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ENVIRONMENT, TRANSPORT AND
REGIONAL AFFAIRS COMMITTEE

Twentieth Report

UK BIODIVERSITY

Report and Proceedings of the Committee

*Ordered by The House of Commons to be printed
22 November 2000*

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ENVIRONMENT, TRANSPORT AND REGIONAL AFFAIRS COMMITTEE

Twentieth Report

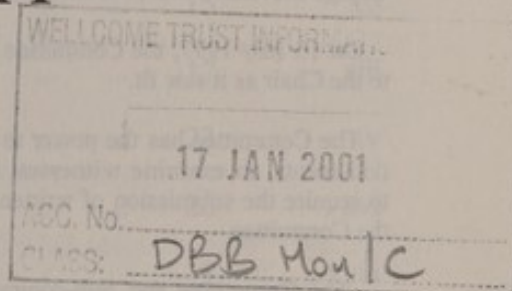
UK BIODIVERSITY

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The Environment, Transport and Regional Affairs Committee is appointed to examine on behalf of the House of Commons the expenditure, administration and policy of the Department of the Environment, Transport and the Regions (and any associated public bodies). Its constitution and powers are set out in House of Commons Standing Order No. 152.

The Committee has a maximum of seventeen members, of whom the quorum for any formal proceedings is five. The members of the Committee are appointed by the House and unless discharged remain on the Committee until the next dissolution of Parliament. The present membership of the Committee is as follows¹:

Hilary Benn MP (*Labour, Leeds Central*)⁵
 Andrew F Bennett MP (*Labour, Denton and Reddish*)²
 Crispin Blunt MP (*Conservative, Reigate*)⁷
 Thomas Brake MP (*Liberal Democrat, Carshalton and Wallington*)²
 Christine Butler MP (*Labour, Castle Point*)²
 John Cummings MP (*Labour, Easington*)²
 Jeffrey M Donaldson MP (*Ulster Unionist, Lagan Valley*)⁸
 Brian H Donohoe MP (*Labour, Cunninghame South*)²
 Gwyneth Dunwoody MP (*Labour, Crewe and Nantwich*)²
 Louise Ellman MP (*Labour/Co-operative, Liverpool Riverside*)²
 Teresa Gorman MP (*Conservative, Billericay*)³
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 Bill O'Brien MP (*Labour, Normanton*)²
 Bill Oiner MP (*Labour, Nuneaton*)²
 George Stevenson MP (*Labour, Stoke-on-Trent South*)²

On 15 July 1997, the Committee resolved that *Andrew F Bennett or Gwyneth Dunwoody* would be called to the Chair as it saw fit.

The Committee has the power to appoint Sub-committees, require the submission of written evidence and documents, to examine witnesses, and to make Reports to the House. The Sub-committees have the power to require the submission of written evidence and documents, to examine witnesses, and to make Reports to the Committee.

The Committee and Sub-committees may meet at any time (except when Parliament is prorogued or dissolved) and at any place within the United Kingdom. The Committee and Sub-committees may meet concurrently with other committees or sub-committees established under Standing Order No. 152 and with the House's European Scrutiny Committee (or any of its sub-committees) or the Environmental Audit Committee for the purpose of deliberating, taking evidence or considering draft reports. The Committee may exchange documents and evidence with any of these committees, as well as with the House's Public Accounts and Deregulation Committees.

The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the internet at <http://www.parliament.uk/commons/selcom/etrahome.htm>.

All correspondence should be addressed to The Clerk of the Environment, Transport and Regional Affairs Committee, Committee Office, House of Commons, London SW1A 0AA. The telephone number for general inquiries is: 020 7219 4972; the Committee's e-mail address is: etacom@parliament.uk.

¹Stephen Day MP (*Conservative, Cheadle*), was appointed on 14 July 1997 and discharged on 17 November 1997; Philip Hammond MP (*Conservative, Runnymede and Weybridge*) was appointed on 17 November 1997 and discharged on 22 June 1998; Howard Flight MP (*Conservative, Arundel and South Downs*) was appointed on 14 July 1997 and discharged on 20 July 1998; Eric Pickles MP (*Conservative, Brentwood and Ongar*) was appointed on 14 July 1997 and discharged on 30 November 1998; Eleanor Laing MP (*Conservative, Epping Forest*) was appointed on 22 June 1998 and discharged on 5 July 1999; Alan Whitehead MP (*Labour, Southampton, Test*) was appointed on 14 July 1997 and discharged on 6 December 1999; Graham Stringer MP (*Labour, Manchester Blackley*) was appointed on 14 July 1997 and discharged on 13 December 1999; John Randall MP (*Conservative, Uxbridge*) was appointed on 20 July 1998 and discharged on 21 February 2000; Clifford Forsythe MP (*Ulster Unionist, Antrim South*) was appointed on 14 July 1997, deceased 27 April 2000.

²Appointed 14 July 1997; ³Appointed 30 November 1998; ⁴Appointed 5 July 1999; ⁵Appointed 6 December 1999;

⁶Appointed 13 December 1999; ⁷Appointed 21 February 2000; ⁸Appointed 12 June 2000.

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TWENTIETH REPORT

The Environment, Transport and Regional Affairs Committee has agreed to the following Report:—

UK BIODIVERSITY

Introduction

1. In recent years, there have been rapid and significant developments in biodiversity policy. Since 1995, the Government, statutory agencies and a variety of non-governmental organisations have been drawing up detailed action plans for species and habitats. The progress of the Biodiversity Action Plans is now being reviewed. Along with the other Member States of the European Union, the UK is in the process of designating Natura 2000 protected sites. The Government introduced the Countryside and Rights of Way Bill earlier this year and this contains many proposals which affect biodiversity. As such, we considered this to be an appropriate point to consider the development of biodiversity policy with the following terms of reference:

- the effectiveness of UK biodiversity policies;
- progress on Habitat and Species Action Plans;
- the priorities for implementing the Species and Habitat Action Plans and the obstacles to their effective implementation (including the desirability of placing the plans on a statutory basis);
- the co-ordination of biodiversity planning and action between national and local levels;
- the adequacy of arrangements for monitoring and reporting changes in species and habitats;
- current implementation of EU biodiversity measures, particularly the Habitats and Birds Directives;
- full implementation of the EU Habitats and Birds Directive obligations in the UK, and the adequacy of the Natura 2000 network;
- measures to protect biodiversity outside of protected sites;
- specific measures taken by Government Departments to help achieve biodiversity targets; and
- the priority areas for, and what improvements are needed to ensure, biodiversity concerns are integrated into other government policies.

2. In response, we received thirty-eight memoranda of evidence. We held five sessions of oral evidence and heard from non-governmental organisations involved in delivering biodiversity policy as well as local authorities, statutory agencies, land owners, industry representatives and ministers from both the Department of the Environment, Transport and the Regions and the Ministry of Agriculture, Fisheries and Food. We wish to thank all those who took part in our inquiry and offer particular thanks to those who worked so hard in organising our visits to Suffolk and Spain. We were ably assisted throughout by our advisers, Dr Janet Dwyer from the Institute for European Environmental Policy and Professor David Macdonald from the Wildlife Conservation Research Unit of Oxford University. We extend many thanks to them for their thoughtful guidance and support.

3. During the course of our inquiry, it became clear that many deficiencies of biodiversity policy could only be remedied by new primary legislation. As such, to take advantage of the passage of the Countryside and Rights of Way Bill, we produced an interim report in July which focused only on those conclusions and recommendations which could be addressed by amendments to this Bill. The Bill has now completed its passage through the House of Lords and we include the interim recommendations in this final report and note whether or not they have been acted upon.

Biodiversity Policy

4. During the last twenty years, a large number of conventions and agreements which relate to one or several aspects of biodiversity have been adopted by the UK Government. However, a few landmark measures can be considered largely to dictate the shape of UK policy today and it is these which we note here. The Convention on Biological Diversity (signed in Rio de Janeiro in 1992 and since ratified by 176 countries and the European Community) is of particular importance. The Convention can be considered to be the foundation stone of biodiversity policy: Article 6 requires parties to develop national strategies for the conservation and sustainable use of biodiversity and to integrate biodiversity considerations into all activities. It is this requirement which led to the publication of *Biodiversity: the UK Action Plan* in 1994 and the subsequent development of the many Species and Habitat Action Plans.

5. The other, parallel, strand of biodiversity policy results largely from the European Community Habitats¹ and Birds² Directives (1992 and 1979). The Birds Directive places a duty on Member States to maintain the populations of wild birds, largely through the creation of special sites, termed Special Protection Areas (SPAs). The Habitats Directive was transposed into UK law through the 1994 Conservation Regulations³ and adopts a 'no-net-loss' approach to habitats and species.⁴ Most importantly, the Habitats Directive aims to merge the Special Protection Areas with the Special Areas of Conservation (SACs, the areas designated under the Habitats Directive) to form a network of protected areas which are designated as Natura 2000. There are other requirements of the Directives which will require action outside of protected sites to fulfil and there are also a number of questions over precisely how some aspects of the Directives should be implemented. One important and explicit requirement of the Habitats Directive is to ensure that all priority habitats and species, wherever they occur, are maintained at 'favourable conservation status'. Clearly, this will necessitate much action outside of protected sites. Although the Habitats and Birds Directives and the UK Biodiversity Action Plans have separate origins, their overall direction is very similar. It is important that the UK Biodiversity Action Plans are capable of fulfilling the UK's obligations under the EU Directives.

6. Although this inquiry examined UK Biodiversity Policy, the responsibility for biodiversity has largely been devolved to the national administrations of England, Scotland and Wales. Some witnesses expressed concern about the need for a clear UK focus to policy to ensure that UK obligations are met and that there is only limited divergence between country policies.⁵ We note this concern but have not attempted to analyse the detailed implications. Our recommendations are aimed primarily at the overall thrust of UK Biodiversity policy but, where more detailed comments are made, these relate to the situation in England.

The Basis of Biodiversity Policy

7. Nature conservation in the UK started in earnest after the second world war, with the development of systems of protected sites and areas, such as National Parks and Sites of Special Scientific Interest. The 1992 Rio summit and the signing of the Convention on Biological Diversity perhaps marked the starting point for modern biodiversity policy, which has increasingly become a preoccupation of Governments around the World. The Convention is essentially a commitment to conserve and sustain the variety of life on earth and includes various requirements for signatories including the development of a strategy to conserve biodiversity. As such, it is only in the last five years that specific species and habitats in the UK have been targeted by action plans intended to conserve them.

¹ Council Directive 92/43/EEC on the conservation of natural habitats of wild fauna and flora

² Council Directive 79/409/EEC on the conservation of wild birds

³ These were amended this year by the Conservation (Natural Habitats, &c.) (Amendment) (England) Regulations 2000

⁴ A 'no-net-loss' approach aims to ensure that, overall, there is no loss of any habitat or species

⁵ Ev p18, p37, p45, p59 (HC441-II)

8. There is little argument that maintaining biodiversity is a 'good thing' but it is worth considering *why* we are aiming to protect biodiversity and precisely *what* it is that we are trying to conserve. Both these factors help to determine the appropriate strength and nature of biodiversity policies. There are several component parts in the justification to protect wildlife.⁶ Culturally, we consider it to be a positive thing that there are areas which are rich in biodiversity and that people have access to these areas. We also consider that there is some moral responsibility to conserve the natural world which we inherit and pass it on to future generations without inflicting further damage. Finally, there are economic reasons for conserving biodiversity: for example, our still developing knowledge of the species in some areas of the world could yet discover drugs of great medicinal value. Although all these reasons are implicitly recognised in the importance people ascribe to the English countryside, this value seems to get a little lost in biodiversity policy, which is often viewed as the preserve of ecologists and environmentalists, rather than the public. One witness complained that what was lacking from biodiversity policy was a recognition that it was an important part of people's quality of life. This was well summarised by Dr Jeremy Greenwood of the British Trust for Ornithology, who told us simply that :

"I feel depressed when I go out into fields and do not hear skylarks nowadays. I believe I am not the only member of the British population who feels similarly depressed."⁷

9. This sentiment brings us neatly on to some of the other biodiversity questions: for example, what is the final aim of biodiversity policy: what era or landscape are we trying to recreate? The popular idea of the attractive UK countryside is one which is largely human-managed so we cannot argue that we are trying to restore it to its 'natural' state. Also, most people's concept of biodiversity tends to focus on the fate of a few charismatic species to the exclusion of an understanding of the importance of habitats and the less appealing species. Water UK noted that:

"strictly speaking if we were talking about biodiversity we ought to be concentrating on beetles. There are many, many more beetles than almost any other species in the world, by orders of magnitude."⁸

Inevitably though, the wildlife charities tend to focus on birds, whales and other charismatic species for their fund-raising efforts. One can take the question of priorities a step further and ask whether species which can be considered undesirable for one reason or another have the same rights to conservation as the more appealing ones. Put at its baldest, does the liver fluke have the same rights of preservation as the panda? There is no easy answer to this question but at the very least, it is important to remember that what we are aiming to preserve is a *system* rather than any one species. A whole ecosystem can be unbalanced by the elimination (or domination) of a species at any point in the food chain. Given that biodiversity is a system of species, our efforts should generally be focused on conserving the features of the system, rather than any given species.

10. Another aspect of biodiversity which is easily overlooked is that it is an urban concern as well as a rural one. For example, the London Ecology Committee commented that "the private gardens of residential areas can constitute a large area of wildlife habitat (20% of London's land area is in gardens)."⁹ By definition, urban wildlife sites are also those which have the greatest local population and can help communicate the importance of biodiversity to the public.

11. Legislation to protect biodiversity and the designation of protected sites has claimed to start from a scientific basis. However, in reality, there can be no simple scientific approach to biodiversity policy since what we want to conserve involves value judgements. The Parliamentary Office of Science and Technology recently studied this issue and concluded that:

⁶ Ev p28, p91, p109 (HC441-II); QQ18-19; Also, see *Biodiversity and Conservation*, Parliamentary Office of Science and Technology, Note 144, July 2000, reproduced as Appendix A

⁷ Q20

⁸ Q360

⁹ Ev p43 (HC441-II)

"Given the range of perceptions and values of nature that people hold, these choices [priorities for protection] cannot be made by science, only informed by it. Thus, ultimately, it will be a matter of social debate to establish the priorities. This has led to calls for a process of wide consultation and deliberation, open to a broader range of interests than has been the case."¹⁰

It would, at present, be difficult to carry out this process of consultation: one of the least successful aspects of biodiversity to date has been communicating its importance to the public and business. We examine these issues later in the report.

12. Too much of biodiversity policy is based on ignorance or prejudice or single-minded enthusiasm for a single species, and has often little understanding of the naturally evolving world. Of course the point behind the Rio agreement was the simple one that people were reducing the number of species in the world far quicker than new ones were being created. Although Rio started from the fact that such destruction was not sustainable, it did not propose trying to hold the world in a time-warp — it recognised that evolution was an on-going process. Unfortunately this understanding has not been fully translated into the action agreed within the European Union.

13. First, it is clear that some of the Natura 2000 sites are designated for their current flora and fauna when by their very nature they are fast evolving sites of coastal deposition or erosion. Second, sites are being designated which are in fact the product of almost certainly unsustainable farming in economic terms — farming which developed at the end of the 19th century and beginning of the 20th century. Examples are provided by marginal hill farming in the UK and the remarkable Alpine farming which the Committee viewed in Somiedo in Spain. The environment in Somiedo is not threatened by winter-sports but even small changes in agricultural practice (for example, silage rather than hay-making or retreat from the highest pastures) will alter its biodiversity. Designating such sites is pointless unless the cost of doing so is calculated and balanced against the benefits of protecting the area. No doubt the Spanish brown bear could survive if such areas were agriculturally abandoned but much of its flora and fauna would not.

14. Third, the picture of UK biodiversity is extremely patchy — bird enthusiasts have ensured very good knowledge of their numbers but far less is known about small UK mammals, and many species of insect or fungus and algae. In some cases, one species is in competition with another and information about, for example, a decline in barn owl numbers may or may not be worrying, depending on its impacts on all biodiversity. However, judgements may be wrong if made on partial information. Fourthly, it remains the case that so many biodiversity judgements are made on sentimental grounds. **We believe that, for biodiversity policy to have long-term credibility, it needs to be based on far better knowledge of the natural environment than we have now, and should be grounded in a set of principles which can be used to test individual policies and actions.**

Aspects of Biodiversity Policy

Biodiversity Action Plan

15. The very fact that the UK Biodiversity Action Plan exists must be recognised as a great step forward in biodiversity policy.¹¹ It is generally acknowledged that, prior to the development of the plan, there was no agreed focus for nature conservation policy and this severely limited the progress made.¹² As such, the partnership approach of the plan process has been especially welcomed, bringing together as it does Government, statutory agencies, local groups and non-governmental organisations to define agreed priorities and actions.¹³ The UK Biodiversity Group (UKBG) represents all these groups and is responsible for co-ordinating the UK biodiversity process. The last five years have seen the drafting of nearly 400 species action plans and 45 Habitat Action Plans. All of these plans have now been agreed upon by the statutory agencies, the Department of the Environment, Transport and the Regions and the non-governmental

¹⁰ See Appendix A

¹¹ Ev p16 (HC441-II)

¹² Ev p44; p58 (HC441-II)

¹³ Ev p7, p37, p41, p58, p68 (HC441-II)

organisations. This is no mean feat and should be seen as an extremely good start. But it is only a start: many of the plans have only been in existence for a year or two and we are only now approaching the real implementation phase for the plans as a coherent whole.¹⁴ Although the majority of plans have shown 'some progress' towards their aims and targets, it is generally acknowledged that this does not necessarily indicate great improvements. The National Farmers Union, for example, noted that "farmers are becoming increasingly frustrated with the lack of obvious plan implementation."¹⁵ Within the plans agreed, there exist some 6000 agreed targets and actions. The challenge of making consistent progress on all of these is a huge one and relies on a tall order: "political will, resources and the support of society."¹⁶

16. Rather inevitably, the lengthy process of drawing up the plans has been seen by some as over-bureaucratic.¹⁷ Beyond these concerns, there are serious questions over issues such as the lack of progress with many of the Habitat Action Plans, the complexity of the process, the co-ordination of local and national plans and the overall level of funding available to implement the actions required. The questions of funding and broader policy action are dealt with later in this report.

SPECIES AND HABITAT ACTION PLANS

17. There are now 391 completed Species Action Plans (SAPs) and 45 Habitat Action Plans (HAPs) which have been agreed and published. Each of the plans documents the current situation, defines targets for improvement and lists actions which are required to support the targets. Plans are taken forward by individual steering groups, chaired by a lead partner. With such a large number of plans, it is extremely difficult to gauge the overall level of success or progress at any one time. The first stage of reporting on these plans is now underway¹⁸ and, as one might expect, this shows that those plans produced in the first tranche have made greater progress than those completed more recently. For example, species such as the otter, the corncrake and the stone curlew are all starting to show a reversal of their long declines. The picture is by no means a uniform one and the Wildlife Trusts noted that "some Species Action Plans are showing signs of poor co-ordination, lack of commitment and little new work on the ground."¹⁹ In general, it seems that species where local action is effective have fared better than those requiring changes on a landscape scale.²⁰

18. Many witnesses expressed concern that the rate of progress in implementing the Habitat Action Plans was somewhat disappointing as against the progress which could be demonstrated for some of the Species Action Plans.²¹ Although some habitats are faring well (for example, reedbeds and lowland heathland), these are the exceptions. For example, the Wildlife Trusts told us that:

"of the 14 first tranche Habitat Action Plans, half have yet to develop a meaningful work programme to take forward actions in the plans, and if we look at the progress towards targets for these habitats, the results are less than encouraging."²²

The Wildlife Trusts go on to note that there is no major statutory agency programme on habitat recovery to match that which exists for species recovery.

