CHAPTER 8

Progress with implementation of the Habitat and Species Action Plans

Analysis of 358 reports in 1999 from Lead Partners and Agencies show:

Where biological status is known:

- Five habitats and 33 species are already showing signs of recovery.
- One habitat and 44 species are still in decline.
- One habitat and 58 species are thought to be stable.
- 54% of plans are showing some progress towards their targets.
- Biological status is still unknown for over 70% of habitats and 55% of species, though in most cases surveys have started.
- Widespread species are more likely to be declining than those with restricted ranges.
- The greatest needs for effective plan implementation are more research and survey, extra resources, and better access to information.
- Action Plans are working: species with fuller plan implementation are more likely to show stability or signs of recovery.
- Drawing on reports submitted by Lead Partners, data in the Action Plans themselves and the results of the recent major Countryside Survey 2000, this chapter describes the status of the priority habitats and species and considers how the implementation of their Action Plans is progressing. Many of the issues are discussed in more detail in chapters 11-15.

Lead Partner reports

- 8.2 In 1999, the Lead Partners and Agencies responsible for co-ordinating implementation of the species and habitat Action Plans were invited to submit reports on progress since publication. Reports were received for 358 of the 436 plans, representing nearly all plans apart from those published in October 1999. In the course of 2000 the reports were analysed through the Biodiversity Information Service of JNCC for the purposes of this report. The reports clearly demonstrate that substantial progress has been achieved since the first species and habitat Action Plans were published and that many cross-sectoral partnerships have been successfully and rapidly generated to undertake activities to meet the targets.
- 8.3 The reporting framework has for the first time brought together in database format the threats, actions and targets contained in the individual Action Plans and the themes and issues identified in the UK Action Plan and the Steering Group report. It links these to specific information on progress and constraints reported by the Lead Partners and

Agencies. Analysis of the database has produced much of the information in this and subsequent chapters and will be a powerful tool for future work planning, monitoring and reporting.

Biological status of the priority habitats and species

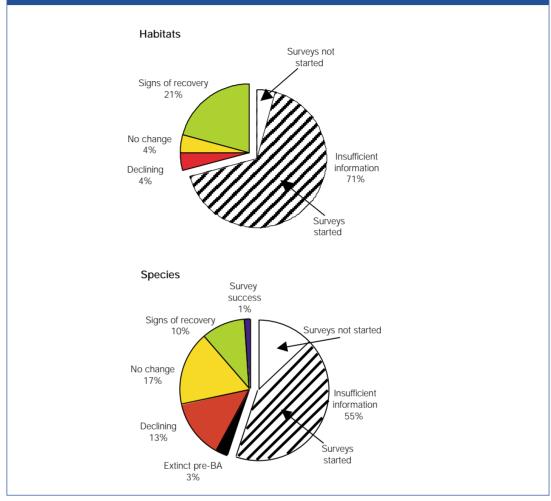
8.4 Lead Partner reports were received for 24 habitats and 334 species and each included an assessment of the biological status of the resource, if known. Encouragingly, signs of recovery are reported for 33 (10%) species and 5 (21%) habitats (figure 8.1). A further 58 (17%) species and a single habitat are considered to be stable, though 44 (13%) species and one habitat (limestone pavements) are reported to be in decline.





Barbary Carpet Moth and Saline Lagoons are showing signs of recovery.

Figure 8.1: Assessment by Lead Partners of species and habitat biological status. 'Survey successes' are species that have been found to be more common than previously thought, as a result of recent survey. For 71% (17) of habitats and 55% (185) of species there was insufficient information for Lead Partners to assess the status of the resource. However, as a result of BAP-initiated actions, surveys have now started for 16 of these 17 habitats and for 139 of these 185 species.



8.5 There are five priority species for which recent surveys reveal more populations than were thought to exist at the time the plans were written. This may also be the case for other species for which survey work is now underway. In the light of the survey findings, the targets and actions for these species are, in many cases, no longer appropriate and Lead Partners are concentrating on monitoring, ensuring favourable management and protecting existing populations. Monitoring programmes are particularly important because, despite being more common than was previously thought, these species may still be in decline and in need of conservation action.



Surveys have found that the Killarney Fern is more numerous than previously thought.

8.6 Surveys for nine priority species confirmed that they were extinct in the UK in the wild, all having been lost prior to the inception of their plans. In one case, Ivell's sea anemone *Edwardsia ivelli*, no known specimens now exist anywhere in the world. Work is underway to encourage the re-establishment of the other eight species. Measures include preparing suitable habitat for natural re-colonisation, and undertaking ex-situ conservation programmes in order to establish captive stock for re-introductions. One additional action plan species, the Burbot *Lota lota*, is also currently extinct in the UK. The plan for the Burbot was published in October 1999, after the reporting round, and so no Lead Partner report was received. There have been no known new UK species extinctions reported in the period since the UK BAP's inception.



