- (c) Be available for interrogation on a frequent and regular basis to enable reporting of the latest BAP expenditure for individual BAPs or groups of BAPs.
- (d) Be an integral part of, or at least be compatible with, the monitoring databases currently being developed by JNCC.

Developing a method of monitoring to this standard will require further work and consultation with Steering Groups, JNCC and the Government Departments and agencies, but a number of recommendations can be made for a practical way forward for developing such a monitoring system. In particular, it is recommended that a future monitoring system will need to:

- (a) **Identify the areas of expenditure to be monitored for each Action Plan.** The priority areas for data collection should be the major areas of expenditure. These will vary from one Action Plan to another. For some existing sources of data such as government expenditure through agri-environment schemes further work is required to ensure that data can be confidently assigned to particular Action Plans.
- (b) **Devise a method by which costs can be regularly and systematically collected and analysed.** Consideration is currently being given to the development of monitoring programmes including information on costs. Further consideration will need to be given to how data collection and analysis is organised, but some central co-ordination is likely to be needed.
- (c) **Develop guidance for those being asked to undertake monitoring.** In order to ensure that the required data are provided on a common basis in future monitoring programmes guidance will be required on the level of monitoring, standardisation of cost data, principles for assigning costs, dealing with double counting and the exclusion of baseline costs.

APPENDIX 8

Glossary of Acronyms

ACWG	Aculeate Conservation Working Group
AFI	Action for Invertebrates
ALGE	Association of Local Government Ecologists
AMP3	Asset Management Plan round 3
ASSI	Area of Special Scientific Interest
BA	Broads Authority
BAP	Biodiversity Action Plan
BASC	British Association for Shooting and Conservation
BBC	Balfour Browne Club
BC	Butterfly Conservation
BCT	Bat Conservation Trust
BENHS	The British Entomological and Natural History Society
BHS	British Herpetological Society
BMS	Butterfly Monitoring Scheme
BRWG	Biodiversity Research Working Group
BSBI	Botanical Society for the British Isles
BSG	Baker, Shepherd, Gillespie
BWB	British Waterways Board
BWG	Bombus Working Group
CA	Countryside Agency
CAP	Common Agricultural Policy
CBD	Convention on Biological Diversity
CC	Cypripedium Committee
CCW	Countryside Council for Wales
CEH	Centre for Ecology and Hydrology
CFP	Common Fisheries Policy
CHAMPS	Coastal Habitat Management Plan
CLRTAP	Convention on Long-range Trans-boundary Air Pollution
COP	Conference of the Parties of the Convention on Biological Diversity
CoSLA	Convention of Scottish Local Authorities
CP	Cairngorm Partnership
CPS	Countryside Premium Scheme
CS2000	Countryside Survey 2000
DETR	Department of the Environment, Transport and the Regions
DoE	Department of the Environment
DNPA	Dartmoor National Park Authority
EA	Environment Agency
EBG	England Biodiversity Group
EIA	Environmental Impact Assessment
EN	English Nature
ESA	Environmentally Sensitive Area
ETRA	House of Commons Environment, Transport and Regional Affairs Committee
EU	European Union
FC	Forestry Commission

FE	Forest Enterprise
FRCA	Farming and Rural Conservation Agency
FWAG	Farming and Wildlife Advisory Group
GCT	Game Conservancy Trust
HAP	Habitat Action Plan
HCT	Herpetological Conservation Trust
HFA	Hill Farm Allowance
HLF	Heritage Lottery Fund
IDG	International Designations Group
ITE	Institute for Terrestrial Ecology
JNCC	Joint Nature Conservation Committee
LBAP	Local Biodiversity Action Plan
LEAP	Local Environment Agency Plan
LIAG	Local Issues Advisory Group
MACC	Making a Corporate Commitment
MAFF	Ministry of Agriculture, Fisheries and Food
MCS	Marine Conservation Society
MS	Mammal Society
MONARCH	Modelling Natural Resource Responses to Climate Change
NAW	National Assembly for Wales
NBG	National Botanic Garden Wales
NBN	National Biodiversity Network
NCC	Nature Conservancy Council
NGO	Non-Governmental Organisation
NHM	Natural History Museum
NIBG	Northern Ireland Biodiversity Group
NPPG	National Planning Policy Guidance
NT	National Trust
NTS	National Trust for Scotland
PAN	Planning Advice Note
PEBLDS	Pan European Biological and Landscape Diversity Strategy
PPG	Planning Policy Guidance
PPS	Policy Planning Statement
PTES	People's Trust for Endangered Species
QOLC	Quality of Life Counts
RBG	Royal Botanic Gardens
REGIS	Regional Climate Change Impact and Response Studies
RSPB	Royal Society for the Protection of Birds
RSS	Rural Stewardship Scheme
RTPI	Royal Town Planning Institute
SAC	Special Area of Conservation
SAP	Species Action Plan
SAT	Shetland Amenity Trust
SBG	Scottish Biodiversity Group
SEPA	Scottish Environmental Protection Agency
SERAD	Scottish Executive Rural Affairs Department
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
TAN	Technical Advice Note
TRBAP	Trunk Road Biodiversity Action Plan
UKBAP	UK Biodiversity Action Plan

UKBG	UK Biodiversity Group
UKRSG	UK Red Squirrel Group
UNECE	United Nations Economic Commission for Europe
VIBES	Vision in business and environment, Scotland
WBG	Wales Biodiversity Group
WGS	Woodland Grant Scheme
WLMP	Water Level Management Plan
WT	Wildlife Trusts
WWF	World Wildlife Fund
WWT	Wildfowl and Wetlands Trust

IMAGE

Flood plain
 Fish Market
 Children with clipboards
 Roseate Tern
 White Clawed Crayfish
 Sea Empress Oil Spill
 Limestone Pavement Ingleborough NNR
 Juniper, Porton Down
 Scottish Farmland scene
 Rodney Stoke NNR
 Montane Habitat
 Derbyshire Feather Moss
 Bittern and Reedbeds
 Barberry Carpet Moth
 Shingle Street Saline Lagoon Suffolk
 Kilarney Fern
 Black-veined moth
 Ladybird Spider
 Corn bunting
 Fen Orchid
 Greater Horseshoe Bat
 Capercaillie
 Deptford Pink
 Nightjar
 Camley Street Reserve, St Pancras, Camden
 Wildlife Trust Volunteer inputting information at local record centre
 Stour Estuary, Essex
 Tower Mustard
 Sand Lizard
 Lady's Slipper Orchid
 Lundy Cabbage
 Field Cricket
 Cereal Field Margin
 Skylark
 Crop spraying
 Otter
 Water Vole
 Native Pinewoods
 Belfast Lough
 Sand Dune, Kenfig NNR
 Shore dock
 Bottlenose dolphin
 Grenadier Fish
 Whisky Glass and Decanter
 House sparrow
 Family walking in Forest
 Stag Beetle
 Storm damaged trees
 Orange Fruited Elm Lichen
 Narrow-bordered bee hawk moth

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