¹⁴ Ev p59, p97, p111 (HC441-II)

¹⁵ Ev p117 (HC441-III)

¹⁶ Ev p44 (HC441-II)

¹⁷ Ev p17, p45 (HC441-II)

¹⁸ The Millennium Biodiversity Report is due to be published in early 2001

¹⁹ Ev p59 (HC441-II)

²⁰ Ev p23, p91, p113 (HC441-II)

²¹ Q130; Q473; Q481; Ev p1, p77, p92 (HC441-II)

²² Ev p59 (HC441-II)

19. English Nature noted that successful Habitat Action Plans were those where suitable land was owned by statutory or conservation bodies or within a Site of Special Scientific Interest.²³ Habitat restoration and recreation are expensive and difficult activities. The agency also noted that some habitats, (such as grazing marshes and lowland grassland) require broader policy changes to succeed. This point was emphasised by other witnesses: the achievement of the aims of habitat plans will always require actions outside of designated sites and often the integration of biodiversity concerns across other areas of policy, noticeably agriculture.²⁴ Witnesses suggested that another reason for the apparent lack of advancement of Habitat Action Plans was that insufficiently experienced people from the statutory agencies were being put in charge of the plans.²⁵ There exist a variety of reasons for limited progress in the Habitat Action Plans and whilst it appears that this has been recognised as a problem for some time now, little has been done to address the problem.²⁶

20. Indeed, a more general point was made to us that too much attention was focussed on species, as against habitats: "if you look after the habitats you look after a whole suite of species in those habitats whereas if you look after particular species you may not be looking after the habitats."²⁷ The argument then is that, by focussing on habitat recreation and restoration, the future of many species will be ensured and that this is a more effective use of resources than aiming to protect a given species. Certainly, if we are to achieve the broader aims of biodiversity policy, a new emphasis must be placed upon providing habitats for wildlife: the loss and fragmentation of habitats has caused immense harm. This approach is also in line with the agreement of the parties to the Convention on Biological Diversity to adopt an 'ecosystem' strategy to conserving biodiversity. **We recommend that efforts now be focussed on the Habitat Action Plans: we consider these to be worthy of a greater emphasis than the Species Action Plans. The UK Biodiversity Group should be given the task of establishing precisely what the barriers are to effective implementation of the Habitat Action Plans and how to overcome them.**

21. The criticism of the progress of the Habitat Action Plans brings us onto the larger charge that the whole of the Biodiversity Action Plan process lacks leadership and is driven by the individual plans, rather than a broad and integrated vision of what the goals of the policy should be.²⁸ Although the Department of the Environment, Transport and the Regions argued that this could not possibly be the case because so many action plans have been drawn up,²⁹ this perhaps misses the point that leadership is now required to ensure that the plans are implemented and that their rather unwieldy structure does not impede progress.

22. The sheer number of plans prompted some witnesses to suggest that the whole action plan approach was over-complex³⁰ and, for this reason, was failing to connect with farmers, industry or the public. Although we have some sympathy with this concern, it is important to remember that the Biodiversity Action Plans are not tools for public use but are intended to define the actions required to protect a given species or habitat. Whilst there is much room within biodiversity policy for better communication of the goals to the public, this is not the purpose of the plans. The number of plans was criticised for another reason: that many of the plans had very similar aims and common actions and could be brought under a single umbrella.³¹ We understand that this approach is being pursued by the Department of the Environment, Transport and the Regions to create groups

²³ Q565

²⁴ Q130, Q473

²⁵ Q476, Q130

²⁶ Q482

²⁷ Q514

²⁸ Q4

²⁹ Q89

³⁰ Ev p15 (HC441-II); Q257; Q398

³¹ Ev p12 (HC441-II)

based on Broad Habitats to co-ordinate actions for all the Species Action Plans that are related³² and this should aid more rapid progress with the plans. However, Plantlife noted that this idea had been around since 1998 but that “progress in implementing this model has been slow.”³³ **We urge the Government to press ahead with the process of grouping action plans with similar aims under ‘umbrellas’ to simplify the plan process, thereby improving the co-ordination of the plans and speeding up their implementation.**

CO-ORDINATION OF NATIONAL AND LOCAL PLANS

23. There are around 100 local Biodiversity Action Plans (LBAPs) and these range from parish to county level. The relationship between the national and local Biodiversity Action Plans caused concern to many witnesses.³⁴ The fundamental problems are that there is no consistency between the aims of the national and the local plans and there is very poor communication between the two levels. The inconsistency has arisen because the national and local plans were effectively drawn up simultaneously and separately.³⁵

“There has been enormous enthusiasm within local BAP groups in some areas and the result is that they have often got well ahead of the game, that national plans have not actually been developed to the point where they can properly inform local priorities.”³⁶

The Wildlife Trusts told us that the system of co-ordination between national and local levels was “not working”³⁷ and went on to note the example of the water-vole, where the lack of co-ordination was contributing to the continued decline of the species. English Nature and other witnesses (including the Association of Local Government Ecologists) noted that the exchange of information between national and local levels was not operating well.³⁸ We were encouraged that the Department of the Environment, Transport and the Regions acknowledges this to be a problem.

24. English Nature suggested that the problems would be best tackled by bringing together English Nature, the Wildlife Trusts and the Department of the Environment, Transport and the Regions.³⁹ This is an appealing idea, not least because it is important that this matter is dealt with promptly before local actions start to diverge from the aims of the national plans. The Environment Agency noted that “constant effort is still required to ensure that local targets and priorities logically contribute to national ones.”⁴⁰ Similarly, the Woodland Trust suggested that an iterative process be carried out to link the aims and achievements of the national and local plans to avoid the disadvantages of both the ‘top-down’ and ‘bottom-up’ approaches.⁴¹

25. In the final analysis, it is important that the sum total of the local Biodiversity Action Plans should fulfil the aims of the national Biodiversity Action Plans as far as possible. There appears to be no mechanism for checking consistency between national and local plans. **We recommend that English Nature, the Department of the Environment, Transport and the Regions, and the Wildlife Trusts be brought together under the England Biodiversity Group to address the poor co-ordination of the English national and local Biodiversity Action Plans.** Witnesses were also worried that devolution may be resulting in a divergence between the biodiversity policies and practices in the countries of the UK.⁴²

³² Ev p23 (HC441-II)

³³ Ev p77 (HC441-II)

³⁴ Ev p16, p18, p24, p38, p45, p61, p72, p78 (HC441-II); Q634; Q519; Q466; Q229; Q78

³⁵ Ev p24 (HC441-II); Q231

³⁶ Q229

³⁷ Q466

³⁸ Ev p24, p38, p61 (HC441-II)

³⁹ Q561

⁴⁰ Ev p45 (HC441-II)

⁴¹ Ev p13 (HC441-II)

⁴² Ev p18, p37, p45, p46, p59 (HC441-II)

STATUS

26. It was a source of disappointment to many witnesses that the Biodiversity Action Plans had little statutory underpinning⁴³ and the Minister agreed that this was “a central issue.”⁴⁴ There are two possible components to any statutory requirements. At the national level, Government Departments and Non-Departmental Public Bodies could be given a requirement to further the Biodiversity Action Plans. Such a duty was strongly supported by witnesses from non-governmental organisations who considered that there was insufficient commitment to the plans across Government.⁴⁵ Certainly, the attitude and actions of some Government Departments and agencies suggest that biodiversity is not a priority or even seen as a matter which should particularly concern them.

27. English Nature told us that:

“We believe that there should be some statutory underpinning of the Biodiversity Action Plan process. That is really for three reasons. First, permanence. This is actually something which is here to stay, it is not just a whim or the flavour of the year or the three-year period. Second, clarity of responsibility. Whilst the statutory underpinning itself may not define precisely who is responsible, it actually ensures that somebody is going to sort out who is responsible. A third is actually a profile for resourcing.”⁴⁶

The need for a statutory duty to give the Biodiversity Action Plan process “continuity” and “commitment” was also backed by the Wildlife Trusts.⁴⁷ There was also a general sentiment that the continued development of this area of policy should not be left entirely to the voluntary sector but should be led by the statutory sector and matched by a similar level of commitment.⁴⁸ Against this, the Department of the Environment, Transport and the Regions cautioned that the Biodiversity Action Plan process had made good progress, that statutory duties would not necessarily improve the fortunes of the plans and a system of statutory duties could risk alienating many of the bodies currently involved.⁴⁹ Although the Joint Nature Conservation Committee concluded that there was “nothing more to be gained”⁵⁰ by making the process statutory, most of the Government agencies came down in favour of a statutory duty.⁵¹ Perhaps most significantly, we were told by the Environment Agency of the benefits which their duty had already brought:

“It does give you sharper focus. ... Indirectly it probably means about five per cent of our total budget or about £30 million has been spent on conservation, so it has had quite an impact. ... we employ about 100 staff on conservation, technically qualified, which is about 25 per cent of the level of employment in English Nature.”⁵²

28. Given the amount of land and types of activity undertaken by many utility companies, it would be especially important to extend any statutory duty to the utility regulators.⁵³ This point too was stressed by Mr Mance of the Environment Agency:

“I did point up specifically the utility regulators, who have a significant impact in power generation and in water, and it seems sensible to make sure they are firmly taking account of the conservation impacts of their decisions on pricing for instance.”⁵⁴

⁴³ Ev p1, p90, p105 (HC441-II)

⁴⁴ Q654

⁴⁵ Q470; Ev p106, p113 (HC441-II)

⁴⁶ Q567

⁴⁷ Q462

⁴⁸ Q468; Ev p106, p113 (HC441-II)

⁴⁹ Q88; Ev p84 (HC441-II)

⁵⁰ Ev p7 (HC441-II)

⁵¹ Q571; Q621

⁵² Q638

⁵³ Ev p5 (HC441-II)

⁵⁴ Q640

29. Amongst those in favour of a statutory duty, there is a consensus that it should not take the form of making the BAPs themselves statutory (since they are dynamic) but would instead place a simple duty on bodies to further biodiversity or the action plans.⁵⁵ There is a convincing consensus of opinion that some statutory underpinning of the Biodiversity Action Plans is required and it seems clear that this would help aid the implementation of the plans. There is a need to bring greater commitment across all national bodies and to ensure that this commitment is a lasting one. The arguments against a statutory duty seem rather flimsy and we are not convinced that there would be any significant negative consequences. **We recommend that Government Departments, Executive Agencies, Non-Departmental Public Bodies, Utility Regulators and the Regional Development Agencies should be required to further the aims of the Biodiversity Action Plans. The resource implications of this statutory duty should be examined and addressed.** We made this recommendation in our interim report and are pleased that the Government has now amended the Countryside and Rights of Way Bill to ensure that Ministers and Government Departments must have regard to the conservation of biodiversity. However, we remain concerned that such a duty will not lie with the other bodies included in our recommendation.

30. The other statutory requirement which many witnesses favoured was giving local authorities a duty to further biodiversity.⁵⁶ At present, the performance of local authorities in this regard appears to be patchy and the variable success of local Biodiversity Action Plans demonstrates this. The Local Government Association commented that:

“At present there is no clear responsibility for local authorities to produce Biodiversity Action Plans or Habitat Species Plans. There is responsibility to consider nature conservation in local plans, and a lot of local authorities do take responsibilities for biodiversity very seriously; but in terms of the priorities for spending money then resources will be targeted at what local authorities have to provide by duty and statute.”⁵⁷

The Wildlife Trusts confirmed that “there is no coherent network of local Biodiversity Action Plans and no apparent resources to establish this in the near future.”⁵⁸ English Nature and the Wildlife Trusts recommended to us that the duty on local authorities should include drawing up a local Biodiversity Action Plan.⁵⁹ The positive role of local authorities is also critical in determining the success of local wildlife sites and local record centres: we examine both these issues later.

31. The need to ensure greater consistency and commitment by all local authorities is widely accepted. It is the mechanism to do this which is under discussion. We were told by the Minister of his plans for ‘Community Strategies’ to take forward sustainable development, including the Biodiversity Action Plans. Under the Local Government Bill, the Government intends to introduce Community Strategies and will accompany this legislation with statutory guidance to local authorities on the approach to take in drawing up these strategies. The Minister told us that this “will require local authorities to take full account of biodiversity in the preparation of all of their activities within the community strategy.”⁶⁰

32. The main argument against a statutory duty on local authorities appears to be that it will not necessarily deliver the plans in itself.⁶¹ This is transparently the case but a statutory duty would help in raising the profile of biodiversity and would also give increased leverage to those involved in setting priorities and bidding for funding for biodiversity work.⁶² It is true that funding remains an issue and several witnesses noted that any statutory duty must be accompanied by additional funding.⁶³ **We are pleased that the Government’s Community Strategies initiative will offer**

⁵⁵ Q638; Q567

⁵⁶ Ev p36, p78 (HC441-II)

⁵⁷ Q410

⁵⁸ Ev p61 (HC441-II)

⁵⁹ Q470; Q567

⁶⁰ Q655

⁶¹ Q657

⁶² Ev p1 (HC441-II); Q414

⁶³ Q524; Q462

some backing to biodiversity policy for local authorities and we recommend that this should encompass some commitment to local record centres and local wildlife sites. We expect the Government to review the effectiveness of this approach in delivering greater commitment to biodiversity and introduce a stronger statutory duty if necessary.

MONITORING AND RESEARCH

33. Biodiversity monitoring and research are vital to demonstrate where the problems exist (or are developing), what progress is being made by the various initiatives and whether progress is sufficient to meet the targets set.⁶⁴ Thirty-four per cent of the plans published in 1995 still report problems with 'insufficient information'.⁶⁵ As with any monitoring process, there are debates about quite what should be measured to assess the quality of biodiversity.⁶⁶ Some witnesses suggested that current efforts to monitor the populations of species were measuring the wrong thing: that we should focus on the amount of semi-natural habitat or some other proxy for biodiversity.⁶⁷ We did not attempt to reach a conclusion on such a scientific debate but, certainly, we agree that monitoring biodiversity must be seen as a means to an end in relation to biodiversity policy.⁶⁸ Research and monitoring must never become a substitute for action.

34. Historically, the monitoring of biodiversity has been largely carried out by volunteers. As a result, the data on the more charismatic types of species (for example, a small selection of mammals and many birds) are rather good whereas relatively little is known about the fortunes of the less charismatic (for example, insects, perhaps excluding butterflies).⁶⁹ In general terms, then, monitoring has been rather patchy (both in terms of geographical coverage and biological comprehensiveness⁷⁰) and this is exacerbated by the absence of a network to collect biodiversity data and ensure access to that data. Current efforts are now attempting to overcome these problems and the main mechanism for doing this, the National Biodiversity Network, was launched in 1996 after the UK Biodiversity Action Plan Steering Group Report. The concept has evolved since then and the vision is now of "a network of national and local data holders, working to common standards, collating data to meet the needs of key users and making it widely accessible."⁷¹ Accessibility will be provided through a database which can be reached via the Internet. A successful National Biodiversity Network is required to ensure that the whole Biodiversity Action Plan process is heading in the right direction and that the plans can be tweaked and priorities changed according to what is actually happening.

35. The aims of the National Biodiversity Network are undoubtedly good ones but witnesses were disappointed with the progress to date: it was described as having been "slow and piecemeal" and "painfully slow".⁷² Given that the vast majority of the work is being carried out by volunteers⁷³ and will continue to be so, the main costs involved in establishing the National Biodiversity Network will be set-up costs and, in later years, the annual costs should diminish.⁷⁴ It is, therefore, all the more disappointing that many witnesses were concerned that the National Biodiversity Network would fail due to inadequate resources.⁷⁵ The Government has recently committed £250,000 to the development of the National Biodiversity Network but the National Biodiversity Network Trust note that "the establishment of the network and its continued maintenance and extension will require far greater resources"⁷⁶. The Royal Society for the Protection of Birds estimated that the National

⁶⁴ Ev p2, p8, p24, p26, p61 (HC441-II)

⁶⁵ Ev p8 (HC441-II)

⁶⁶ Ev p13 (HC441-II)

⁶⁷ Q543

⁶⁸ Q33

⁶⁹ Ev p19, p42 (HC441-II); Q547

⁷⁰ Ev p2 (HC441-II)

⁷¹ Ev p62 (HC441-II)

⁷² Ev p42 and p19 (HC441-II)

⁷³ Q593

⁷⁴ Q508;

⁷⁵ Ev p2, p19, p42, p80 (HC441-II); Q594; Q504; Q190; Q138; Q33

⁷⁶ Ev p74 (HC441-II)

Biodiversity Network would need around £20 million over the next ten years.⁷⁷ A successful National Biodiversity Network is a linchpin of the whole Biodiversity Action Plan and we are concerned that it may fail due to inadequate resources. We recommend that the National Biodiversity Network be provided with greater funding for the next five years, to establish the network.

36. Another continuing problem with the National Biodiversity Network is the variable commitment found in Government Departments and academic institutions.⁷⁸ Witnesses noted that tradition had always dictated that any biodiversity information or data were not made publicly available: data are kept so that you can gain the kudos from publishing it at some later date. The Joint Nature Conservation Committee called for a "change of culture" to overcome this.⁷⁹ This applies to Universities and Research Councils⁸⁰ as much as Government Departments and local authorities. Some Government Departments (notably Ministry of Agriculture, Fisheries and Food, the Forestry Commission and the Ministry of Defence⁸¹) have apparently rejected full participation in the National Biodiversity Network in favour of their own systems of data. This is unhelpful. We are disappointed that the National Biodiversity Network cannot rely on the commitment of all government Departments. We can see no good reason for individual Departments keeping data to themselves. National biodiversity policy relies on freely available, good quality data: this prerequisite must not be blocked by the Government or academic institutions. Any data collected as a result of the use of public funds must be freely available to all and should be placed on a national biodiversity website.

37. With the full co-operation of those collecting or owning the data, one of the main pillars of a successful National Biodiversity Network will be an invigorated network of Local Record Centres. These are partnership projects which are often led by the local authority and bring together biodiversity information, providing access to a range of organisations. At present, there are just 11 such centres and the performance of local record centres was described by the Minister as "extraordinarily fragmented."⁸² Many witnesses agreed⁸³ and it is clear that the network of local record centres needs to be expanded.⁸⁴ The question is where the responsibility for doing this should be placed. English Nature said that:

"In my view I should place it very firmly with local authorities. At the end of the day they need to know about the wildlife in their local areas, they need to take account of that across the broad range of all of their responsibilities and the most efficient way of collecting and holding data is through these local centres."⁸⁵

Similarly, the Wildlife Trusts noted that "many local authorities do not perceive that they have any need for biodiversity information and are therefore reluctant to work with Local Record Centres."⁸⁶ The only realistic point at which support can be offered to the centres is through local authorities. It is clear that the network of local record centres should be expanded and receive greater support. We recommend that county councils, unitary authorities, metropolitan councils and the Greater London Authority be given a duty to ensure that local record centres are provided. The Government should consider what additional resources will be required to fulfil this duty.

⁷⁷ Q138

⁷⁸ Ev p62 (HC441-II)

⁷⁹ Q594

⁸⁰ Q595

⁸¹ QQ602-603 and Q506

⁸² Q745

⁸³ Ev p19, p72 (HC441-II)

⁸⁴ Q596

⁸⁵ Q599

⁸⁶ Ev p62 (HC441-II)

Research Requirements

38. Witnesses noted that, in some instances, further research was needed to determine exactly what actions were required to aid a particular species.⁸⁷ The Wildlife Trusts noted that the Biodiversity Action Plans “have identified a lack of understanding of the ecological needs of a particular species as a problem or lack of methods of monitoring those species or lack of information about them.”⁸⁸ This is particularly the case for marine biodiversity. Without adequate information about the behaviour of a species or the inter-linking of species, inappropriate or harmful actions could be taken. Unfortunately, a consistent theme to emerge from witnesses was dismay that the priorities of the research councils were failing to reflect the priorities of the Biodiversity Action Plans.⁸⁹ Indeed, one witness described the Natural Environment Research Council as “rather aloof” from the need for applied science to support the Biodiversity Action Plans.⁹⁰ **We recommend that the Research Councils, particularly the Natural Environment Research Council, place a priority on funding practical research which fills gaps in the knowledge required to achieve the aims of the UK Biodiversity Action Plans. Action must be taken to address this swiftly because of the delays between providing funding for research and the availability of results.**

Funding

39. Funding for work on biodiversity comes from both government and private sources. Many witnesses emphasised the contribution made by voluntary organisations and some noted the efforts made by those involved in field sports. Dr Potts of the Game Conservancy Trust described the contribution of game bird conservers to biodiversity as “fantastic”⁹¹ and emphasised that the sensitive management carried out by those involved in field sports was of benefit to many species. He stressed that the reduced inputs of insecticides and herbicides that can be associated with game bird management are of benefit to biodiversity as a whole. Similarly, the Country Landowners Association told us that the total annual investment in field sports in the UK was around £6 billion and that the contribution of field sports to good wildlife management was “substantial ... and an important one”⁹². The Association went on to emphasise that this work comprised a large voluntary contribution from those involved in field sports to the cause of biodiversity.

40. As one might expect, many witnesses called for additional funding to be found for the various component parts of biodiversity policy.⁹³ The Government argue that English Nature has already received additional funding of £11 million in the last two years, £3.3 million of which was specifically to fund the Biodiversity Action Plan process. In evidence to the House of Lords Committee last year, English Nature suggested that it required £20 million a year to meet the immediate needs of Sites of Special Scientific Interest management. Other statutory bodies, such as the Countryside Council for Wales have made it clear that they do not have adequate funding to fulfil their biodiversity commitments.⁹⁴ Various recommendations we make in this report have associated funding requirements and, where this is the case, we note the importance of tying in resources. We did not, however, attempt to analyse in detail the full picture of funding for biodiversity. Nevertheless, a few principles did emerge.