Black-veined moth

Priority Habitats and Species showing signs of recovery

Habitats

Cereal field margins Native pine woodlands

Reedbeds Saline lagoons Upland oakwoods

Species

Otter Field cricket

Greater horseshoe bat
Lesser horseshoe bat
Ladybird spider

Bittern Ribbon-leaved water plantain
Stone curlew Creeping marshwort
Cirl bunting Lundy cabbage
Concrake Lady's Slipper orchid

Sand lizard Fen orchid
Purbeck mason wasp Holly-leaved naiad
Blue ground beetle Shore dock

Leaf beetle (Cryptocephalus exiguus)Red-tipped cudweedSilver-spotted skipper butterflyTriangular club mossLarge blue butterflyScleranthus perennisReddish buff mothRiver jelly lichenBarberry carpet mothElm gyalectaBlack-veined mothPhalloid fungus

New Forest burnet moth

Priority Habitats and Species still declining

Habitats

Limestone pavements

Species

Red squirrel Fiery clearwing moth Water vole Netted carpet moth

Skylark Freshwater white-clawed crayfish

CapercaillieAnisus vorticulus snailReed buntingFreshwater pearl musselWryneckDepressed river musselRed-backed shrikeShining ram's horn snailRed-necked phalaropeFloating water plantain

Linnet Deptford pink

Corn buntingJuniperSpotted flycatcherGrass-wrack pondweedBullfinchOblong woodsiaTurtle doveTwinflowerGreat crested newtStarry breck-lichen

Narrow-headed ant Calicium corynellum lichen
Great yellow bumble bee Schismatomma graphidioides lichen

Shrill carder bee Scaly breck-lichen
Heath tiger beetle Greater copperwort
Bark beetle Marsh Earwort
Pearl-bordered fritillary butterfly Cornish path moss

Marsh fritillary butterfly

Weissia multicapsularis moss
Heath fritillary butterfly

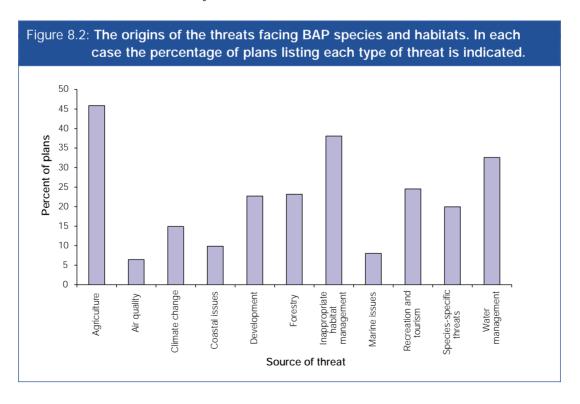
Round-leaved feather-moss

Information gaps

- 8.7 A striking fact to emerge is that Lead Partners were unable to assess the status of 17 (71%) habitats and 185 (55%) species because, at the time of reporting, insufficient information existed to establish current status and whether any change had occurred. There is an urgent need for better information, and this highlights the importance of the framework for surveillance and monitoring of all biodiversity that is currently being developed by JNCC and partners linking to the National Biodiversity Network (see chapter 15).
- 8.8 Despite the large gaps in our current knowledge of biological status, it is reassuring that surveys were reported to be underway for 16 of the 17 habitats and 139 of the 185 species where status was unknown (figure 8.1). Unsurprisingly, the status of species and habitats is better known for those that have had Action Plans in place for longer. In addition, our knowledge of status varies across taxonomic groups of species. For example, substantially more is known about the status of mammals and birds than about fungi, lower plants, butterflies and moths. Lead Partners have seized the opportunity for combined survey action for these less known groups and extensive surveys are currently underway. The excellent progress with baseline surveys is encouraging because they are an important foundation for subsequent action and future monitoring.

Threats to biodiversity

8.9 Each Action Plan identifies the specific threats facing the priority habitats and species. These threats provide indications of the areas in which long-term changes are needed to arrest the decline of biodiversity in the UK.



8.10 The main threats identified in the published Action Plans as causing priority species and habitats to decline are agricultural practices (identified as a threat in 46% of plans); inappropriate management of semi-natural habitats and sites (38%); and water management (33%) especially excessive water abstraction and the pollution of inland

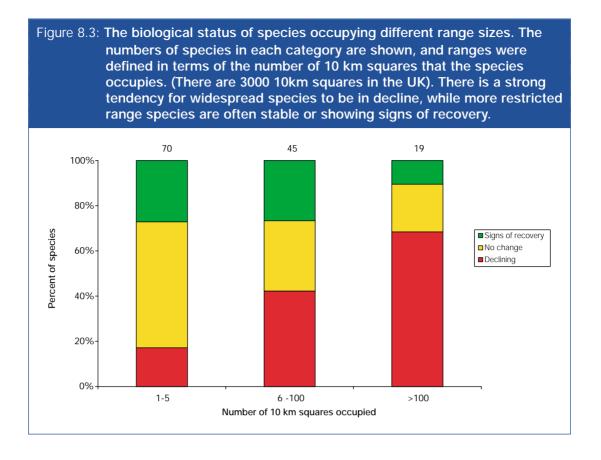
- water systems. The predominance of agricultural impacts is perhaps not surprising given that over 70% of the UK is managed for arable and livestock farming. Increasing agricultural intensification over the past 50 years has led to habitat loss and fragmentation, which have had a profound effect on our wildlife.
- 8.11 Other significant problems are: afforestation and the decline in traditional woodland management for broadleaved trees; urban development and expansion, including the growth of the transport infrastructure; impacts in the marine and coastal environments, particularly over-fishing, pollution and development; invasive species and species competition; and recreational disturbance and erosion. These factors are considered in more detail in chapters 11-14.