41. Possibly the most important area to find additional funding for is local authority biodiversity work. By having just one person in each local authority, the cause of biodiversity could be significantly boosted. As Professor Colin Reid noted:

⁸⁷ Q643

⁸⁸ Q472

⁸⁹ Ev p81, p93, p111 (HC441-II); Q472

⁹⁰ Q140

⁹¹ Q523

⁹² Q267

⁹³ Ev p1, p74 (HC441-II); Q635 and Q583

⁹⁴ Ev p45 (HC441-II)

"I know from my own experience ... you can make limited progress through the good will of busy people in other bodies and volunteers doing things, but when you have a full-time project officer, that is when you can actually make big steps forward, making the connections, making what is going on known to the public, getting bodies involved to capture the good will, the expertise that is there. For comparatively small sums you can often, by bringing in all these things, have a big impact."⁹⁵

The Association of Local Government Ecologists told us that there is a 'multiplier' effect in which major benefits can result from very limited expenditure at local authority level:

"It is important, certainly within the best value context, to think about the multiplier effect. One officer in the council probably can attract in well over 100 per cent again what that person costs the authority; and very often I should think it is many times that amount. There is a multiplier effect. Once you have got somebody in they can organise and bring down further resources."⁹⁶

42. The Minister focussed on the "need to enthuse" and emphasised the role of voluntary groups in the biodiversity process. However, the enthusiasm of voluntary groups for pushing forward biodiversity plans generally could be exhausted if these groups feel that this commitment is not mirrored by Government at all levels.⁹⁷ Local authorities are key in this and relatively modest amounts could pay big dividends: even £50,000 for each local authority could effectively ensure a full network of biodiversity officers working to enthuse their colleagues, local businesses and the local community. **If local authorities are to be given duties relating to local record centres, local wildlife sites and furthering the action plans, some additional funding must be supplied by central Government. We recommend that the Government provide an additional £10 million to local authorities. This funding should ensure that the authority provides a biodiversity officer, or enables an equivalent service to be agreed with other interested parties, with responsibility for the local wildlife site register and the local record centre.**

43. Whilst it is true that additional funding is required for biodiversity, there is an important potential resource in the existing funding streams. Total annual subsidies to agriculture total more than £2.5 billion, of which spending on agri-environment schemes accounts for just £160 million or 6%.⁹⁸ With progressive diversion of greater amounts of the agricultural spend towards biodiversity aims (specifically, priorities for the Biodiversity Action Plans), this stream could cover many of the gaps in biodiversity funding. This point was explicitly made by officials from the Department of the Environment, Transport and the Regions who noted that:

"My understanding is that the total estimated cost over and above the current programmes is estimated to be about £60 million for the public sector per year. The assumption is that the great majority of those costs will be expended through agri-environment programmes."⁹⁹

Baroness Young, Chair of English Nature told us that:

"It is not just about money, or new money, it is also about targeting existing resources, particularly that big agriculture budget which at the moment is not helping biodiversity, in fact is damaging biodiversity. Moving that budget so that it benefits wildlife rather than being destructive, is probably as important as getting in fresh money."¹⁰⁰

We return to the issue of targeting agri-environment spending later.

⁹⁵ Q64

⁹⁶ Q435

⁹⁷ Ev p37 (HC441-II)

⁹⁸ Website of Ministry of Agriculture, Fisheries and Food

⁹⁹ Q112

¹⁰⁰ Q584

44. Although there is clearly a need to divert greater resources to the cause of biodiversity, we are concerned that there is limited scrutiny of the way in which funding is currently spent. In particular, we believe that English Nature needs to involve a much wider group of people in its funding decisions and that these decisions must be based on sound principles rather than sentiment. For example, the efforts we saw being made to extend the bittern's habitat in Suffolk were impressive but were also very expensive, particularly given the extent of the bittern in Europe. It seems unlikely that preserving the bittern's habitat in the UK is a good use of funds compared to protecting some hard-pressed beetles or algae which cannot be found in abundance in continental Europe.

Implementation of the Habitats and Birds Directives

45. The Birds Directive provides for the protection, management and control of all species of naturally occurring wild birds. It requires various measures to be put in place to preserve habitats for birds and specifies that Special Protection Areas should be designated. The Habitats Directive requires Member States to take actions to maintain or restore natural habitats or wild species at "favourable conservation status" and necessitates the designation of Special Areas of Conservation (SACs). The way in which the UK has implemented the Habitats and Birds Directives was commented on by many witnesses and much criticism was levelled at the Government. For example, the Worldwide Fund for Nature described their implementation as "seriously flawed."¹⁰¹ We consider the main criticisms below.

NATURA 2000 SITES

46. It now seems to be generally accepted that the list of candidate Natura 2000 sites submitted by the Government in June 1999 was inadequate. The Atlantic meetings of the Biogeographical Region in Kilkee and Paris presided over a 'moderation' process which decreed that several Member States (including the UK) had failed to put forward an adequate number of candidate Natura 2000 sites. The list put forward was insufficient for a number of reasons. The Worldwide Fund for Nature told us that:

"First of all, we did not think there were enough sites on the list to ensure favourable conservation status for habitats and species on the directive, and secondly that there was not sufficient geographical representation of sites all over the UK to make sure that the biological variation would be represented. It was no surprise to us that at the Atlantic meeting the UK was found insufficient for I think 39 habitats on the directive, that is half of those occurring in the UK, and 14 species, that is 73 per cent of the total occurring in the UK."¹⁰²

In addition to the two reasons detailed above, the Department of the Environment, Transport and the Regions officials noted that there also needed to be greater recognition of the importance of 'subsidiary' species or habitats within sites.¹⁰³

47. Since the Atlantic meetings, the UK has been in the process of developing a fuller list. Although many witnesses reiterated their disappointment with the original list, they did also suggest that they were now broadly happy with the approach adopted to selecting sites and emphasised that there was real commitment on behalf of the statutory agencies to this process. For example, the Worldwide Fund for Nature told us that they were "impressed" with the Government's approach to this problem and the "very rigorous process" which was being undertaken to address the inadequacies of the original list.¹⁰⁴

48. In August 2000, the Government put forward a new list of UK sites for consultation which contained 576 sites, a substantial expansion from the original 340 proposed. The European Commission have informed seven Member States (including the UK) that failure to submit an

¹⁰¹ Ev p3 (HC441-II)

¹⁰² Q191

¹⁰³ Q105

¹⁰⁴ Q191

adequate list of sites could result in the loss of regional aid.¹⁰⁵ The UK now has a “period of grace” to resolve this matter. As a general point, we regret that the European Commission appear to have made no policy link between designating sites and costing the protection of such sites: it is inevitable that any designations made without the resources to back them up will merely be empty gestures.

BUFFER ZONES

49. Inevitably, there are differences in the way that the various Member States choose to implement the requirements of the Directive. This is most apparent in the selection of Natura 2000 sites where some of the southern European Member States (such as Greece and Italy) have designated large areas as sites, within which so-called ‘buffer zones’ surround the core area. The aim of buffer zones is to bring land around core sites under sympathetic land-management practices. In the UK, smaller sites have been selected which consist solely of the core area. The Worldwide Fund for Nature told us of the pros and cons of the two different approaches:

“The positive side of including those buffer zones is that it gives you a lot more flexibility to restore and recreate and try and make these areas bigger. Particularly in coastal and marine areas that is very important where you have other processes going on and maybe have some loss due to sea level rise or coastal squeeze; you can actually accommodate that because you have larger boundaries. The down side, and this is where I do have some sympathy with the approach the UK has taken, is that you have really quite draconian requirements under Article 6 of the Directive which are quite difficult to apply if you applied them to areas which have no existing nature conservation value.”¹⁰⁶

Despite their sympathy with the Government’s approach, the Worldwide Fund for Nature recommended that the UK should designate some buffer zones. Similarly, the Woodland Trust lamented the lack of buffer zones: “It means that designation is doing nothing to actually address the threats external to the sites, it is not actually promoting positive management of surrounding land, and it probably limits us as a country in our ability to gain EU LIFE funding...”¹⁰⁷ The designation of buffer zones would also fit with the Biosphere Reserves model (outlined to us by the Environment Agency) in which a core area is defined (of sufficient size to meet long-term conservation objectives), with a buffer zone (in which only activities compatible with the conservation objectives are permitted) and an outer transition area (in which only sustainable resource management is permitted).¹⁰⁸ Representatives of farmers and landowners did not favour the use of buffer zones but did not put major arguments against their use.¹⁰⁹

50. It is transparently the case that wildlife within a protected site does not necessarily confine itself to the site: for this reason, it is argued, sympathetic management of a much larger area is important if we are to genuinely protect the wildlife in the site. Certainly, with current agricultural policy and practices, we believe that the value of sites could be compromised by the inappropriate management of adjacent and nearby land. However, the merits of buffer zones and their appropriate size will vary dramatically according to the species which is being conserved and the type of habitat: there is no simple answer as to whether a large designated area with no buffer zone is better than a smaller area with a buffer zones. **We recommend that the Government look again at the potential of establishing buffer zones around Natura 2000 sites. Where a site itself cannot be enlarged, or it would be a poor use of resources, buffer zones could be an effective method of offering limited protection to a larger area. However, the most practical method of improving the prospects for biodiversity in areas around Natura 2000 sites remains reform of the agricultural support system.**

¹⁰⁵ Q104

¹⁰⁶ Q192

¹⁰⁷ Q224

¹⁰⁸ Appendix to Environment Agency Memorandum (Ev not printed)

¹⁰⁹ Q300

STATIC NATURE OF HABITATS DIRECTIVE

51. It is generally accepted that we are in the midst of a period of environmental change and this will have major and persistent effects on the range and location of species and habitats. As the Woodland Trust noted, "in the face of change individual species will either adapt, migrate or become extinct."¹¹⁰ It is likely that species already present will migrate within the UK to areas which can best support them and species which cannot currently prosper here will start to move in. Clearly, a system of relatively small designated sites will struggle to deal with such changes and it will be impossible for sites to remain as 'fixed points' within a sea of change all around them. Unfortunately, this appears to be the requirement of the Habitats Directive.

52. The memorandum from the Centre for Social and Economic Research on the Global Environment (CSERGE) focussed on this issue and questions whether the Habitats Directive as it stands can incorporate the effects of environmental change. The Centre considered various methods of dealing with the problem but concluded that "[the Habitats Directive] is likely to encounter problems in the context of dynamic and rapidly changing systems."¹¹¹ Quite simply, by adopting a 'no-net-loss' approach to biodiversity without provision for changing the site boundaries, it fails to allow for the impacts of environmental change. An example of the problems to be expected was noted by the Environment Agency:

"A concern we have within the agency, given our flood defence responsibilities, is that under the Habitats Directive, for instance, areas will be designated on a dynamically changing coastline. There does not seem to be the vehicle for modifying the designation in the longer term. We appear to be being asked to play Canute and hold the tide back, which is never very comfortable."¹¹²

Other witnesses expressed concern that the likely impacts of climate change had not been adequately taken account of in biodiversity policy generally.¹¹³ **We recommend that the Government press the European Commission to amend the Habitats Directive so as to reflect the impact of environmental change upon biodiversity.**

MARINE SITES

53. We did not have time in this inquiry to consider marine biodiversity issues in any detail. It was clear, however, from the written evidence which we received that there is a good deal of concern over marine issues generally and, in particular, the extremely limited designation of marine sites for Natura 2000. The most comprehensive criticism of the Government's current approach was provided by the Joint Marine Programme of the Wildlife Trusts and the Worldwide Fund for Nature-UK. In relation to the Habitats Directive, they expressed concern over the selection of sites, the management of sites, the way boundaries have been drawn and the absence of habitat restoration and recreation.¹¹⁴ These worries were backed up by other witnesses and Professor Colin Reid noted that "the current legal structures are woefully inadequate to offer appropriate protection or management for marine biodiversity."¹¹⁵ The importance of marine areas was emphasised and extended by a recent case which confirmed that the Habitats Directive applies up to a limit of 200 nautical miles, rather than 12 miles which had previously been assumed to be the case.¹¹⁶ The problems with marine biodiversity are, if anything, more complex than those relating to terrestrial nature conservation and, as marine conservation areas are developed and designated, it is clearly critical that there is an integration of marine biodiversity needs into fisheries policy along with pollution control.

¹¹⁰ Ev p13 (HC441-II)

¹¹¹ Ev p32 (HC441-II)

¹¹² Q650

¹¹³ Ev p27 (HC441-II)

¹¹⁴ Ev pp50-52 (HC441-II)

¹¹⁵ Ev p1 (HC441-II)

¹¹⁶ *R v Secretary of State for Trade and Industry ex parte Greenpeace Ltd*

54. Friends of the Earth (FoE) noted that the work of the statutory nature conservation agencies has focussed on the terrestrial environment and argue that the marine environment has been "severely neglected."¹¹⁷ FoE concluded that "It is difficult to see how the UK will ensure effective nature conservation in the marine environment, or meet its obligations under European Union directives and international conventions, unless it establishes structures and agencies that reflect the size and unprecedented nature of the task" and recommended that a new, dedicated conservation body should be established to handle marine biodiversity issues. A new, Marine Conservation Agency is also suggested by the Joint Marine Programme of the Wildlife Trusts and the Worldwide Fund for Nature-UK.¹¹⁸ There are many complex and unresolved aspects of marine biodiversity policy and there is a serious risk of these issues being forgotten in the rush to deal with terrestrial matters. The subject of marine biodiversity is one to which we may return in a future inquiry. **The Government must address the range of problems and inadequacies in their approach to marine biodiversity. As an island nation, the conservation of marine biodiversity should be paramount and the Government should consider whether a new statutory agency is required to deal with marine biodiversity issues.**

ACTION OUTSIDE SITES

55. Witnesses suggested that implementation of the Habitats and Birds Directives had focussed on designating sites to the exclusion of the implications of the Directives for the fabric of the wider countryside.¹¹⁹ The Worldwide Fund for Nature (along with other organisations) has made a complaint to the European Commission that the UK has incorrectly transposed some of the provisions of Article 12 relating to the protection of species outside of Natura 2000 sites.¹²⁰ The concern over biodiversity in the wider countryside is a general one which does not relate solely to the provisions of the Habitats Directive and we consider the protection of biodiversity outside sites below.

Protection of Designated Sites

56. There exist a number of different types of protected site. Sites of Special Scientific Interest are designated under the Wildlife and Countryside Act 1981 and are of national importance. These sites may also be National Nature Reserves (NNRs). They may also be designated as Special Protection Areas (SPAs) under the Birds Directive or Special Areas of Conservation (SACs) under the Habitats Directive; both of which contribute to the Natura 2000 network. All of these types of site receive some statutory protection. In addition to these sites, there is also a network of locally-designated wildlife sites which do not have statutory protection, but which may receive limited protection in local planning policies.

57. Although Sites of Special Scientific Interest do receive statutory protection, the provisions made to protect them have not been entirely successful. For example, the Countryside Council for Wales (CCW) noted that "constraints on staff time and cash for management agreements with owners/occupiers mean that not all sites/features are adequately protected."¹²¹ Specifically, the Council note that on some Sites of Special Scientific Interest, "where overgrazing is a problem, steady degradation is occurring even though they are notified as Sites of Special Scientific Interest." English Nature also acknowledge the problems posed by over-grazing in the uplands and suggested that up to 70% of Sites of Special Scientific Interest in upland areas are in 'unfavourable condition'.¹²² As in so many instances, agricultural practices and nature conservation are interwoven.

¹¹⁷ Ev p108 (HC441-II)

¹¹⁸ Ev p52 (HC441-II)

¹¹⁹ Ev p25 (HC441-II)

¹²⁰ Ev p3 (HC441-II)

¹²¹ Ev p97 (HC441-II)

¹²² Ev p27 (HC441-II) and Q582

58. The Countryside and Rights of Way Bill will improve the protection available for Sites of Special Scientific Interest, thereby righting one of the main faults of the Wildlife and Countryside Act 1981.¹²³ In particular, greater powers are being given to the statutory agencies to impose and enforce management agreements on owners of land in Sites of Special Scientific Interest. Many witnesses expressed their support for the improved protection of Sites of Special Scientific Interest.¹²⁴ **We are pleased that the Countryside and Rights of Way Bill will offer greater protection for Sites of Special Scientific Interest (SSSIs). We expect the Government and the statutory agencies to monitor the practical improvements which result, with a view to making modifications if necessary.**

59. In addition to protected sites, the designation of National Parks and Areas of Outstanding Natural Beauty has indirect consequences for biodiversity. There are 37 Areas of Outstanding Natural Beauty in England, covering more than 15% of the land area. The limited protection of Areas of Outstanding Natural Beauty (AONBs) has been a matter of concern for many years and this anxiety has been heightened as development pressures on the countryside have increased. Although Areas of Outstanding Natural Beauty are considered by many to be equivalent in importance to National Parks, they do not have the same statutory protection. During the last two years, unsuccessful attempts have been made to introduce a Bill in the Lords to give much greater protection to Areas of Outstanding Natural Beauty and it was a source of disappointment to many that the Countryside and Rights of Way Bill did not include measures to enhance the protection given to Areas of Outstanding Natural Beauty. However, the Government has brought forward amendments to the Bill to do just this. Specifically, the amendments will require a management plan to be drawn up for each Area of Outstanding Natural Beauty and will enable the creation of statutory conservation boards where there is local support for such a move. Most importantly, the Government's proposals will offer Areas of Outstanding Natural Beauty the same status of protection against development as currently applies to National Parks. **We welcome the Government's amendments to the Countryside and Rights of Way Bill which aim to provide Areas of Outstanding Natural Beauty with greater protection.**

Protection of Biodiversity Outside of Sites

60. A policy of site-based protection of biodiversity has been successfully pursued in the UK for many decades. A corollary of this approach has been that biodiversity outside of the sites (which, after all, is the majority of biodiversity¹²⁵) has been neglected and, as a result, has suffered dramatically. Sites of Special Scientific Interest cover only around 10% of UK land¹²⁶ and Sites of Special Scientific Interest only form a representative sample of sites: for example, 85% of the ancient woodlands in England and Wales fall outside of these sites.¹²⁷ One of the best indications of the state of biodiversity outside sites is the decline of farmland birds, the populations of which fell by 35% between 1973 and 1998.¹²⁸ It has been estimated that the number of pairs of skylarks has halved since 1990.¹²⁹

61. It is a consistent feature of the criticisms levelled at the implementation of the Habitats Directive and biodiversity policy generally that action outside of sites has remained "something of a Cinderella."¹³⁰ The fragmentation of habitats, the loss of semi-natural habitats and the decline of many species which rely on the wider countryside are continuing apace. Without action outside of the sites, we risk rural England becoming a scattering of protected sites in a wildlife desert. Although almost all those involved with policy now acknowledge that insufficient attention is being paid to biodiversity outside designated sites, there is clearly some concern that action will not

¹²³ Ev p44 (HC441-II)

¹²⁴ Ev p3, p14, p26, p37, p44, p60, p105 (HC441-II)

¹²⁵ Ev p63, p106 (HC441-II)

¹²⁶ Ev p3 (HC441-II)

¹²⁷ Ev p14 (HC441-II)

¹²⁸ *Quality of life counts: Indicators for a strategy for sustainable development for the United Kingdom*. DETR, December 1999, London (ISBN 1 85112 3431)

¹²⁹ Reported in the RSPB's *The State of the UK's Birds 1999*, Published February 2000

¹³⁰ Ev p28 (HC441-II)

necessarily follow.¹³¹ In particular, it is recognised that the UK Biodiversity Action Plans have addressed this issue in the plan stage, but there seems to be scepticism about the delivery of the plans' targets and actions which rely on action outside of sites.¹³²

62. A few quotes illustrate the level and nature of concern about this issue: "a site centred system cannot deliver adequate protection for our natural heritage in the face of habitat fragmentation and climate change,"¹³³ "the wildlife voice outside designated areas is weak and often wholly reliant on the voluntary sector,"¹³⁴ "current legislation for protecting species and habitats outside protected sites is weak and does not adequately cover priorities identified through the biodiversity planning process."¹³⁵

63. The importance of addressing biodiversity needs outside sites is illustrated by the statistics produced by English Nature which show that action outside protected sites will be required to achieve the targets for around 60% of the Habitat and Species Action Plans.¹³⁶ English Nature are attempting to address the current focus on sites by promoting their 'lifescapes' approach which aims to adopt a 'whole countryside' view to protecting biodiversity and includes both economic and environmental aspects. The environmental part of the 'lifescapes' approach relates to habitat recreation and the need to encourage more sensitive land management around habitats. Officials from the Department of the Environment, Transport and the Regions argued that although it might be a "valid criticism" that too little work was being done outside sites, this was because of the efforts to designate Natura 2000 sites and that this would change once the work on designations was complete. However, even if this is the case, it remains the situation that the policy levers to help aid protection of biodiversity outside of sites are largely absent. It is not just 'effort' that is required but policy changes. We examine the influence of some areas of policy later in this report but here we consider some of the specific actions which will aid biodiversity in the wider countryside.

LINKING FEATURES

64. In 1998, we undertook an inquiry into the protection of field boundaries. Many witnesses to that inquiry stressed to us the wildlife importance of traditional field boundaries such as hedgerows, dry stone walls, ditches and dykes. In our inquiry into UK Biodiversity, we once again heard about the importance of field boundaries (and other connecting features) for biodiversity and the problems caused by their loss.¹³⁷ Fragmentation of habitats was identified by several witnesses as one of the biggest threats to biodiversity¹³⁸ and, apart from habitat recreation, one of the best methods of countering this fragmentation is to provide 'corridors' which link the remaining habitats.¹³⁹ This is recognised in Article 10 of the Habitats Directive, which seeks to maintain features of importance in the landscape which link and buffer areas of importance for wildlife. Plantlife wrote that "there is currently no appropriate mechanism to implement Article 10."¹⁴⁰ Traditional field boundaries qualify as such features and their protection and recreation can be considered to be an extremely effective mechanism for aiding biodiversity.

65. Of all the different types of traditional field boundaries, only hedgerows currently receive any protection and the existing Hedgerows Regulations continue to offer partial and inadequate protection for hedgerows since they only enable the protection of 'important' hedgerows, where importance is defined by a set of nationally defined criteria. Although the Government intend to strengthen the Hedgerow Regulations later this year, we must re-affirm the recommendation made in our Field Boundaries report that "all types of traditional field boundary merit equal protection in

¹³¹ Ev p1, p10, p12, p22 (HC441-II); Q587; Q202

¹³² Ev p10, p44 (HC441-II)

¹³³ Ev p12 (HC441-II)

¹³⁴ Ev p29 (HC441-II)

¹³⁵ Ev p63 (HC441-II)

¹³⁶ Ev p25 (HC441-II)

¹³⁷ Ev p26, p31 (HC441-II)

¹³⁸ Ev p12, p46 (HC441-II)

¹³⁹ Q736

¹⁴⁰ Ev p79 (HC441-II)

law ... the Government must introduce new primary legislation for the protection of field boundaries within the lifetime of this Parliament.”¹⁴¹ We recommend that all types of traditional field boundaries should be protected so as to ensure the continued presence of habitats for some species and corridors for the movement of others. Hedges, banks, ditches, dykes and walls should all receive legal protection where they are identified as being important either nationally or locally for biodiversity or other reasons. We first made this recommendation in our 1998 report on field boundaries and reiterated it in our interim report on UK Biodiversity in July of this year. Despite our concerns, the Government has not brought forward amendments to the Countryside and Rights of Way Bill to offer greater protection to field boundaries.

66. The continued function of field boundaries and other features in linking habitats will not be ensured by legal protection alone: there is also a role for measures which achieve better management of these features. English Nature already has powers to negotiate and enforce management agreements with landowners of Sites of Special Scientific Interest. Friends of the Earth called for this power to be extended outside Sites of Special Scientific Interest and stated that this was “urgently required to help biodiversity conservation in the wider countryside.”¹⁴² We recommend that English Nature be given the power to negotiate and enforce management agreements with landowners outside Sites of Special Scientific Interest, to cover features of importance to biodiversity, and are pleased that such powers will now result from the Countryside and Rights of Way Bill. We anticipate that English Nature will need some additional resources to be able to fulfil the potential which this option offers.

LOCAL WILDLIFE SITES

67. Local Wildlife Sites¹⁴³ are designated at a local level as having importance for wildlife. These sites are often run by a partnership involving the wildlife trusts, other local organisations and the local authority. Witnesses identified these sites as being critical to the success of biodiversity policy and achieving targets in the Biodiversity Action Plans.¹⁴⁴ Further, they contribute to achieving the ‘favourable conservation status’ for species and habitats listed in the Habitats Directive.¹⁴⁵ However, the protection they receive is entirely dependent upon the priority given to them by the local authority — they are not the subject of any statutory provisions. The Department of the Environment, Transport and the Regions recently established a Local Site Review Group to examine the issue and recommend measures for their improved protection and management. We understand that this group reported in March 2000 and witnesses urged the Government to act upon the recommendations of the group.¹⁴⁶

68. The problems of local sites were encapsulated by Friends of the Earth who wrote that “The conservation and management of these sites ... is currently dependent on goodwill and there are great differences in the standard of the local wildlife site systems currently run by local authorities.”¹⁴⁷ The degree of variation in local systems of designating and dealing with local sites was recognised by English Nature and the Wildlife Trusts as a disadvantage and a matter which required some intervention.¹⁴⁸ We heard many calls for local wildlife sites to be given greater recognition and protection in law and for increased resources to ensure their positive management.¹⁴⁹ English Nature called for a national framework to ensure a reasonably consistent approach to selection and a duty upon local authorities to become much more involved in local wildlife sites.¹⁵⁰ The Local Government Association acknowledged that the planning system as it

¹⁴¹ Paragraph 129, *The Protection of Field Boundaries*, Environment, Transport and Regional Affairs Committee, HC969-I (1997-98)

¹⁴² Ev p107 (HC441-II)

¹⁴³ These may also be known as Sites of Importance for Nature Conservation

¹⁴⁴ Ev p3, p27, p63, p106 (HC441-II)

¹⁴⁵ Ev p4 (HC441-II)

¹⁴⁶ Ev p63, p106 (HC441-II)

¹⁴⁷ Ev p106 (HC441-II)

¹⁴⁸ Ev p63 (HC441-II) and Q608

¹⁴⁹ Q491; Ev p4, p63, p99, p106 (HC441-II)

¹⁵⁰ Ev p25 (HC441-II); Q605

stands will not be adequate to protect local wildlife sites.¹⁵¹ We recommend that local authorities should have a duty to establish and maintain a register of local wildlife sites and to give them the status of 'material consideration' in development control decisions. This should ensure that there is a general presumption against development on these sites. Although we first made this recommendation in our interim report in July, the Government has not amended the Countryside and Rights of Way Bill to reflect our recommendation.

Integration into Other Areas of Policy

69. Article 6 of the Convention on Biological Diversity requires parties to integrate biodiversity considerations into all activities.¹⁵² This feature was also included in the seminal 59 steps of the UK Biodiversity Action Plan recommended by the Biodiversity Steering Group. However this appears to be the area of least progress so far: witnesses were united in their condemnation of the lack of integration of biodiversity concerns into other areas of policy.¹⁵³

70. This area is critical if biodiversity is to be protected throughout the UK and not just in defined sites. The Environment Agency suggested that there was a need for "some sort of gear shift" to bring about greater integration of biodiversity across other areas of policy.¹⁵⁴ As one might expect, the most important areas for better integration of biodiversity are agriculture and planning. We examine both of these areas below. Of course, the drive for integration should not stop at those policy areas which have the greatest influence — aspects of almost all areas of policy (for example, transport and defence) will have a marked impact on biodiversity. However, unless the degree of integration is improved in the 'headline' areas of agriculture and planning, there can be relatively little hope of it taking place in the less prominent areas. The 'Green Ministers Biodiversity Checklist' deals with this matter and other aspects of Government actions and we examine its role later in this report.

AGRICULTURE

71. The significance of agricultural policy and practices for biodiversity is difficult to overstate. Agriculture influences more than 75% of the UK's land area.¹⁵⁵ Up until 1900, UK agriculture was essentially mixed farming but since then the drift into monoculture has had a devastating effect in reducing biodiversity. Modern agricultural practices have been responsible for the decline of many species and the disappearance of large areas of habitat. We heard of species such as the grey partridge being "brought to their knees" by intensive farming. One witness reported the comments of a senior conservationist, who stated that the single most useful thing Western Governments could do to aid biodiversity would be to abandon subsidised agriculture.¹⁵⁶ Although the direction and emphasis of agricultural policy is now starting to shift to address environmental matters, it is hard to escape the conclusion that current efforts are too little, too late and too slow. Species and habitats are still in decline.¹⁵⁷ Agricultural policy or practice has been identified as a constraint in approximately 55% of Species and Habitat Action Plans.¹⁵⁸

72. It is, however, important to recognise that farmers are not to blame for these problems: it is agricultural policy which is guilty. As the National Farmers Union noted, "the drivers of agricultural policy remain at odds with a fuller expression of biodiversity conservation."¹⁵⁹ The criticisms we make are of agricultural policy and market conditions, not farmers. Farmers are simply attempting to make a living within the constraints of policy and during extremely hard times. Agriculture is responsible for shaping the countryside of the UK that so many want to conserve and farming and agriculture have the potential to be extremely positive for biodiversity: sensitively

¹⁵¹ Q442

¹⁵² Ev p82 (HC441-II)

¹⁵³ Ev p92, p97 (HC441-II)

¹⁵⁴ Q637

¹⁵⁵ Ev p3 (HC441-II)

¹⁵⁶ Ev p95 (HC441-II)

¹⁵⁷ Q465

¹⁵⁸ Ev p60 (HC441-II)

¹⁵⁹ Ev p116 (HC441-III)

managed agricultural land provides a range of habitats for a huge number of species. It is the challenge for agricultural policy to harness the work of farmers and landowners for the good of biodiversity.

73. Witnesses called for root and branch reform of agricultural policy.¹⁶⁰ **We believe that wholesale reform of the Common Agricultural Policy is required if biodiversity is to have a bright and secure future. We urge the Government to continue to work towards this.** Various changes are required to modify the face of agriculture and, whilst reform of the Common Agricultural Policy must remain the ultimate goal, there are many things which could be done now to help mitigate (and ultimately reverse) the effects of previous agricultural policies.

Increased Modulation

74. 'Modulation' is the name applied to the process of reducing agricultural subsidies for production so as to increase the funding to agri-environment schemes and rural development initiatives. Any 'modulation' of EU subsidies must be accompanied by an equal amount of matched funding from the national Government. Under the Agenda 2000 reforms of the Common Agricultural Policy, Member States are allowed to modulate up to 20% of the support paid to farmers. On 7 December 1999, the Government announced that it would modulate 2.5% of Common Agricultural Policy spending in 2001 and progressively increase the amount of spend to be modulated to reach approximately 4.5% by 2005. In practical terms, this modulation will be applied at a flat rate which means that all direct subsidies to farmers will be reduced by 2.5% in 2001 and this reduction will rise as modulation increases.

75. We discussed the development of 'modulation' in our recent report on the Rural White Paper.¹⁶¹ Here, it is simply worth stating that the vast majority of witnesses pressed the case for further reducing production subsidies and increasing expenditure on agri-environment schemes.¹⁶² Within this context we were somewhat disappointed with the stance of the National Farmers Union, which urged caution in the pace of modulation.¹⁶³ Given the precipitate decline of much farmland wildlife, the pace of change cannot be quick enough. In our report on the Rural White Paper in May 2000, we concluded that the degree of modulation should be increased and the pace accelerated. The evidence we received in this inquiry re-affirmed our conclusions. **We reiterate our previous recommendation that the Government should increase the level of modulation to 10% as soon as possible with a clearly stated intention and timetable of reaching the highest permitted percentage of 20%. The level of spend on agri-environment schemes should continue to take the lion's share of the diverted funds.**

Targeting of Agri-Environment Spending

76. In addition to the overall level of funding put into agri-environment schemes, questions have also been raised about the way in which that spending is targeted.¹⁶⁴ This is particularly important, given that we are about to embark on a period of expansion for the agri-environment schemes. Agri-environment schemes currently cover around 12% of farmland and, with the funding set to double, up to 40% of farmland could be included in the schemes.¹⁶⁵ Amongst others, the British Trust for Ornithology noted that the impact to date of such agri-environment schemes for

¹⁶⁰ Ev p11 (HC441-II)

¹⁶¹ *Rural White Paper*, HC32-I, 17 May 2000

¹⁶² Ev p10, p60, p80, p90, p114 (HC441-II); Q624; Q210; Q132; Q8; Q161

¹⁶³ QQ270-271

¹⁶⁴ Ev p30 (HC441-II)

¹⁶⁵ Q96; Q209

biodiversity may be relatively small given the proportion of land covered by the schemes.¹⁶⁶ The Worldwide Fund for Nature noted that the decline in farmland birds has continued unabated in recent years, even as the agri-environment schemes have been developed.¹⁶⁷

77. There continues to be a debate about whether the agri-environment schemes would actually deliver greater biodiversity benefits if there was some wider spread of the spending. For example, the Game Conservancy Trust told us of their work to establish basic good habitat management practice on arable farms (which produced a 42% increase in the songbird population) and their calculation that this would cost around £14 per hectare.¹⁶⁸ To carry this out on all arable farmland in England would, therefore, cost around £74 million. Given that there are precious few measures in agricultural policy to aid biodiversity outside of agri-environment schemes, a good case can be made for schemes which cover a larger proportion of farming land. The Game Conservancy Trust suggested that a thinner spread of the spend would be desirable and the Country Landowners Association also backed this:

“We would actually like to see some form of agri-environment scheme that could be put on one piece of paper, where there are a range of commitments entered into which are pretty simple, but which could be widely rolled out over very many farms, with a very limited amount of monitoring and administration very quickly. That would help to improve the environmental standards and practices a lot more rapidly over a larger area more quickly.”¹⁶⁹

We recommend that the Government consider whether some of the increased agri-environment funding could be best spent on a simple scheme which aimed to improve the prospects for biodiversity in the largely neglected areas of arable farmland. A simple scheme which was widely publicised and easy to access would offer some relief to the hard-pressed wildlife on some of the barren areas of intensive farmland.

78. The total spending on agri-environment schemes will reach £260 million by 2006/7. Clearly, it makes sense for the ways in which this is spent to be co-ordinated to provide, wherever possible, the maximum benefit to biodiversity. There is, however, some concern that the current schemes do not do this and that the expansion will be carried out without reference to the priorities of the UK Biodiversity Action Plan.¹⁷⁰ For example, the Association of Local Government Ecologists argued that local wildlife sites should be targeted by agri-environment schemes. **We recommend that English Nature be consulted on the expansion of the agri-environment schemes so as to maximise the benefit to biodiversity. The priorities of the agri-environment schemes should incorporate the priorities of the Biodiversity Action Plans.**

Establishing Good Farming Practice for Conservation

79. The limited coverage of agri-environment schemes has also prompted other suggestions as to how biodiversity can be protected and enhanced outside of those schemes. In essence, the main problem is how to raise the standard of management for biodiversity across all farms. The two linked aspects to this are the establishment of a code of good conservation practice and the use of cross-compliance, attaching environmental conditions to the payment of production subsidies.

80. The application of cross-compliance to agricultural subsidy payments remains a largely untapped resource for environmental good. In the final analysis, if farmers are being subsidised, it seems to be a natural requirement that some straightforward positive environmental actions could be tied to that payment. English Nature backed the idea, as did other witnesses.¹⁷¹ We believe the Country Landowners Association's argument that “a policy that aims at two targets simultaneously tend to miss both” to be sophistry and we are disappointed that both the National Farmers Union and the Country Landowners Association seem to be failing to enter into the debate with any

¹⁶⁶ Q6

¹⁶⁷ Ev p4 (HC441-II)

¹⁶⁸ Q538 and QQ525-528

¹⁶⁹ Q273

¹⁷⁰ Ev p60 (HC441-II); Q237

¹⁷¹ Ev p30, p80, p96, p100 (HC441-II)

positive suggestions whatsoever.¹⁷² Certainly, cross-compliance should be used with prudence: the Minister noted that any scheme must be both reasonably fair to farmers and simple to enforce: we agree. Cross-compliance must not work at the expense of farmers who have always looked after their land with environmental sensitivity as against those who have removed hedgerows and adopted environmentally damaging practices. However, we find it implausible that some basic conditions cannot be defined and attached to the huge sums of money which are paid out in agricultural subsidies. Professor Sutherland suggested examples for these conditions:

“in the uplands that could be the absence of over-grazing, in arable areas that could be for people who have unsprayed headlands around their fields”¹⁷³

We recommend that the Government make maximum use of ‘cross-compliance’ mechanisms to ensure that high environmental standards are maintained in return for the payment of subsidies.

81. In addition to greater use of cross-compliance, there is a need to supply better quality information to farmers on how to protect biodiversity and to establish what constitutes ‘good practice’ in this regard.¹⁷⁴ The Farming and Wildlife Advisory Group noted that “most farmers do not understand the principles behind biodiversity conservation nor its relevance for their own farms.”¹⁷⁵ Similarly, the National Farmers Union commented that:

“We believe that there are many ways of improving the standard of farming practice (such as demonstration of good practice, advice and information, membership of a farm assurance scheme or regular auditing or benchmarking) which can benefit wildlife conservation.”¹⁷⁶

The National Farmers Union also told us of their document, ‘Farming For Britain - Our Contract with Society.’ which we believe should be used as a basis for further developing good practice for conservation.

82. Although a draft ‘Code of Good Conservation Practice’ has been in existence for some time, we were told by Ministry of Agriculture, Fisheries and Food officials that it was “on hold” since it was effectively blocked by concerns over the role of a code of practice:

“Previously we had viewed codes of good practice as high standards to which we should encourage people to aspire. The rural development regulation defines good practice as the reference level which everybody should be expected to do without being paid for it and that you only begin to pay people for things they do going beyond good practice. The reason that makes a difference is that if we included in a code any activities we would like people to do and might be prepared to pay them to do, we potentially debar them from receiving money for that because the good practice under the terms of the rural development regulation is something that people are expected to do unpaid. What we have done is put the work on the draft conservation code on hold for the time being while we have been drafting the rural development plan and trying to get Commission approval for it. In the process of that we hope that some clarification about their attitude towards good farming practice will come through. At the moment it is on hold.”¹⁷⁷

We can see no good reason why a Code of Good Farming Practice for Conservation cannot be established. If the Government need clarification from the European Commission on the role of such a code, it should resolve this as soon as possible. Once a code has been introduced, efforts must be made to spread its implementation as wide as possible amongst the farming community.

¹⁷² Q282

¹⁷³ Q46

¹⁷⁴ Q542

¹⁷⁵ Ev p129 (HC441-III)

¹⁷⁶ Ev p118 (HC441-III)

¹⁷⁷ Q113

Field Margins Issue

83. The biodiversity benefits of uncultivated field margins are considerable.¹⁷⁸ However, the presence of field margins in the UK has been under threat because the approach of the UK to measuring arable areas came into conflict with European Union auditing rules. In practice, this means that subsidy payments to some arable farms could have been withheld where margins were wider than 2 metres on each side of the centre-point of the boundary. Although the Government had negotiated a one-year deal to allow the margins to stay, we were concerned about the longer-term implications. As the Game Conservancy Trust noted:

“Many organisations including ourselves have been trying to persuade farmers to have wider field margins and we have done a lot of research to show what benefits this would bring and then farmers hear they are going to be penalised. This is the sort of thing that immediately acts as a disincentive. I can imagine farmers thinking ‘Well I had better go up and plough up my grass margins or cut back my hedges to make sure I do not lose money.’”¹⁷⁹

We understand that the UK is not the only Member State that is experiencing this problem and that the Government has argued for a change in the regulations to allow Member States the flexibility to handle field margins as they see fit.¹⁸⁰ We were told by the Ministry of Agriculture, Fisheries and Food that they expected a resolution of this matter “in time to advise farmers” on autumn planting¹⁸¹ and are pleased that the matter now appears to have been fully resolved so that farmers can maintain their field margins in future years.

Environmental Impact Assessment

84. Under the Environmental Impact Assessment (EIA) Directive, the UK is committed to providing environmental impact assessment for projects involving agricultural intensification on semi-natural or uncultivated land. This provision is intended to help protect areas of existing environmental value from damage or destruction due to the intensification of farming (for example, ploughing unimproved pastures, draining valuable wetlands) by requiring Environmental Impact Assessments and approvals for such action. As noted above, agricultural intensification often poses serious threats to biodiversity. The Government should have introduced measures to do this by March 1999 but has failed to do so. We were, however, relieved to be told by the Ministry of Agriculture, Fisheries and Food Minister that a consultation document on this matter would be issued towards the end of this year with a view to introducing regulations next year.¹⁸² We welcome the Government’s commitment to introducing regulations to implement the Environmental Impact Assessment Directive as it relates to agricultural intensification and urge them to press ahead as speedily as possible with this.

Farm Level Biodiversity Plans

85. There are some very positive initiatives for nature conservation in agriculture: perhaps the best example is the development of farm-level Biodiversity Action Plans. The memorandum from the Farming and Wildlife Advisory Group noted the success of these plans in focussing farmers’ actions on biodiversity and it is to be welcomed that the plans are now being expanded to cover around 1,000 farmers, in co-operation with Sainsbury’s. We commend the use of Farm Biodiversity Action Plans and recommend that farmers be encouraged wherever possible to develop and adopt such a plan. Further, the Government should consider how to help fund the expansion of Farm Biodiversity Action Plans, possibly through an agri-environment scheme.

¹⁷⁸ Q316

¹⁷⁹ Q538

¹⁸⁰ Q711

¹⁸¹ Q714

¹⁸² QQ731-732

PLANNING

86. Development stands alongside agriculture as one of the most serious threats to biodiversity. Much habitat fragmentation has resulted from development which took little or no account of biodiversity¹⁸³ and, from the evidence we received, it is apparent that biodiversity concerns have not been adequately integrated into planning policy. Analysis of the problems for local authorities was provided by the Royal Society for the Protection of Birds:

"A study that we have just done of local authority development plans suggests to us that local authorities here are struggling with this. Of the local authorities we have surveyed about two thirds have not got policies pursuing the protection management of landscape features, many of which link back to the Biodiversity Action Plan priorities. We would like to see guidance in that area. We believe that it is not that the local authorities are resistant but they are struggling with the best way to take it forward."¹⁸⁴

87. The Council for the Protection of Rural England went further and noted the inadequacies of those plans which do aim to take account of biodiversity issues:

"Even where representations are made, they usually focus narrowly on wildlife policies and fail to give sufficient attention to the impact of other policies (e.g. on housing development) on the wildlife resource. As a result the focus of the planning system tends to be on end-of-pipe problems for wildlife and mitigation measures. This is instead of integrating wildlife concerns at the earliest stages of policy development."¹⁸⁵

88. Planning guidance and policy must aid local planning authorities in trying to balance biodiversity commitments against other needs and pressures. We have already made some recommendations which will help counteract this: the requirement for local authorities to offer improved support for local wildlife sites and the overall duty on local authorities to further biodiversity should help.

89. As an illustration of the need to integrate biodiversity concerns into planning, the Government's commitment to target new housing on 'brownfield sites' raised concerns for some witnesses. The London Ecology Committee noted that:

"Another significant tension in London is between the aim to locate more housing on 'brownfield' sites and the value of some previously developed urban areas as biodiversity habitat. ... Government guidance for housing land allocation should acknowledge that some previously developed land has such value for biodiversity, and the enjoyment of nature for local people, as to be inappropriate for housing development."

The Association of Local Government Ecologists and Professor Chris Baines also noted this problem, which seems to be more significant in northern England.¹⁸⁶ There is no specific remedy for this matter but a fuller understanding and appreciation of biodiversity issues should aid local planning authorities in balancing the needs for development against nature conservation. However, a more general point arises from this matter: the need to see nature conservation as a key element in urban regeneration. As Professor Chris Baines noted, "the development process itself can enhance biodiversity."¹⁸⁷ If, as we were told, people enjoy going out into the countryside to see skylarks, even more people will enjoy songbirds, flowers, butterflies and beetles in our towns. Several issues follow from this — much landscaping of new developments can be done to produce crime-free, safe environments which look attractive but encourage biodiversity. Equally, the vast areas of muddy grass in our existing townscapes can be made much more attractive to look at and far better for biodiversity. Finally, many of our neglected parks and cemeteries can play a useful role in promoting biodiversity.

¹⁸³ Q128; Ev p11 (HC441-II)

¹⁸⁴ Q156

¹⁸⁵ Ev p29 (HC441-II)

¹⁸⁶ Q450

¹⁸⁷ Ev p66 (HC441-II)

90. The Countryside Agency told us that there should be better integration of biodiversity throughout the national Planning Policy Guidance note system. We agree. Primary in this is the imminent review of PPG9 (Nature Conservation) and we were pleased to hear that the Government already plan to give biodiversity a much higher profile in PPG 9 and that this will be published for consultation once the Countryside and Rights of Way Bill has been passed.¹⁸⁸ This review should bring recognition of local wildlife sites and encourage local planning policies to reflect the priorities of the Biodiversity Action Plans.¹⁸⁹ Although PPG9 will always be the main focus of biodiversity in planning policy, it is important that biodiversity concerns are integrated across all the PPGs, as and when they are reviewed.¹⁹⁰ For example, it was critical that PPG11 (Regional Planning Guidance) gave adequate guidance on the importance and means of integrating biodiversity concerns into regional plans.¹⁹¹ Similarly, PPG7 (the Countryside: Environmental Quality and Economic and Social Development) could also benefit from a better integration of biodiversity concerns.¹⁹²

91. Another point made to us about planning policy was the potential of planning gain for biodiversity. This can be sizeable: the Association of Local Government Ecologists told us that some £125,000 of habitat recreation work would be carried out on one site, and also of a current development:

“what is going to be put into the planning agreement just for nature conservation, a figure of £1.6 million has been identified. That will go towards habitat enhancement, species enhancement and protection, and long-term management. This will secure management of something like 40-50 hectares in perpetuity. It will provide public access and interpretation facilities and hopefully will bring a lot of resources to bear through development in the planning process to actually achieve very local real biodiversity objectives.”¹⁹³

However, at present, there seems to be little checking that the promised benefits in terms of habitat creation or restoration are delivered. The Association of Local Government Ecologists (ALGE) noted that their members “have experience of damage to existing sites that conditions sought to safeguard, failure of establishment of new habitats, and wholesale lack of implementation.”¹⁹⁴ The Association of Local Government Ecologists went on to suggest that more resources were required to ensure that planning conditions were implemented and that clearer guidance should be given in PPG9 about how to realise planning gain for biodiversity.

92. We believe that biodiversity is inadequately integrated into the planning system at present. Key to addressing this problem are the Planning Policy Guidance Notes. Biodiversity must be integrated into all PPGs as and when they are reviewed. The upcoming review of PPG9 (Nature Conservation) is particularly important and we recommend that it should encourage local plans to reflect Biodiversity Action Plan priorities, emphasise the importance of local wildlife sites and give guidance on realising the potential benefits of planning gain for biodiversity generally, and habitat provision in particular. If brownfield sites which are rich in biodiversity are to be lost to development, the developer must provide replacement areas of similar biodiversity value, by enhancing the biodiversity of other green spaces in the area. Urban regeneration efforts must embrace biodiversity: each and every development can provide some positive benefits for biodiversity.

¹⁸⁸ Q691

¹⁸⁹ Ev p27, p39, p45, p80 (HC441-II)

¹⁹⁰ Q633

¹⁹¹ Appendix to Environment Agency memorandum (Ev not published) and Q691

¹⁹² Q627

¹⁹³ Q441

¹⁹⁴ Ev p39 (HC441-II)

Non-Native Species

93. There is a growing list of introduced, non-native species which are causing harm to the UK's native biodiversity. Few people can be entirely unaware of (or unaffected by) the relentless march of species such as the grey squirrel and the North American crayfish; floating pennywort and Japanese knotweed continue to colonise water and land respectively. The negative impacts of invasive non-native species are widely known. The Environment Agency told us of the problems of weeds coming in through garden centres.¹⁹⁵ Other witnesses noted the developing problem posed by the New Zealand and Australian flatworms which feed on indigenous earthworms and could have serious economic consequences.¹⁹⁶ However, the issue of non-native species is a complicated one with some philosophical and ethical wrinkles: for example, it is a particularly difficult judgement to decide when a non-native species (for example the rabbit or the sycamore) can be considered to have assimilated and become a naturalised one. The UK's biodiversity, of course, changes composition constantly and new species are always finding homes in the UK. There are also ethical and welfare considerations raised by efforts to control some species (for example, American mink). However, it is important to keep in mind the practical problem: the Worldwide Fund for Nature recognised this and warned of the danger of being distracted by "academic arguments".¹⁹⁷ The Wildlife Trusts went one step further and suggested that the more important distinction was 'invasive' or 'benign', rather than 'native' or 'non-native' since many 'non-native' species co-exist with the native biodiversity, without posing a threat to it.¹⁹⁸

94. The practical problems of introduced species comprise two separate components: dealing with those species which have already been introduced to the UK (for which the Ministry of Agriculture, Fisheries and Food has responsibility), and preventing other, unwelcome, species from entering the UK (the responsibility of the Department of the Environment, Transport and the Regions).¹⁹⁹ There are provisions under Section 14 of the Wildlife and Countryside Act 1981 to prohibit the release of certain species. However, no plant species have been added since 1992 and, to date, no convictions have been brought for the illegal release of plants into the wild.²⁰⁰ This is perhaps because a prosecution can only be brought where a plant is shown to have caused environmental problems. Plantlife stated that "the law must be changed to reflect a more precautionary approach towards species which are likely to cause environmental damage. Crucially, both the Joint Nature Conservation Committee and Plantlife believe that the sale of problem species should also be banned."²⁰¹ More generally, if those importing species were made legally responsible for any problems experienced, they may exercise a little more caution in their decisions.

95. In dealing with species which are already here, there are various factors which dictate the action to be taken: the scale of damage being caused along with the costs and practicality of eradication are paramount. Various strategies can be employed to limit the impact or spread of an invasive species and these include creating areas where native species are protected from the invasive species,²⁰² attempts to limit the reproductive capabilities of the invasive species or develop native species which can resist the invasive one. The costs of taking action against invasive species can be significant: for example, the Ministry of Agriculture Fisheries and Food Minister told us that his department has spent £4 million attempting to eradicate mink.²⁰³

96. Although there already exist some measures to deal with both aspects of the problem, there does not appear to be a coherent strategy to deal with the problem as a whole. A sensible approach would comprise taking action early, wherever possible, before the invasive species has become established and, for those species already here, to carry out a risk-assessment of the situation with

¹⁹⁵ Q645

¹⁹⁶ Q64

¹⁹⁷ Q171

¹⁹⁸ Q496

¹⁹⁹ Q749

²⁰⁰ Ev p79 (HC441-II)

²⁰¹ Ev p79 (HC441-II)

²⁰² Q750

²⁰³ Q750

a view to taking rapid action if necessary.²⁰⁴ There is a need for an 'early-warning' system,²⁰⁵ particularly as the effects of climate change are likely to include greater threats from non-native species. Several witnesses called for greater co-ordination of efforts and the Wildlife Trusts called for:

"a single agency taking account of this. At the moment there is no one agency that covers introduced species. This means that it tends to get farmed around to different agencies rather than a single one taking responsibility."²⁰⁶

The Minister told us that the Department of the Environment Transport and the Regions would be carrying out a review of the problem of non-native species early next year.²⁰⁷ **There appears to be a worrying lack of coherence in efforts to deal with invasive, non-native species. We recommend that English Nature be given overall responsibility for dealing with this problem. Specifically, English Nature should monitor and assess particular problems relating to introduced species, and recommend action where required.²⁰⁸ The Government must be ready to provide any legislative support required. We first made this recommendation in our interim report in July. The Government did not amend the Countryside and Rights of Way Bill to deal with this issue and we are concerned that the threat of non-native species is not being adequately dealt with.**

Involvement of Key Players

97. We have already noted that biodiversity policy to date is somewhat compartmentalised and is seen as the preserve of environmentalists and ecologists. This is despite the value that so many of us place on countryside and wildlife. Amongst the organisations not originally submitting evidence to us on this inquiry were the Confederation of British Industry, the Countryside Agency and the Local Government Association. Given the purpose and range of membership of these organisations, it would seem to imply that biodiversity is often not a priority for Government Agencies, industry or local government. It is a legitimate question to ask who exactly will work to implement biodiversity policy if not these groups? A little ironically, the Countryside Agency suggested that biodiversity policy now needed a "buy-in from all the institutions of the country."²⁰⁹ We agree. We outline the necessary involvement of the main groups below.

Industry

98. It seems that the majority of industry does not consider biodiversity to be a direct concern for them. Although the Confederation of British Industry told us that industry has a "prime responsibility"²¹⁰ to be involved with biodiversity, the only industries from whom we received memoranda were the water and power industries. Indeed, the Confederation of British Industry also told us that:

"I think there is room for a greater understanding and appreciation by industry of what the Biodiversity Action Plan process means, how it works and what industry can do towards it."²¹¹

99. Both the water and power sectors set positive examples for other industries: they have taken biodiversity seriously and have put effort and resources into nature conservation.²¹² For example, some water companies and National Power have drawn up their own, corporate

²⁰⁴ Q487; Q67

²⁰⁵ Q123

²⁰⁶ Q487

²⁰⁷ Q749

²⁰⁸ Since English Nature's remit extends only to England, close co-operation between English Nature and the devolved administrations will be necessary, particularly where preventing unwelcome species from entering the UK is concerned. The Joint Nature Conservation Committee may provide an appropriate vehicle for such co-operation.

²⁰⁹ Q628

²¹⁰ Q363

²¹¹ Q381

²¹² Ev p67 (HC441-II) and Ev p119 (HC441-III)

Biodiversity Action Plans.²¹³ Anglian Water have established their own biodiversity monitoring programme. Similarly, the water companies have got very involved in the 'championing' process and a number of species have benefited from this. Of course, this is not merely altruism: the firms make effective use of their actions in advertising materials to emphasise that they are responsible businesses. We see no problem with this: indeed, any promotion of environmental performance as a competitive parameter is to be welcomed.

100. The question remains as to how a much broader cross-section of industry can be encouraged to incorporate biodiversity into their activities? The Confederation of British Industry argued that their members were willing to take biodiversity issues on board and noted that "there are many things that industry can do to enhance biodiversity which, in fact, are not all that expensive."²¹⁴ National Power suggested the characteristics of those businesses which take an active interest in biodiversity:

- an environmental culture within the company that goes beyond compliance;
- the availability of financial and people resources, and in particular in-house environmental expertise to initiate and drive the process;
- confidence that conserving biodiversity will result in business benefits (and that there will be no commercial conflicts)²¹⁵

101. Given these criteria, it is not surprising that gentle encouragement does not seem to have been very successful in engaging a broader cross-section of industry and it is clear that the industry umbrella groups do not have biodiversity policy as a high priority. Witnesses aided us in determining which industries should be prioritised for involvement. Water UK told us that there were three types of industry which should be encouraged to draw up Biodiversity Action Plans: industries which have large land holdings, industries which consume large amounts of resources and the construction and development industries.²¹⁶ These are undoubtedly the industries with the greatest potential impact (positive or negative) on biodiversity. For example, if the development industry was truly engaged with biodiversity matters, the side-benefits of developing land could minimise the negative impact of the development itself. The provision of managed areas of habitats and ponds could help provide many of the 'stepping stones' which are so vital for the welfare of wildlife. The food industry should be added to the list of industries which must embrace biodiversity because it has a direct influence upon farming practices through its relationships with suppliers. Although Water UK noted that "there is no industry that cannot be involved because there is always potential to fund local schemes, for local communities",²¹⁷ it will clearly be more difficult to involve smaller firms.

102. The Government issued a document earlier this year, containing case studies of businesses involved in biodiversity, with the aim of getting a broader cross-section of industry involved in biodiversity.²¹⁸ Unfortunately, from our own experience, we are not convinced that there is a large receptive audience for such a document. We are disappointed with the very limited involvement of industry in biodiversity matters. A much wider range of industries (particularly development and others which deal with significant areas of land) should aim to incorporate biodiversity into their operations and, if possible, draw up their own Biodiversity Action Plans. The Confederation of British Industry should be at the forefront of efforts to promote biodiversity in the business world. If industry cannot be persuaded to take biodiversity seriously, Government should take action to require them to do so. We note the Minister's suggestion that companies could all be required to draw up environmental accounts²¹⁹ and recommend that this is pursued.

²¹³ Ev p70 (HC441-II)

²¹⁴ Q367

²¹⁵ Ev p122 (HC441-III)

²¹⁶ Q333

²¹⁷ Q330

²¹⁸ *Case Studies in Business and Biodiversity*, Department of the Environment, Transport and the Regions, March 2000

²¹⁹ Q759

103. The other aspect of industry involvement which we examined was the 'champions' scheme, in which a firm can sponsor the plan to protect a given species or habitat. Witnesses were in no doubt that the champions scheme had, so far, failed to deliver much of its promise²²⁰ and the Minister acknowledged that industry was "not sufficiently" active or enthused with the plans.²²¹ Of the 400 or so priority Species Action Plans, only around 20 plans have business champions. We recommend that the Champions scheme be relaunched with some new target 'sectors' involved (eg house-builders, grain/feed manufacturers, supermarkets). There should be a regional and local aspect to the promotion of the scheme and it should aim to raise the profile of biodiversity amongst the wider public.

Government

104. The lack of integration of biodiversity throughout other areas of national policy demonstrates the limited commitment to the issue which can be found in some Government Departments. The commitment to biodiversity appears to diminish as one moves away from the Department of the Environment, Transport and the Regions. The Royal Society for the Protection of Birds noted the need for "contributions from the whole of Government" and also suggested that the cause would benefit from an occasional mention by the Prime Minister.²²²

105. The main mechanism for achieving integration appears to be the recently produced Green Ministers' Biodiversity Checklist. Although this document is a reasonable one, witnesses commented that it was markedly less ambitious than the advice which Government had previously issued to industry. Further criticism was levelled by the Wildlife Trusts, who commented that: "it does not really get to grips with the issue of trying to get targeted delivery across the whole of Government."²²³ and that "it is not really testing Government in meeting their commitments across all Departments against the UK Biodiversity Action Plan. We want to see a process of expanding it to really be a mechanism which can give us some kind of reporting against."²²⁴ Professor Reid noted the limitations of weak requirements:

"current obligations for various bodies to 'have regard to' biodiversity are of limited value unless there is some means of checking that there has been a genuine balancing of interests as opposed to mere lip service."²²⁵

106. Other witnesses also called for better checking,²²⁶ perhaps provided by the National Audit Office or by introducing a requirement for biodiversity activity to be included in the annual report of Government Departments.²²⁷ All this criticism of the checklist should also be placed within the context of the Green Ministers Committee's poor record of bringing about integration of environmental matters across other policy areas. The Environmental Audit Committee noted that "The lack of Government target-setting gives the impression that the Green Ministers Committee is settling for progress at the pace of the slowest, and is not injecting much drive into the pursuit of the greening government agenda."²²⁸

107. It is clear that some Government Departments have tried but largely failed to integrate biodiversity into their operations. For example, the Ministry of Defence owns considerable amounts of land but the Royal Society for the Protection of Birds noted that it was not doing a good job of managing this for biodiversity.²²⁹ Indeed, many Government Departments are significant land-owners and this provides a major opportunity for furthering biodiversity in the Government's own

²²⁰ Ev p98 (HC441-II); Q352

²²¹ Q756

²²² Q129

²²³ Q484

²²⁴ Q485

²²⁵ Ev p1 (HC441-III)

²²⁶ Ev p26 (HC441-II)

²²⁷ Ev p1 (HC441-II); Q55

²²⁸ Paragraph 55, *The Greening Government Initiative: First Annual Report from the Green Ministers Committee*, Environmental Audit Committee, Fifth Report, 14 March 2000

²²⁹ Q150

backyard. Biodiversity is not adequately integrated into all Government Departments and we are not convinced that the Green Ministers Biodiversity Checklist is a demanding enough instrument to address this. A statutory duty upon Government Departments to further biodiversity should be accompanied by redoubled efforts from the Department of the Environment, Transport and the Regions (through the Sustainable Development Unit) to push the integration message across all other Departments and develop a simple system of meaningful targets, against which progress can be monitored.

Local Authorities and Regional Development Agencies

108. Local authorities provide a critical link in the chain of organisations involved in putting biodiversity policy into action. We have already noted that their performance was described as "patchy" in relation to this issue; it is clear that some local authorities are doing very little to aid biodiversity. Some witnesses suggested the reasons for this: the Association of Local Government Ecologists noted that "the lack of a clear definition of the role and responsibilities of local authorities in nature conservation has resulted in varying standards in practice."²³⁰ Similarly, the Local Government Association commented that "local authorities are not specifically audited on their performance on local biodiversity and therefore protection of habitats and species is not generally a high priority."²³¹ This is unacceptable and is perhaps the main reason for recommending a duty on local authorities: to ensure a more even commitment to biodiversity across all authorities. In connection with this, we were impressed with the guidance drawn up by the Association of Local Government Ecologists to link biodiversity with the Best Value process.²³²

109. It seems likely that local authorities are willing to participate in the process but are somewhat short of people, money and guidance. We have noted our disappointment that the Local Government Association did not initially submit evidence to our inquiry and by this fact, and other aspects of the evidence given, it is clear that they are doing little to help raise the standard of biodiversity policy across all local authorities or persuade Government of the need for more resources for biodiversity. Local record centres and local wildlife sites should be able to rely on consistent support from any local authority. However, if local authorities are to be required to do more, this duty must be accompanied by some increase in funding to enable all local authorities to commit themselves to biodiversity. The patchy performance of local authorities on biodiversity matters should be a cause for concern for the Local Government Association and we recommend that they address it as a matter of urgency. As a starting point, we recommend that the Local Government Association employ the guidance produced by the Association of Local Government Ecologists to promote biodiversity through the Best Value process. The Local Government Association also need to play a better co-ordinating role in persuading Government of the need for more resources for biodiversity.

110. As with other levels of government, regional government should be pushed to integrate biodiversity into its policy agenda. The Association of Local Government Ecologists advised us that "regional biodiversity issues have, so far, had only limited consideration"²³³ Witnesses stressed the importance of biodiversity being adequately integrated into Regional Development plans.²³⁴ There is, however, some concern about the performance of the Regional Development Agencies so far: a review by the Council for the Protection of Rural England found a lack of progress in integrating environmental concerns into their economic strategies.²³⁵ In this context, the London Ecology Committee noted that "although guidance requires the Agencies to further sustainable development, there is a risk that the major focus of the Agencies will be 'the bottom line' and employment."²³⁶ The Association of Local Government Ecologists noted the success of the South West Biodiversity

²³⁰ Ev p36 (HC441-II)

²³¹ Ev p126 (HC441-III)

²³² *A Biodiversity Guide for Best Value Service Review: Helping Biodiversity Happen Across Local Government*, the Association of Local Government Ecologists

²³³ Ev p38 (HC441-II)

²³⁴ Ev p2 (HC441-II)

²³⁵ Ev p14 (HC441-II)

²³⁶ Ev p43 (HC441-II)

Partnership, guidance from whom has been accepted by the Government Office and South West Regional Planning Forum.²³⁷ **There is a need to ensure that biodiversity is adequately integrated into the Regional Development Plans. We commend the guidance provided by the South West Biodiversity Partnership as a model for other regions.**

Public

111. Public understanding and engagement with environmental issues is often poor and biodiversity is no different. Nevertheless, the 59 steps of the UK Biodiversity Action Plan included developing public awareness and understanding. Although there is strong public sympathy for the conservation of some of the more charismatic and appealing species, the concept of 'biodiversity' has made relatively little impact upon the public consciousness. Anglian Water wrote that "it is our belief that the general public are the 'customer' in the process of biodiversity and without their education, subsequent involvement and support the UK Action Plan will fall short of meeting its objectives."²³⁸ It can, of course, be argued that whilst commitment is so variable across Government and business, there will be little public enthusiasm for the general cause of biodiversity.

112. One point made to us was that the very word 'biodiversity' was part of the problem since it was so poorly understood and that 'nature conservation' should be reinstated. Certainly, few can argue that the public relate to the word itself. Nevertheless, communication that nature is a system of interlinked species is a valuable one and, rather than change the use of the word 'biodiversity', we believe that greater efforts should be made to explain what biodiversity means, how it relates to people's quality of life, what the threats are, and what the implications will be if we fail to protect it.²³⁹ There is a need for greater imagination in the communication of biodiversity issues: a good example is provided by the 'Web of Life' exhibition at London Zoo. Similarly, we were told by the National Farmers Union that "a lot of public awareness work done so far has not taken a professional marketing approach."²⁴⁰ **The public have great enthusiasm for nature conservation, will happily rally to the support of the red squirrel, the barn owl or a rare orchid, but for the most part are put off biodiversity by feeling that it is bureaucratic and muddled. If the public imagination is to be fired and they are to be persuaded to pay for biodiversity actions through their taxes, biodiversity policy must be grounded in sound principles which are clearly set out.**

²³⁷ Ev p39 (HC441-II)

²³⁸ Ev p69 (HC441-II)

²³⁹ Ev p97 (HC441-II)

²⁴⁰ Q294

Summary of Recommendations

- (a) We believe that, for biodiversity policy to have long-term credibility, it needs to be based on far better knowledge of the natural environment than we have now, and should be grounded in a set of principles which can be used to test individual policies and actions (paragraph 14).
- (b) We recommend that efforts now be focussed on the Habitat Action Plans: we consider these to be worthy of a greater emphasis than the Species Action Plans. The UK Biodiversity Group should be given the task of establishing precisely what the barriers are to effective implementation of the Habitat Action Plans and how to overcome them (paragraph 20).
- (c) We urge the Government to press ahead with the process of grouping action plans with similar aims under 'umbrellas' to simplify the plan process, thereby improving the co-ordination of the plans and speeding up their implementation (paragraph 22).
- (d) We recommend that English Nature, the Department of the Environment, Transport and the Regions, and the Wildlife Trusts be brought together under the England Biodiversity Group to address the poor co-ordination of the English national and local Biodiversity Action Plans (paragraph 25).
- (e) We recommend that Government Departments, Executive Agencies, Non-Departmental Public Bodies, Utility Regulators and the Regional Development Agencies should be required to further the aims of the Biodiversity Action Plans. The resource implications of this statutory duty should be examined and addressed (paragraph 29).
- (f) We are pleased that the Government's Community Strategies initiative will offer some backing to biodiversity policy for local authorities and we recommend that this should encompass some commitment to local record centres and local wildlife sites. We expect the Government to review the effectiveness of this approach in delivering greater commitment to biodiversity and introduce a stronger statutory duty if necessary (paragraph 32).
- (g) A successful National Biodiversity Network is a linchpin of the whole Biodiversity Action Plan and we are concerned that it may fail due to inadequate resources. We recommend that the National Biodiversity Network be provided with greater funding for the next five years, to establish the network (paragraph 35).
- (h) We are disappointed that the National Biodiversity Network cannot rely on the commitment of all government Departments. We can see no good reason for individual Departments keeping data to themselves. National biodiversity policy relies on freely available, good quality data: this prerequisite must not be blocked by the Government or academic institutions. Any data collected as a result of the use of public funds must be freely available to all and should be placed on a national biodiversity website (paragraph 36).
- (i) It is clear that the network of local record centres should be expanded and receive greater support. We recommend that county councils, unitary authorities, metropolitan councils and the Greater London Authority be given a duty to ensure that local record centres are provided. The Government should consider what additional resources will be required to fulfil this duty (paragraph 37).
- (j) We recommend that the Research Councils, particularly the Natural Environment Research Council, place a priority on funding practical research which fills gaps in the knowledge required to achieve the aims of the UK

Biodiversity Action Plans. Action must be taken to address this swiftly because of the delays between providing funding for research and the availability of results (paragraph 38).

- (k) If local authorities are to be given duties relating to local record centres, local wildlife sites and furthering the action plans, some additional funding must be supplied by central Government. We recommend that the Government provide an additional £10 million to local authorities. This funding should ensure that the authority provides a biodiversity officer, or enables an equivalent service to be agreed with other interested parties, with responsibility for the local wildlife site register and the local record centre (paragraph 42).
- (l) We recommend that the Government look again at the potential of establishing buffer zones around Natura 2000 sites. Where a site itself cannot be enlarged, or it would be a poor use of resources, buffer zones could be an effective method of offering limited protection to a larger area. However, the most practical method of improving the prospects for biodiversity in areas around Natura 2000 sites remains reform of the agricultural support system (paragraph 50).
- (m) We recommend that the Government press the European Commission to amend the Habitats Directive so as to reflect the impact of environmental change upon biodiversity (paragraph 52).
- (n) The Government must address the range of problems and inadequacies in their approach to marine biodiversity. As an island nation, the conservation of marine biodiversity should be paramount and the Government should consider whether a new statutory agency is required to deal with marine biodiversity issues (paragraph 54).
- (o) We are pleased that the Countryside and Rights of Way Bill will offer greater protection for Sites of Special Scientific Interest (SSSIs). We expect the Government and the statutory agencies to monitor the practical improvements which result, with a view to making modifications if necessary (paragraph 58).
- (p) We welcome the Government's amendments to the Countryside and Rights of Way Bill which aim to provide Areas of Outstanding Natural Beauty with greater protection (paragraph 59).
- (q) We recommend that all types of traditional field boundaries should be protected so as to ensure the continued presence of habitats for some species and corridors for the movement of others. Hedges, banks, ditches, dykes and walls should all receive legal protection where they are identified as being important either nationally or locally for biodiversity or other reasons (paragraph 65).
- (r) We recommend that English Nature be given the power to negotiate and enforce management agreements with landowners outside Sites of Special Scientific Interest, to cover features of importance to biodiversity, and are pleased that such powers will now result from the Countryside and Rights of Way Bill. We anticipate that English Nature will need some additional resources to be able to fulfil the potential which this option offers (paragraph 66).
- (s) We recommend that local authorities should have a duty to establish and maintain a register of local wildlife sites and to give them the status of 'material consideration' in development control decisions. This should ensure that there is a general presumption against development on these sites (paragraph 68).

- (t) We believe that wholesale reform of the Common Agricultural Policy is required if biodiversity is to have a bright and secure future. We urge the Government to continue to work towards this (paragraph 73).
- (u) We reiterate our previous recommendation that the Government should increase the level of modulation to 10% as soon as possible with a clearly stated intention and timetable of reaching the highest permitted percentage of 20%. The level of spend on agri-environment schemes should continue to take the lion's share of the diverted funds (paragraph 75).
- (v) We recommend that the Government consider whether some of the increased agri-environment funding could be best spent on a simple scheme which aimed to improve the prospects for biodiversity in the largely neglected areas of arable farmland. A simple scheme which was widely publicised and easy to access would offer some relief to the hard-pressed wildlife on some of the barren areas of intensive farmland (paragraph 77).
- (w) We recommend that English Nature be consulted on the expansion of the agri-environment schemes so as to maximise the benefit to biodiversity. The priorities of the agri-environment schemes should incorporate the priorities of the Biodiversity Action Plans (paragraph 78).
- (x) We recommend that the Government make maximum use of 'cross-compliance' mechanisms to ensure that high environmental standards are maintained in return for the payment of subsidies (paragraph 80).
- (y) We can see no good reason why a Code of Good Farming Practice for Conservation cannot be established. If the Government need clarification from the European Commission on the role of such a code, it should resolve this as soon as possible. Once a code has been introduced, efforts must be made to spread its implementation as wide as possible amongst the farming community (paragraph 82).
- (z) We welcome the Government's commitment to introducing regulations to implement the Environmental Impact Assessment Directive as it relates to agricultural intensification and urge them to press ahead as speedily as possible with this (paragraph 84).
- (aa) We commend the use of Farm Biodiversity Action Plans and recommend that farmers be encouraged wherever possible to develop and adopt such a plan. Further, the Government should consider how to help fund the expansion of Farm Biodiversity Action Plans, possibly through an agri-environment scheme (paragraph 85).
- (bb) We believe that biodiversity is inadequately integrated into the planning system at present. Key to addressing this problem are the Planning Policy Guidance Notes. Biodiversity must be integrated into all PPGs as and when they are reviewed. The upcoming review of PPG9 (Nature Conservation) is particularly important and we recommend that it should encourage local plans to reflect Biodiversity Action Plan priorities, emphasise the importance of local wildlife sites and give guidance on realising the potential benefits of planning gain for biodiversity generally, and habitat provision in particular. If brownfield sites which are rich in biodiversity are to be lost to development, the developer must provide replacement areas of similar biodiversity value, by enhancing the biodiversity of other green spaces in the area. Urban regeneration efforts must embrace biodiversity: each and every development can provide some positive benefits for biodiversity (paragraph 92).

- (cc) There appears to be a worrying lack of coherence in efforts to deal with invasive, non-native species. We recommend that English Nature be given overall responsibility for dealing with this problem. Specifically, English Nature should monitor and assess particular problems relating to introduced species, and recommend action where required. The Government must be ready to provide any legislative support required (paragraph 96).
- (dd) We are disappointed with the very limited involvement of industry in biodiversity matters. A much wider range of industries (particularly development and others which deal with significant areas of land) should aim to incorporate biodiversity into their operations and, if possible, draw up their own Biodiversity Action Plans. The Confederation of British Industry should be at the forefront of efforts to promote biodiversity in the business world. If industry cannot be persuaded to take biodiversity seriously, Government should take action to require them to do so. We note the Minister's suggestion that companies could all be required to draw up environmental accounts and recommend that this is pursued (paragraph 102).
- (ee) We recommend that the Champions scheme be relaunched with some new target 'sectors' involved (eg house-builders, grain/feed manufacturers, supermarkets). There should be a regional and local aspect to the promotion of the scheme and it should aim to raise the profile of biodiversity amongst the wider public (paragraph 103).
- (ff) Biodiversity is not adequately integrated into all Government Departments and we are not convinced that the Green Ministers Biodiversity Checklist is a demanding enough instrument to address this. A statutory duty upon Government Departments to further biodiversity should be accompanied by redoubled efforts from the Department of the Environment, Transport and the Regions (through the Sustainable Development Unit) to push the integration message across all other Departments and develop a simple system of meaningful targets, against which progress can be monitored (paragraph 107).
- (gg) The patchy performance of local authorities on biodiversity matters should be a cause for concern for the Local Government Association and we recommend that they address it as a matter of urgency. As a starting point, we recommend that the Local Government Association employ the guidance produced by the Association of Local Government Ecologists to promote biodiversity through the Best Value process. The Local Government Association also need to play a better co-ordinating role in persuading Government of the need for more resources for biodiversity (paragraph 109).
- (hh) There is a need to ensure that biodiversity is adequately integrated into the Regional Development Plans. We commend the guidance provided by the South West Biodiversity Partnership as a model for other regions (paragraph 110).
- (ii) The public have great enthusiasm for nature conservation, will happily rally to the support of the red squirrel, the barn owl or a rare orchid, but for the most part are put off biodiversity by feeling that it is bureaucratic and muddled. If the public imagination is to be fired and they are to be persuaded to pay for biodiversity actions through their taxes, biodiversity policy must be grounded in sound principles which are clearly set out (paragraph 112).

Annex 1: Visit Note for Suffolk

Tuesday 20 June 2000

Members and Staff participating in the visit:

Members

Mr Andrew Bennett MP (Chairman)
Christine Butler MP
Mrs Louise Ellman MP
Mr Bill Olnier MP

Staff

Dr David Harrison (Clerk)
Dr Dave Taylor (Committee Specialist)
Mr Gary Kass (Parliamentary Office of Science and Technology)

Specialist Advisers

Professor David MacDonald
Dr Janet Dwyer

English Nature

Nicholas Woolley, Council Member
Dr Andy Brown, Director
Mark Felton, General Manager
Dr Roger Mitchell, Manager, Biodiversity Programme
Dr Keith Porter, Manager, Biodiversity Monitoring and State of Environment Reporting
Phil Grice, Ornithologist, Natural Area Teams
Dave Stone, Species Action Co-ordinator
Dr Rachel Thomas, Relationship Manager
Dr Richard Rafe, Manager, Suffolk Team
Gareth Dalglish, Senior Conservation Officer, Suffolk Team
Helen Smith, Conservation Officer, Suffolk Coast and Heaths, Suffolk Team
Adam Burrows, Site Manager, Suffolk Coast NNRs, Suffolk Team
Paul Lacey, Assistant Site Manager, Suffolk Team

The party was met by staff of English Nature at Ipswich railway station. In travelling by minibus, there was an opportunity to view the agricultural landscape and the associated fragmentation of habitats.

The party arrived at Walberswick National Nature Reserve (Hoist Covert/East Hill). This NNR is one of the most diverse sites in Britain, consisting of some of the best remaining areas of Sandlings heathland together with reedbeds, inter-tidal mud-flats, grazing marsh, hay meadows, woodland and the River Blyth estuary. It receives around 100,000 visitors annually although it is not promoted as an attraction.

Much of the heathland has been restored by scrub clearance during the last ten years and the importance of continued management was emphasised: the land is grazed by sheep to prevent it returning to scrub.

The party walked through a little of this heathland to view Westwood Marsh, which at 190 hectares, is probably the largest single block of freshwater reedbed in Britain. As with the heathland, management of the reed-bed is critical and this is fulfilled by commercial reed-cutting. On arrival, the group was lucky enough to see a Marsh Harrier.

The discussion focussed on the Habitat and Species Action Plan targets for reedbeds and bitterns. The fortunes of the Bittern received a great boost during the second world war, when coastal areas were flooded. Since then, the species has suffered a marked decline although there has been a recent improvement in the number of booming males (the best measure of overall breeding numbers) as a result of the action of English Nature and the Royal Society for the Protection of Birds. In discussing why the Bittern had been such a focus of attention for English Nature, it was explained that the Bittern could be considered a 'charismatic' species which was capable of galvanising public support. However, by taking measures to conserve habitats for Bitterns, many other species benefit.

The other main topic of discussion was dynamic coast issues: English Nature have already accepted that some of the site will be lost to the sea (saltwater would displace the fresh-water habitat and the reedbed and its associated wildlife would be lost). A bank divides the site and this will stop some sea-water coming through but a big event (for example, on the scale of the 1953 floods) would breach it. In essence, the bank has been built to slow the process down, but not to stop it. As a result, in the medium-term, this site should survive but, in the long-term, the sea will invade it. The EN staff noted that one of the main problems with the Habitats Directive is that it deals only with static sites and does not make any allowance for the effects of environmental change.

The party left Walberswick and, whilst travelling, were told of the need for transitional or replacement sites for habitats like reed-beds that will be lost to the sea. By way of illustration, the group was shown Blyth Valley, which is a wet valley and is a good potential site for reedbed/grazing marsh restoration. The party stopped at Wang Valley to view 45 hectares of re-created reed-beds. Mr Alan Miller from Suffolk Wildlife Trust described to the group the rapid creation of the beds from neglected grazing land. This has taken little more than a year and cost £670,000 in total, most of which was provided by Heritage Lottery Funds. Management of the beds consists of grazing and mowing and public access to the site has been accommodated.

After lunching in Southwold, the party travelled to Orford Castle, a Norman castle managed by English Heritage. The group ascended the castle to view the landscape all around: the Alde-Ore Estuary behind the shingle spit of Orford Ness NNR, the RSPB's Reserve at Havergate Island, grazing marshes and arable fields behind the sea-wall and on higher ground agriculture and forestry on the sandy soils. The discussion centred on English Nature's Habitat Restoration Project which attempts to tackle the widespread problem of habitat fragmentation by restoring or recreating given habitats. This has been successful in bringing some areas and linear features under positive management, largely through the Countryside Stewardship and Environmentally Sensitive Areas schemes. The other topic of discussion was English Nature's 'lifescapes' approach, which adopts a landscape approach to biodiversity and aims to integrate action for widespread and mobile species. By the landscape nature of this approach, it places an emphasis on the need for action outside of protected sites. This in turn means that planning policy is critical and local authorities have a key role if the lifescapes approach is to succeed.

Annex 2: Visit Note for Spain

17-21 July 2000

Participants:

Mr Andrew F. Bennett (Chairman)

Mr Crispin Blunt

Mr Brian Donohoe

Mr James Gray

Dr David Harrison (Clerk)

Miss Jacqueline Recardo (Committee Assistant)

Introduction

The Committee was given permission to visit the Netherlands and Spain to see how the Biodiversity Convention and EU directives on biodiversity were being implemented in two EU member states. Unfortunately, it was not possible to visit the Netherlands. Spain did however prove a very good comparator. It has land in three distinct habitat zones, western European maritime, Mediterranean and with the Canary Isles sub tropical. Its designation of land and sea areas in respect to the Canary Isles has been accepted as satisfactory by the Commission. Its designation in the Mediterranean zone is still being negotiated, while in the maritime zone, like Britain it has been asked to increase the area designated.

Biodiversity Conservation

Spain ratified the Rio Convention on Biological Diversity in December 1993, and began work on its own domestic strategy which is required under Article 6 of the Convention. This was, however, only formally approved and presented in March 1999. The Strategy aims to comply not just with the Rio commitments, but also with all other international and European conventions and agreements, including the Birds and Habitats Directives. But given the division of competences the Strategy is not definitive; it is now up to the seventeen regional governments to draw up their own regional strategies (by March 2002) and to develop action plans. Likewise, sector action plans must be approved by 2002, and fully implemented by 2010. In general terms, regional action has been slow. Work on the sectors has so far been limited to tourism, agriculture, research and transport (out of a total of eleven identified sectors).²⁴¹

Habitats Directive

Spain occupies some 500,000 Km². Over 80 per cent is taken up by agriculture, livestock and forest, while some 8 per cent consists of urban areas and infrastructures (ie. Non-recoverable habitats). 65 per cent of the 179 habitats described in the Habitats Directive are present in Spain; and 50 per cent of priority habitats. This gives Spain the greatest diversity of natural habitats of all EU member states. However, there are problems. There is little coordination between devolved organisations and administrations. The aim is to correct this. One of the most important first steps will be a detailed inventory of Spanish habitats (both Natura 2000 and others) and of flora and fauna species which will be fed into a Nature Data Bank (managed by the Biodiversity Conservation branch of the central Environment Ministry) and updated regularly.²⁴²

²⁴¹ Information supplied by Mr Matthew Desoutter, Environment Officer, British Embassy Madrid.

²⁴² Information supplied by Mr Matthew Desoutter, Environment Officer, British Embassy Madrid.

Birds Directive

As far as the Directive is concerned, Spain is on important migratory routes. And according to IUCN figures, 10 species are classed as endangered. Types of threat vary from region to region, and include more intensive farming methods; new infrastructures (eg power lines; wind farms); and pollution.²⁴³

Monday 17th July, Madrid

Meeting with the Environment Ministry

The Sub-committee began its visit with a detailed exposition of Spain's policies by the Secretary General, Director General for Nature conservation and other officials at the Environment Ministry which was set up in 1996. They pointed out that Spain was a Federal state, and while they were responsible to the EU for biodiversity, the actual policy had to be carried out by the regional government. This made selecting areas for designation and enforcing EU directives particularly difficult. It also caused tension where regional political control differed from central control.

The Committee also discussed the advantages and disadvantages of being a relatively new small ministry, compared to being part of an old large agriculture ministry; and the conflict between some agricultural grants (particularly headage payments) and conservation.

Discussion concerned less the merits, or principles of biodiversity policy, but rather the need to implement EU directives. Officials were also worried that they did not have the resources to educate public opinion — particularly in the areas designated for special protection — about the merits of biodiversity.

Meeting with NGOs working on Habitats and Birds Directives

The Sub-committee then went on to meet representatives of SEO/Birdlife and Ecologistas en Acción. Ecologistas en Acción is a non profit institution. Its main aim is to promote environmental policy in Spain. SEO/Birdlife is a "sister" organisation to the RSPB, although it is much smaller. It has an annual turnover of 500 million pesetas (£200 million). These NGOs began by expressing their concerns that they did not have the resources of organisations like the RSPB in the UK, but pointed out their membership was growing. They expressed some scepticism about areas designated around the Canaries suggesting that the area was large but the quality of much of its marine zones was poor. They were very worried that the EU agriculture policy was damaging biodiversity in Spain and were concerned that enforcement — particularly court action — was poor.

The evening was spent with a wide selection of officials, environmental figures from the Parliamentary Environment Commission, NGOs, environmental journalists, consultants, and others interested in biodiversity who were able to greatly expand on the issues discussed earlier in the day.

²⁴³ Information supplied by Mr Matthew Desoutter, Environment Officer, British Embassy Madrid.

Tuesday 18th July, Toledo

Meeting with the regional Ministry for Agriculture and Environment for Castilla-La Mancha

From Madrid, the Sub-committee travelled to Toledo for the second stage of the visit to meet the Director General for the Natural Environment for Castilla-La Mancha and other officials.

Castilla-La Mancha covers the southern centre of the country, and is made up of five provinces, with the regional administrative capital in Toledo. The region is dominated by the flat central plain, divided by the Tagus and Guadiana rivers, with mountain ranges in the centre and south.

The Sub-committee were given a very enthusiastic presentation by the section head of the Wildlife Service, Directorate General for Natural Environment Regional Government of Castilla-La Mancha, setting out the main areas in the region and the special biodiversity interests and also the main species that were of particular importance.

In the late afternoon the Sub-committee were taken to the "Deheson del Encinar" estate and the Navalcan reservoir situated within the Valle del Tietar and Navalcan and Rosarito reservoir SPA. This is an area of grassland — with tree cover in a few places olive trees, but mainly three types of oak. Near to water it tended to be cork oak. It was explained that the biodiversity of the area, depended to a large extent on maintaining traditional agriculture. Fortunately, the cork was still very profitable, but running pigs and cattle on the grassland was less profitable — and the grassland had to be cultivated every five years or so to stop it becoming scrub. A great deal of work was going into managing the area, and recording its biodiversity. Much of the record keeping was being passed on from its earlier incarnation as a agricultural research institution. We completed the visit by walking along the shore of the Navalcán Reservoir. We were able to see at first hand a good display of birdlife and take a look North towards the Gredos mountain range where, with the land rising steeply, there is a very rapid change of vegetation and biodiversity. We were also informed about historic Spanish Drove Roads which can form important wildlife corridors.

Wednesday 19th July

Visit to the Cabañeros National Park

The Cabañeros National Park is in the centre of the Iberian Peninsula between the provinces of Ciudad Real and Toledo, including the hills of Toledo; it covers 39,000 Ha. It is made up of low uncultivated hills offering pasture to a variety of animals, interspersed with mountains. It is the only Spanish National Park which supports Mediterranean forest-type ecosystems, and it contains some 200 different bird species, including black vultures and Iberian and golden eagle populations. It also contains 45 species of mammals, including deer, wild boar, and the Iberian lynx. Its flora include a wide variety of trees and bushes.

The Sub-committee were taken on a visit to the National Park accompanied by the Park's Director. The National park is large, with contrasting management from the regional park — but again very dependent of being managed to maintain its biodiversity. The area was a series of low lying areas surrounded by hills. In the low lying areas the main vegetation was grassland with varying amounts of tree cover. The hills by contrast were densely tree covered. Here there are important species such as the black vulture and wolves. We were told about the detailed record keeping work taking place, the number of volunteers and lists used to record information and to maintain the landscapes. We were also told how the park authorities were co-operating with people living outside the park but near to it in order to foster a sustainable tourist interest and to encourage local people to use the park as an asset, rather than see it as a handicap.

From Madrid, the Sub-committee flew to Asturias for the last stage of the visit, where they had an evening meal with local politicians, and the Environmental Minister and his officials. This gave us a good opportunity to get a feel for local political attitudes to biodiversity.

Thursday 20th July, Asturias

Visit to Somiedo Natural Park

The Sub-committee was taken on a visit to the Somiedo Natural Park, where they were greeted by, and accompanied for the day, by the Mayor of Somiedo, and also the Director of the Park.

Somiedo is an area of high alpine-type land, with a variety of rocks — limestone and shale in particular — high peaks, deep glacial valleys, high rainfall, and considerable contrasts in climate. It has one of the richest ranges of biodiversity anywhere in Spain or Europe. It is a mountain alpine area, reaching 1,988m. Unlike most alpine areas in Europe it has not had its biodiversity destroyed by skiing or an uncontrolled tourist trade. It was very clear that much of its biodiversity depended on the traditional farming carried out in the area — which until recently was little more than subsistence farming. The regional environment officials, and local Mayor, and most people we talked to were eager to allow local people to enjoy modern facilities and a good standard of living while retaining most of the traditional agricultural pattern and introducing a sustainable tourist trade. Some of the wildlife in the park were wolves, deer, boar and birds of prey. Discussions took place about extending the protected area. This seemed to us to raise major issues — the quality of habitats and conservation in Somiedo was very high — to protect it was going to be expensive. It did not appear that either the EU, or the Spanish central government was planning to expand the area, when looking at the costs of doing so and just how much money was needed to maintain the park.

Friday 21st July, Asturias

Visit to the Picos de Europa

The visit ended with a visit to the Park. The scenery is spectacular, with high peaks and crags, alternating with deep gorges and canyons created by the force of the rivers. Mountain passes, hills, chasms, gorges, caves, crags, lakes, streams, brooks and rivers make up the rugged terrain. Extensive beech woods providing shelter for a large number of animals cover the mountain slopes. It contains ecosystems linked to Atlantic forests. The Picos de Europa represent the largest limestone formation on the Atlantic coast of Europe, its chasms are as much as 1,000 metres in depth, the erosion caused by glaciers is very obvious, and there are several lakes. The crags provide a habitat for the chamois, roe deer inhabit the dense forests, and wolves are still to be found in the valleys. 140 different types of bird live in the Park, notably grouse, as well as large birds of prey such as the vulture and the golden eagle. However, damage has been done by uncontrolled agriculture (particularly headage payments for cattle) and poorly run tourism, showing how one of Europe's first national parks — designated in 1918 — could suffer. It was nicer to hear how much progress was being made to produce a new development plan. The tourist exhibition centre was very impressive. It was also worrying to hear of all the problems of administering a national park, split between three Spanish regions, with differing regional political control and agendas.

Appendix: Briefing Note by the Parliamentary Office of Science and Technology

The passage of the Countryside and Rights of Way (CROW) Bill, and two recent select committee inquiries have focussed parliamentary interest on protecting wildlife. Concerns have been raised over the role that science plays in defining the goals of nature conservation.

This briefing note examines the basis for nature conservation and the role and application of science, and discusses the issues raised.

Summary of Key Points

- Nature conservation is a cultural activity, involving many reasons why people value nature.
- Traditionally, nature has been viewed as a static collection of species present in particular places.
- Recent scientific understanding shows that change is an inescapable aspect of nature.
- Historically, conservation has been led by few 'experts' in Government, agencies and NGOs.
- A broader debate is needed to determine how nature conservation can take account of change.

WHY CONSERVE NATURE?

The Origins of Conservation

People have used plants and animals for millennia for food, clothing, and shelter, and have set aside areas to enable these resources to be exploited (e.g. ancient royal hunting forests such as the New Forest). From a western perspective²⁴⁴ a sense that 'nature' was beyond purely economic value, and carried with it both a moral and aesthetic value crystallised in the 19th century, as three trends coincided: the rise of the Romantic poets and novelists; reaction to Blake's "*dark satanic mills*" of the Industrial Revolution; and a growing interest in 'natural history'^{245, 246}. Towards the end of the 19th century, Darwin developed the theory of 'evolution by natural selection', and this established the foundations for the emergence, in the early 20th century, of the science of ecology²⁴⁷, that seeks to understand the interactions between organisms and their surroundings, and between organisms.

By the 1980s, this notion had spread to considering the interdependence of all life on earth, and that the diversity found in nature ('biological diversity' or 'biodiversity' - Box 1) plays a crucial role maintaining life support systems. In June 1992, this culminated at the UN 'Earth Summit' with the signing of the Convention on Biological Diversity (CBD) by 157 nations, including the UK.

²⁴⁴ Many of the world's major ethical frameworks show a complex interaction between values of nature that are either intrinsic or based on human use (instrumental).

²⁴⁵ Some have suggested that this was significantly inspired by the expansion of the British Empire, and a particular Victorian obsession for collecting!

²⁴⁶ Formal nature conservation began in the UK, with the establishment of the National Trust (1895), the Royal Society for the Protection of Birds (1904) and the Society for the Promotion of Nature Reserves (1912). The first government body for nature conservation, the Nature Conservancy Council, was set up in 1949.

²⁴⁷ This is distinct from the interpretation of ecology as a political philosophy.

BOX 1: WHAT IS BIODIVERSITY

Biodiversity (or biological diversity) is often taken to mean 'variability within nature', or more simply 'Life on Earth'. It does not relate to the number of individual species, but to the differences within and between species and their surroundings ('ecosystems'). The UN Convention on Biological Diversity (CBD) defines it as follows:

"The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems."

While it is relatively easy to understand what is 'biological' (i.e. animals, plants, fungi and micro-organisms) the concept of 'diversity' itself is less readily grasped. Essentially, there are three levels of biodiversity that come from the definition in the CBD:

1. diversity between and within ecosystems and habitats (e.g. a dry heathland or a rainforest)
2. diversity of species (e.g. a great crested newt or a red kite)
3. genetic variation within individual species (e.g. differences in the genetic make-up of a single species)

The diversity of species within a habitat can be 'measured', using mathematical formulae, and it can be demonstrated that changing conditions within a habitat will often change the diversity of species within the habitat, and vice versa. Thus, the presence or otherwise of a wildlife community appropriate to an area is a test of the 'health' of a local environment. For example, the features and species of a 'good quality' lowland acid heath are well characterised. So, by monitoring the numbers and types of species present, it is possible to determine whether any adverse changes, beyond those of natural variability, are occurring.

Source: Biodiversity – The UK Action Plan. Cm 2428, 1994

People's Relationships with Nature

People relate to 'nature' in many different ways, depending on their own experiences, cultural background and systems of value. So it is not easy to untangle the reasons why nature is valued. As an example, a forest may be viewed as a stand of timber or as a place that holds some special personal value.

From such a range of relationships, it is possible to distil three non-exclusive sources of 'value for nature':

- **Scientific** - creating new knowledge is a cultural asset, and so natural history and ecology are seen to have merit for their own sake.
- **Economic** – society is dependent on the natural world as a source of raw materials and natural features, so maintenance of 'resources' that have (or may have) economic benefit to people (e.g. medicine, food, shelter, clothing and recreation) is seen as desirable.
- **Cultural** – people hold aesthetic values for particular organisms, habitats, and landscapes, and many feel a moral (sometimes spiritual) responsibility towards nature²⁴⁸. Indeed, in 1981, the UN General Assembly adopted the World Charter for Nature which stated "*all life warrants respect regardless of its usefulness to Man.*"

Reflecting this range of values, international, European and UK legislation has built up to conserve species and habitats. Each is framed (in varying degrees) in terms of the values described, so it can be seen that nature conservation is pursued for a variety of socially directed reasons.

²⁴⁸The question as to whether this stems from nature having specific 'rights', or people having an obligation to avoid causing systematic or gratuitous injury is a matter of debate.

THE PRINCIPLES OF CONSERVATION

Turning from philosophy to practice, once the reasons for conserving nature have been identified, it is necessary to establish:

- which features are to be conserved – primarily the species and habitats of interest;
- the importance to conservation of those features. Because there are many reasons for valuing nature, there are also many criteria for determining their conservation value (see later);
- how the area should be managed to maintain or enhance conservation values. This includes: establishing strategies to avoid damage to the features of interest; identifying the extent and assessing the significance of any changes; and responding to any changes that may occur.

An important point to note here is that much conservation activity in the UK is now driven by the requirements of the EU Birds and Habitats Directives, which require particular species and habitats to be conserved if present in Member States.

Knowing What to Conserve

The first task is to know which animals and plants exist in the UK, in what numbers, and where. The terrestrial and marine wildlife of the UK varies extensively, reflecting changing patterns of rock and soil types, climatic and maritime conditions and human activities. Many plants and animals found in the UK are also found elsewhere in Europe, but many are close to the edge of their natural ranges, and hence may appear in the UK as rarities (while they are abundant on mainland Europe). Nevertheless, in international terms, there are a number of features of the UK's wildlife that are either unique (e.g. the Scottish crossbill, a bird) or at least highly distinctive (e.g. the Caledonian pine forest, limestone pavements, and the Flow Country of northern Scotland).

The science of 'taxonomy' describes, names and classifies distinct organisms (species), and seeks to understand their relationships to one another. Historically, taxonomy has been based on observed variations in the physical form (morphology) of different organisms, but in more recent years, advances in molecular biology have led to a new way of distinguishing organisms, based on observed differences in genetic make-up.

The science of ecology extends this to understanding the interactions between organisms and their surroundings, and between species. Ecological sciences have shown that 'nature' is not a static collection of 'things' present in specific places, but is a complex, dynamic system of relationships and processes that operate over different scales of time and space²⁴⁹. An example is how nitrogen moves from the air, into soil bacteria, into plants and animals, and eventually back into the soil or air again to begin this 'nutrient cycle' again.

Determining Conservation Value

Once the pattern of the distribution of organisms has been established, the range of people's values for nature mean that some organisms, habitats and landscapes are more highly valued than others – whether for scientific, economic or cultural reasons. While value judgements cannot be described as 'scientific', scientific methods can be used to defend conservation value. Thus, a consistent

²⁴⁹ A further insight in the last decade has been that many ecological processes operate in a 'chaotic' (or non-linear) fashion; where small changes in one part of a complex system lead to larger changes elsewhere – often referred to as the butterfly effect (i.e. a wing beat in China causes a hurricane in Bermuda). This means that predictions of ecological changes are inherently highly uncertain.

means of identifying the relative priorities to be conserved is necessary to avoid arbitrary subjective preferences. To this end, criteria were developed in the late 1960s and early 1970s (and updated in 1989) by the (then) Nature Conservancy Council²⁵⁰, to enable such a rigorous approach (Box 2). To some extent, these represent a *post hoc* rationalisation of the practices developed and used by the NCC up to that time. The NCC acknowledged at the time, that these criteria did not attempt to be wholly scientific, but rather they sought to be consistent.

Thus some criteria (such as diversity or rarity) can be seen as more 'scientific' than others – i.e. they are more amenable to repeatable measurement with regard to data on the populations and distributions of species and habitats. Other criteria, however, are less grounded in 'scientific method', and more dependent on value judgements. For example, naturalness is a really a hybrid that judges how close a habitat is to its truly 'wild' state, related to subjective values of 'wilderness'. Finally, other criteria are entirely contingent or judgmental, such the criteria of 'potential value' or 'intrinsic value'.

Essentially, 'measurement' of a site's characteristics against these criteria establishes a range of attributes for the site, but cannot establish its overall worth. This requires judgements based on the relative weightings given to each criterion which reflects social values. For example, it is a matter of preference whether diversity is any more or less highly valued than rarity.

However, under the Habitats Directive, the extent to which judgement can play a part in determining what is to be conserved, and what value it holds, is severely limited. Here, annexes to the Directive specify comprehensive lists of particular habitat types and species that must be conserved.

CONSERVATION IN PRACTICE

The Call of the Wild?

The previous sections have described why nature is valued; how natural features are identified and their distribution and ecology determined; and how their relative value can be established consistently. The next step is to manage those features to maintain (or enhance) their conservation value. Ideally, in a true 'wilderness', there would be no need to intervene as the species, habitats and ecosystems would be fully self-sustaining (even in the face of change). However, in the UK, there are no land areas that can be described as 'wild'²⁵¹ – but they are not wholly artificial, and so are referred to as 'semi-natural'. Conservation in the UK, then, invariably *requires* human intervention in natural processes to maintain and enhance conservation values. For instance, a lowland heath is a landscape created around 3-4000 years ago by people clearing the 'natural' forests on sandy acidic soils to provide grazing. Since then, these areas have developed characteristic plant and animal communities which are now highly valued. Many such areas are legally designated (or locally recognised) for their conservation value, and so are actively managed by scrub clearance and grazing to maintain those values. Without management, scrub and eventually forest would replace the heath. The question of whether this represents a more or less 'valuable' situation remains a matter of contention.

²⁵⁰ The 1989 review concentrated on developing the more 'scientific' criteria and much more detailed guidance was given for major habitats and groups of organisms. Nevertheless, NCC acknowledged the importance of cultural values.

²⁵¹ It is widely accepted however, that coastal and marine areas are more 'wild' than terrestrial areas.

BOX 2 DESIGNATIONS FOR AREAS OF NATURE CONSERVATION IMPORTANCE

Criteria for Nature Conservation Value

1. **'Size'** –there is a minimum acceptable size for areas which need to be safeguarded to maintain their conservation interest.
2. **'Diversity'** – variety in the numbers of both communities and species, related to diversity of habitat, are important features.
3. **'Naturalness'** – the distinction between natural, semi-natural and artificial cannot be rigidly defined and is arbitrary to some extent.
4. **'Rarity'** – rare or local species and habitats are often most highly valued, but such rarity may be natural or human-induced.
5. **'Typicalness'** – it is necessary to represent the typical and commonplace within the field of ecological variation.
6. **'Recorded history'** – the extent to which a site has been used for scientific study and research is a factor of some importance.
7. **'Position within a geographical or ecological unit'** – a site is more valued if it is close to another of high quality.
8. **'Potential value'** – sites that could develop a nature conservation interest (either naturally or through intervention) are highly valued.
9. **'Intrinsic appeal'** – Different kinds of organism do not rate equally in value, thus more weight is given to birds than spiders.
10. **'Fragility'** – a complex criterion that reflects the sensitivity of habitats and species to change. Fragile sites are highly valued.

Protected Area Designations

11. **International** –sites for the conservation of wetlands (Ramsar Convention); EU Special Protection Areas (SPAs) for the protection of birds; EU Special areas of Conservation (SACs) for the protection of certain species and habitats.
12. **National** – National Nature Reserves (NNRs) to protect the most important areas of wildlife habitat (and also geological formations) in Britain; Sites of Special Scientific Interest (SSSIs) and Areas of Special Scientific Interest (ASSI's, in Northern Ireland) as areas representing the best examples of wildlife habitats (as well as geological features and landforms).
13. **Local** – Local Nature Reserve (LNR) recognised by local authorities but have no specific legal protection.

Sources: *Strategy for Nature Conservation*, Nature Conservancy Council, 1976; *Guidelines for selection of biological SSSIs*, Nature Conservancy Council 1989; *National Nature Reserves*, English Nature, 1998; *SSSIs*, English Nature 1999

Planning for Conservation

In practice, conservation takes place within specific sites to 'maintain a favourable conservation status' for those features for which the sites have been designated. It is worth pointing out, however, that many species occur much more widely than on specific sites, and may range over very large areas (e.g. birds, fish, and marine mammals).

Since 1995, the dominant framework within which conservation has been pursued has been the UK Biodiversity Action Plan (UK BAP). Nearly 400 species and over 40 habitats have been identified as being of particular importance, based on their rarity or rapidly declining status. The result of this process has been the preparation of hundreds of species and habitat action plans (SAPs and HAPs) which have set targets and identified costs to ensure the conservation value of the particular species and habitats are maintained. Also, around 100 local BAPs have been developed to focus implementation of the national plans.

A key feature of the BAP process has been that it has signalled a departure from the traditional approach to conservation which saw it as the responsibility of relatively few organisations – primarily the statutory nature conservation agencies²⁵², working alongside voluntary nature conservation organisations. The BAP process has extended involvement to many other organisations, including local authorities and businesses. These organisations now work together in a series of UK, national and local BAP steering groups, and groups for each of the plans – although there are concerns over a lack of ‘leadership’.

While BAP has been successful in bringing together these interested parties to agree priorities and plans, evidence to the current Commons Environment Sub-Committee’s inquiry into UK Biodiversity has revealed some concerns over the BAP process:

- insufficient political imperative, leading many to call for a statutory backing for BAP
- slow progress in implementing the HAPs (contrasted with good progress on SAPs)
- complex and bureaucratic, with too many plans, leading to calls for them to be consolidated
- poor coordination between local and national BAPs
- a lack of sufficient ‘champions’²⁵³ for many species (less than 10% have champions to date).

Dealing with Change

Identifying Change

As nature conservation seeks to maintain favourable conservation status for particular species and habitats on specified sites, it is necessary to establish the status at any given time and to observe how this may change. This requires a system for recording and monitoring species and habitats. The UK has had a long tradition of biological recording, but this has been skewed significantly in favour of particular groups of organisms: principally birds, mammals, reptiles, amphibians, some insects (butterflies) and flowering plants.

Recognising this imbalance, a National Biodiversity Network (NBN) has been set up, funded by a range of organisations (including public bodies and wildlife charities). The NBN aims to encourage schemes where local and national recording efforts can be coordinated to allow data to be shared easily. To record and monitor the status of every species across the country would be an enormous (if not impossible) task, and so gaps in data are inevitable. Therefore, within sites of nature conservation importance, organisations regularly monitor conservation status at a more pragmatic level. Thus, field staff concentrate on surveys that examine a site and note particular

²⁵²English Nature, the Countryside Council for Wales, Scottish Natural Heritage and the Department of the Environment, Northern Ireland.

²⁵³Organisations committed to undertaking specific conservation of nominated species or habitats (e.g. Anglian Water champions the ‘depressed river mussel’).

features that may 'indicate' the presence or absence of other features of conservation interest. An example is the presence of the woodland plant Solomon's seal, an indicator that the woodland has remained relatively undisturbed for many hundreds of years (i.e. 'Ancient Woodland'). However, recognition of Ancient Woodland does not necessarily guarantee its protection. Indeed, the Woodland Trust points out that 85% of Ancient Woodland currently carries no designation.

Another initiative in this area is the Environmental Change Network (ECN) managed by the Natural Environment Research Council (NERC). This provides a more extensive long-term monitoring of particular physical, chemical and biological indicators on a network of 54 established sites – e.g. wind speed and direction, soil chemistry, and vegetation cover. Data from the network have been used to monitor water quality and to track the effects of climate change. Examples include the abundance of the common blue butterfly; the numbers of wrens in farmland and woodland; the date of leafing of oak trees in Surrey; and central England air temperature.

Assessing Change

Recording and monitoring, although incomplete, can establish that change has occurred (or is occurring), and can help in predictions of the effects of future changes. While monitoring can show that change has occurred and the extent of that change (e.g. in terms of the size of populations of certain species), understanding its cause is more complex. Species numbers and distributions can change for many reasons, either naturally or through human influence. Causes of natural change include climate, food availability, disease prevalence and virulence, and predator numbers. Recognising the range of natural variability helps to identify whether changes result from, or are exacerbated by, human influence.

Once a change has been recorded, it is necessary to establish its significance and its cause (if possible), before responses are made (see next section). Assigning the significance of any changes is fraught with difficulty. As discussed earlier, decisions over the importance of particular features are essentially value judgements that can be informed (but not defined) by science. Therefore, the assessment of the significance of any change is a matter of judgement set against the objectives for conservation at a particular location. Similarly (and perhaps even more intractably), assessing changes in conservation status alongside other changes (e.g. landscape value, amenity value, water quality, economic well-being, etc.) makes the task even more complex.

Ultimately, then, the significance of any change is a value judgement, but the question arises "*whose judgement counts?*". As nature conservation objectives are framed by economic, aesthetic, cultural and moral values, agreeing what constitutes significant change is often politically sensitive.

Responding to Change

In spite of these difficulties, decisions are made, and responses to change are sometimes required. The response undertaken, however, is highly dependent on the cause and the extent of the change. Mostly, the closer the cause of the change is to the site where the change occurs, the easier it is to deal with. For example, deliberate damage or neglect on a SSSI (Box 2) is more readily dealt with than changes in land use stemming from structural changes in agriculture that in turn arise from changes in subsidy and support schemes. Also, pollution from dispersed sources distant from the site²⁵⁴ can be more difficult to deal with. Perhaps the most intractable of all is responding to the effects of climate change (whether natural or human-induced)²⁵⁵.

The Government has acknowledged the scope and potential scale of possible effects of climate change in the UK, and raised issues of how society might need to adapt. In May 2000, the

²⁵⁴ Including sources from overseas (e.g. low-level ozone from the industrial activity in the Rhur valley).

²⁵⁵ Reductions in greenhouse gas emissions will take hundreds of years to have any effect in reversing any changes occurring now. So some change is 'inevitable'. See POST Report *Living in the Greenhouse*, December 1998.

Government published a report on adaptation to climate change (Box 3). On nature conservation, the report concluded that *"respect for the dynamic nature of natural and semi-natural ecosystems is the key to future adaptation."*

BOX 3 NATURE CONSERVATION AND CLIMATE CHANGE

In 1999, the Department of the Environment, Transport and the Regions (DETR) commissioned a review of possible impacts of climate change, considering adaptation options and defining priority responses. Protection of designated species and habitats was among the adaptation priorities. The consultants concluded that climate change could significantly affect nature conservation. Similarly, adaptation in other areas (e.g. water resources and agriculture) could also affect biodiversity.

The most critical adaptation response identified was to maintain the network of designated areas, because of their legal status and accompanying international obligations. The consultants also recognised that actions will need to be considered that protect and enhance biodiversity in the wider countryside. Three response options were identified:

1. Relying on natural migration processes
2. A facilitated colonisation process involving removal of barriers to natural ecological processes
3. Wholesale recreation or restoration of habitats which are under serious threat
4. The analysis indicated that adaptation costs could range from £150 million to £1,400 million over the next 30 years, of which the costs of recreating mudflats would be the largest component. In the face of such uncertainty, a number of no-regrets actions were identified (i.e. action that would help to minimise costs for future adaptation, while improving current management):
 5. Improve protection and management of existing designated areas
 6. Ensure policy builds on the natural dynamics of ecosystems and incorporates buffer zones in designated areas
 7. Incorporate opportunities to facilitated colonisation in agri-environment and flood defence schemes and coastal planning.

Source: *Potential UK adaptation strategies for climate change*. Environmental Resources Management, May 2000

In general terms, a key issue in guiding necessary responses, is whether changes actually impact on a site's conservation objectives. This will define the 'latitude' that land managers and conservation agencies have in responding. On internationally designated sites (e.g. SPAs and SACs - see Box 3), the legal requirement to maintain a definitive list of features of importance limits the latitude for response - effectively obliging managers to keep sites in a constant condition, with the same species.

Other sites are designated more flexibly - i.e. with reference to conservation interests but not with the express requirements to maintain exactly those features come what may. Thus for a SSSI, the conservation objectives for a site are more important than ensuring that a defined list of particular species is maintained. Nevertheless, despite there being no legal requirement to maintain specific features, agencies and land managers report that they come under considerable pressure from interest groups and individuals effectively to manage sites with a view to safeguarding the species on the list.

However, it may not be possible (or practicable) to ensure the permanent survival of the features of interest. For example, under climate change, the location of the optimum temperature for the common blue butterfly may move, but unless other aspects of the butterfly's ecological requirements are able to move as well (e.g. soil type for dependent food plants, etc), then the insect may well die out. But, creation of new habitat elsewhere may not always be possible or practicable.

This example highlights a particular concern over the current European system for nature conservation that focuses on maintaining conservation interest on particular species in designated areas with fixed boundaries. As described earlier, however, a scientific consensus is growing around the idea that change is a constant factor in all ecosystems, and that ecological processes occur over many scales of time and space. Thus, many now recognise limitations to current systems. Indeed, in 1998, the Parties to the CBD agreed to adopt an 'ecosystem approach' to nature conservation, which expressly recognises the principle that (among others²⁵⁶) "*management must recognise that change is inevitable*".

In the UK, while the BAP process pursues nature conservation beyond the boundaries of designated sites, concerns still remain that current systems require specific species and habitats to be conserved according to predefined targets, and hence are static.

ISSUES

Science in Nature Conservation

The above analysis points out that nature conservation is essentially a 'philosophy', constructed from a social process that seeks to place value upon, and hence take action to protect, particular features of the natural world present in particular places. Thus many people perceive and value 'nature' as essentially "*something other than human*". This can be manifested as economic values, such as the ability to produce commercial goods and services such as food or building materials. Similarly, cultural values include as a 'sense of place', visually attractive landscapes, and feelings that could be described as emotional or even 'spiritual'. Lastly (and essentially a subset of cultural values) there is also value in creating new knowledge about the workings of the natural world.

Stemming from the goals of nature conservation, rather than driving them, science still plays a number of crucial roles:

- identifying features present (e.g. organisms, soil types, landforms, hydrology, and climate)
- describing interactions between features and ecological processes (e.g. water purification)
- monitoring and recording features, and measuring changes (e.g. skylark decline)
- understanding the causes and consequences of changes (e.g. the effects of sea level rise)
- defining management practices to meet the conservation objectives (e.g. grazing regimes).

Limits of the Traditional Approach

Recognising that organisms exist within complex dynamic ecological systems where the constancy of change is a defining characteristic raises a fundamental question over the role of nature conservation - i.e. whether to concentrate efforts on maintaining populations of particular species within specific sites, or to adopt a broader view to acknowledge and value ecosystem processes that work over larger areas. The choice is ultimately a social one, but science has a role to play in informing the debate. It should be remembered, however, that SSSIs (in Britain) and ASSIs (in Northern Ireland) are considered to be the 'jewels in the crown' of the UK's wildlife. So, even as change occurs, they would remain the best examples, although the particular mix of species present on the sites may be different.

²⁵⁶Others recognise that conservation of ecosystem structure and functioning should be the priority target (rather than just species protection), and that conservation is a societal choice, so all relevant sectors should be involved.

The above discussion has shown that, while some efforts (e.g. BAP) are being made to recognise that biodiversity is not solely restricted to sites with fixed boundaries, current systems for nature conservation need to be amended to allow for dynamic adjustment in response to climate change. Indeed, English Nature is keen for a debate to commence, to tackle the inflexibility of EU conservation policy.

The Wider Countryside

The UK BAP, produced in 1995, expressly recognises the value of biodiversity beyond designated sites. Nevertheless, there are concerns over both the scientific rationale, and organisational issues related to the BAP process itself. Scientifically, there are concerns that the focus of BAP may not be appropriate, as it concentrates on rare or declining species, rather than on a broader range of organisms within their ecological settings. This reflects the earlier discussion of the range of reasons why people value nature. Thus, in the case of BAP priorities, the primary values are rarity, fragility and the need to maximise diversity. Less attention is paid to the more esoteric scientific ideas of maintaining ecosystem processes and integrity, or the more cultural values such as a sense of place²⁵⁷.

This has led some organisations to raise questions over whether the BAP process is the optimum approach, and whether its focus should shift from species and habitat protection to maximising the 'integrity of ecosystems'. For example, in evidence to the Environment Sub-Committee, the Woodland Trust suggested that the 6 separate habitat plans for broadleaved woodland should be combined into one. This would recognise that (as with all ecosystems) broadleaved woodland exists in a permanent state of flux; with the dominant species in the ecosystem changing over time.

Similarly, concerns over BAP have also focussed on organisational issues, such as complexity, bureaucracy, a lack of a recognised 'command structure' and a lack of engagement by business and the general public (even among the 5 million members of the conservation organisations²⁵⁸). Recognising these limitations, English Nature (among others) have called for a statutory underpinning of the BAP process, arguing that this would raise its political profile among key decision-makers, leading them to give a higher priority to biodiversity. The UK Government's final position on this has not been announced.

Marine Nature Conservation

Some estimates suggest that as much as half of the UK's biodiversity is present in the marine environment. Yet, at present, the UK has only two marine nature reserves, and the seaward limit of terrestrial sites is the low water mark. A court decision early in 2000 established that the EU habitats directive must apply to the limit of UK waters, out to the median line or 200 mile limit (whichever is furthest offshore). Biological recording in the marine environment is practically more difficult and more costly than on land, and so records are not as comprehensive, and marine nature conservation policies not as advanced.

Consequently, a broad consensus has emerged that current systems for the protection of marine biodiversity are inadequate. Hence, some have called for specific legislation and a separate agency for marine nature conservation. Others have suggested, however, that this would create further bureaucracy, and would not be workable, given the complex interactions between land, coast and sea. An opportunity exists therefore, for a UK-wide debate to begin as to how best to ensure the protection of marine biodiversity.

²⁵⁷For example, many people enjoy seeing a buzzard flying, but how many would value it for its role as a top predator in an ecosystem, as opposed to it being a beautiful and rarely seen animal which can inspire feelings of awe and majesty?

²⁵⁸This figure includes 2.6 million members of the National Trust, many of whom have not joined solely for nature conservation reasons.

TOWARDS A NEW APPROACH

A New Vision for Conservation?

The above discussion highlights long-held concerns that current systems for nature conservation are limited in their recognition of the dynamics of ecosystems. Three main points arise. The first is that ecosystems are more than just collections of particular species arranged within fixed patterns in particular places. Second, high nature conservation value is often much more widely distributed across the countryside²⁵⁹. Third, conservation value lies beyond concern about rare or rapidly declining species and habitats.

This analysis suggests, therefore, that biodiversity might best be conserved within a more scientifically informed system operating under the 'ecosystem approach' adopted by the Convention on Biological Diversity in 1998. One such attempt to promote this agenda in the UK has been the 'Lifescapes' project run by English Nature (Box 4).

Within such a new vision, there is greater recognition of the scientifically established principles of ecology, but it is important to recognise that choices still have to be made about priorities. Given the range of perceptions and values of nature that people hold, these choices cannot be made by science, only informed by it. Thus, ultimately, it will be a matter of social debate to establish the priorities. This has led to calls for a process of wide consultation and deliberation, open to a broader range of interests than has been the case²⁶⁰.

Current political interest in nature conservation is high. So, the opportunity now exists for the Government and the devolved administrations to begin a process of broadly based consultation and deliberation²⁶¹ to determine how nature conservation policies and practices should adapt in the coming decades, recognising current ecological understanding alongside the broad range of reasons why people value nature.

The terms of reference for such a debate might be²⁶²

“to debate in depth how to evolve new means of evaluating the social implications of ecological understanding, the social preferences for different ecologically-feasible choices, and the best means of achieving widely held goals.”

Research Needs

The 'ecosystem approach' of the CBD suggests that conservation based on the protection of particular species is no longer appropriate, especially as climate change becomes more apparent. Indeed, this approach suggests that special sites need to be seen in the context of the wider countryside, as is intended in English Nature's *Lifescapes* project. Consequently, many have called for a realignment of current ecological research to address these issues. Some argue, for instance, that ecological science should focus on ecosystem processes operating over wider areas. Others have called for a narrowing of the focus of research, to concentrate efforts on BAP priority species

²⁵⁹This is not the case everywhere – e.g. the intensively farmed areas of East Anglia have been described as “ecological deserts”.

²⁶⁰This follows the recommendations of Science and Society report from the House of Lords Science and Technology Committee (February 2000), which concluded that it was necessary to broaden the scope and participation of traditional consultation methods and develop processes that create meaningful dialogue between a wide range of parties: including government, business, NGOs, academia and members of the public.

²⁶¹There are many techniques for eliciting the views and values of interested parties on an issue. A forthcoming POST publication (later in 2000) will summarise the 'state of the art' in this area.

²⁶²Taken from a paper presented by Sir Martin Holdgate, at the National Trust/British Association for Nature Conservation Conference, November 1999.

and habitats. English Nature suggests that both approaches are necessary. Focusing only on ecosystem processes misses the small-scale interaction at the level of individual organisms, while focusing on BAP priorities misses wider processes that, ultimately, determine whether conservation will work in practice.

Underpinning the research agenda, there is a need to address the question of dealing with environmental change. Thus, it is necessary to recognise that research into complex, chaotic natural systems is not capable of resolving all questions, and that inevitably large gaps in knowledge will remain.

BOX 4 'LIFESCAPES'

Over the last 10 years, there has been growing acceptance that successful wildlife conservation cannot be achieved just through designated sites. The importance of land use and land management in the areas between and around SSSIs is also a critical influence. The effects of habitat fragmentation and isolation are now widely recognised. While much important activity is taking place to restore degraded habitat within SSSIs, there is still little effort directed towards improving the ecological quality and 'connectivity' of the landscapes between special sites.

English Nature's *Natural Areas* initiative was a step forward, helping to engage local support and awareness, and identify local action. EN now wishes to use Natural Areas as the way to target action onto specified areas of land where there is the greatest likelihood of achieving habitat and species targets over a long timescale. This leads to the need for 'landscape ecology' and incorporating nature conservation with the socio-economic agenda in rural development. The 'Lifescapes' project emphasises the need for action to deliver wildlife within landscapes, and to highlight that biodiversity is related to quality of life. There are two key components, environmental and socio-economic. The environmental element relates to habitat re-creation, and encouraging more environmentally sensitive land management around habitats. This includes creating buffer zones around, and corridors between, designated sites, and enabling the delivery of 'environmental services' such as flood plains. The socio-economic aspect relates to 'sustainable development' - widening the appeal biodiversity beyond its 'traditional' supporters. It aims to create more attractive countryside, and boost rural tourism in areas where it may not yet be significant, such as the new National Forest. It also allows for enhanced local distinctiveness and 'branding', especially for food and other products.

Source: English Nature

Acknowledging this, some have suggested that ecological research could become more closely aligned with conservation practice in a process of 'learning by doing' (or 'adaptive management'). This approach would produce a range of practical management strategies for particular ecosystems, each seeking to be flexible in meeting conservation objectives, but without prescriptive plans that reduce learning from experience. Clearly, ecological research is necessary at many different scales, but a rebalancing of priorities might be required. An opportunity arises for the Government, devolved administrations, nature conservation agencies, NERC and academics to clarify the objectives and scope of ecological research, and to provide a coherent strategy. Indeed, early in 2000, DETR began a series of meetings (to run until the end of 2001), bringing together the research community to improve research networks, provide coherence in research programmes, to identify research needs, and to encourage action.

Lastly, coming back to social issues, there is a lack of empirical evidence on how people relate to nature. This would be useful as it would lead to a better understanding of what is worth conserving, for what reasons, and how it should be conserved. However, there is no one single method, but a range of research techniques (such as group deliberation, questionnaires, surveys and interviews) can draw out, identify and characterise the nature of the relationships between people and nature. Thus, there is a need to develop a broader basis for expressing 'value' beyond the controversial approaches of 'environmental economics' that seek to place monetary values on species, habitats, and landscapes.

PROCEEDINGS OF THE ENVIRONMENT SUB-COMMITTEE RELATING TO THE REPORT

TUESDAY 21 NOVEMBER 2000

Members present:

Mr Andrew F. Bennett, in the Chair

Mr Hilary Benn
Mr Crispin Blunt
Mr Tom Brake
Christine Butler

Mr John Cummings
Mr Brian H. Donohoe
Mrs Gwyneth Dunwoody
Mr Bill Oler

The Sub-committee deliberated.

Draft Report [UK Biodiversity], proposed by the Chairman, brought up and read.

Ordered, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 112 read and agreed to.

Annexes agreed to.

Resolved, That the Report be the Eighth Report of the Sub-committee to the Committee.

Ordered, That the Chairman do make the Report to the Committee.

Ordered, That the briefing note on Biodiversity and Conservation by the Parliamentary Office of Science and Technology be appended to the Report.

[Adjourned till Wednesday 22 November at a quarter past Twelve o'clock.]

PROCEEDINGS OF THE COMMITTEE RELATING TO THE REPORT

WEDNESDAY 22 NOVEMBER 2000

Members present:

Mr Andrew F. Bennett
Mr Crispin Blunt
Mr Tom Brake
Christine Butler
Mr Brian H. Donohoe
Mrs Gwyneth Dunwoody

Dr Stephen Ladyman
Mrs Anne McIntosh
Mr Bill O'Brien
Mr Bill Oler
Mr George Stevenson

Mrs Gwyneth Dunwoody was called to the chair.

The Committee deliberated.

Report from the Environment Sub-committee [UK Biodiversity], proposed by the Chairman, brought up and read.

Ordered, That the Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 112 read and agreed to.

Annexes agreed to.

Resolved, That the Report be the Twentieth Report of the Committee to the House.

Ordered, That the Chairman do make the Report to the House.

Ordered, That the provisions of Standing Order No.134 (Select committees (reports)) be applied to the Report.

Ordered, That the briefing note on Biodiversity and Conservation by the Parliamentary Office of Science and Technology be appended to the Report.

Ordered, That the Appendices to the Minutes of Evidence taken before the Environment Sub-committee be reported to the House.

[Adjourned till Wednesday 29 November at Ten o'clock.]

LIST OF REPORTS

ENVIRONMENT, TRANSPORT AND REGIONAL AFFAIRS COMMITTEE REPORTS IN THE CURRENT PARLIAMENT

Session 1997-98

First Report: Regional Development Agencies (HC415)

Second Report: Sewage Treatment and Disposal (HC 266-I)

Third Report: The Proposed Strategic Rail Authority and Railway Regulation (HC 286-I)

Fourth Report: Air Traffic Control (HC 360-I)

Fifth Report: The Future for Allotments (HC 560-I)

Sixth Report: Sustainable Waste Management (HC 484-I)

Seventh Report: London Underground (HC 715-I)

Eighth Report: Regional Air Services (HC 589-I)

Ninth Report: English Nature (HC 790)

Tenth Report: Housing (HC 495-I)

Eleventh Report: Implementation of the Best Value Framework (HC 705-I)

Twelfth Report: The Departmental Annual Report 1998 and Expenditure 1998-99 (HC 844)

Thirteenth Report: The Protection of Field Boundaries (HC 969-I)

First Special Report: Government Response to the First Report of the Transport Committee (1996-97): The Road and Bridge Maintenance Programme (HC 234)

Second Special Report: Government Response to the First Report of the Committee: Regional Development Agencies (HC 645)

Third Special Report: Government Response to the Fourth Report of the Committee: Air Traffic Control (HC 843)

Fourth Special Report: Responses from the Government and English Nature Ninth Report of the Committee: English Nature (HC 1137)

Session 1998-99

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