Factors affecting the status of habitats and species

- 8.12 While many priority species and habitats are continuing to decline, some are already showing signs of recovery. What accounts for this difference? At this stage there are too few data to make meaningful comparisons across priority habitats, but some general patterns emerge for species. The implementation of the Action Plans already appears to be having a positive effect: there is a greater likelihood that species with longer-established plans will be showing signs of recovery than those with recent plans (28% of tranche 1 species are recovering compared to 18% of tranche 2 species); and progress against actions has a positive effect on the status of species.
- 8.13 One very clear result is a tendency for widespread species to be declining, while those species with restricted ranges are often recovering or stable (figure 8.3). Indeed, only two of the 19 widespread species for which status was reported, the Otter *Lutra lutra* and Lesser Horseshoe Bat *Rhinolophus hipposideros*, are showing signs of recovery. This reflects the success of targeted conservation efforts for those species restricted to few sites, and is a warning of a continued decline in the wider countryside and the need for broad sustainable development policies.



The Ladybird Spider a species with a restricted range is showing signs of recovery.



Change in the wider countryside

- 8.14 Last year, results of the most comprehensive survey of the UK countryside were published. The Countryside Surveys in Great Britain and Northern Ireland provide estimates of the stock (extent and distribution) and measures of the condition (botanical composition and freshwater biota) of the more widespread 'land-based' broad habitats in 1998 and changes in stock and condition of these habitats from 1990 to 1998. The estimates are based on random stratified samples.
- 8.15 Results for each broad habitat can be summarised for the UK as to whether or not the changes in stock and condition are generally moving towards BAP objectives.

Figure 8.4: Summary of changes in stock and condition of broad habitats as reported in the recent Countryside Surveys of Great Britain and Northern Ireland. Assessment of stock refers to net changes in the extent of habitats in the UK, 1990-98. Assessment of condition refers to changes in vegetation composition and biological quality of rivers and streams, in GB, 1990-98. Assessment is made against general UK BAP objectives. (@ = some favourable trends; @ = no significant or consistent change; & = unfavourable trends; ? = insufficient data).

BROAD HABITAT	STOCK	CONDITION		
Arable and horticultural	©	©		
Improved grassland	©	8		
Boundary and linear features	©	8		
Broadleaved, mixed and yew woodland	©	8		
Coniferous woodland	©	©		
Calcareous grassland	8	?		
Neutral grassland	8	8		
Acid grassland	8	8		
Bracken	\text{\ti}\text{\texi{\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}}\tittt{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}}\tittt{\tex{\text{\text{\text{\text{\text{\texi}\tiint{\text{\text{\texi}\titt{\text{\text{\text{\text{\text{\texi}\tint{\text{\texi}\	?		
Dwarf shrub heath	(4)	8		
Bog	©	8		
Montane	©	(4)		
Inland rock	⊜	?		
Fen marsh swamp	©	⊜		
Rivers and streams	(9	©		
Standing water and canals	©	?		
Source: Haines-Young et al (2000) Accounting for nature: assessing habitats in the UK countryside, DETR, London.				

8.16 The Countryside Surveys revealed some encouraging improvements in stock and condition of certain habitats (figure 8.4). For example, broadleaved and mixed woodland has increased in area by 5%, while there has been a 17% increase in the area of fen, marsh and swamp. The loss of field boundaries recorded in the 1980s was halted in the 1990s. There has also been an improvement in the condition of arable and horticultural land, especially in some field margins, and of the biological quality of rivers and streams, perhaps reflecting the success of targeted action through agri-environment schemes. However, 50% of the broad habitat types surveyed have declined in either stock or condition, or both. Perhaps the most worrying trend is in the grasslands: three grassland habitats are declining in both condition and stock, with important ramifications for the species they support. (See the website www.cs2000.org.uk for further details).



Fen Orchid is found on fens in East Anglia and sand dune slacks in South Wales.



Greater Horseshoe bats utilise a mosaic of habitats for breeding, feeding or wintering.

8.17 Why are changes in the wider countryside so important? The majority of species require a variety of habitats: only just over one-third of priority species are associated with a single Broad Habitat (figure 8.5). The loss, fragmentation or decline in quality of a single habitat can therefore have a serious impact on the populations of a variety of species, even those not obviously associated with it. A difficult balance exists between targeted conservation of species with urgent requirements and the wider conservation of habitats for assemblages of species with similar needs. Further work is taking place to clarify ecological relationships between species and habitats and the influence of environmental impacts, including climate change, on these relationships.

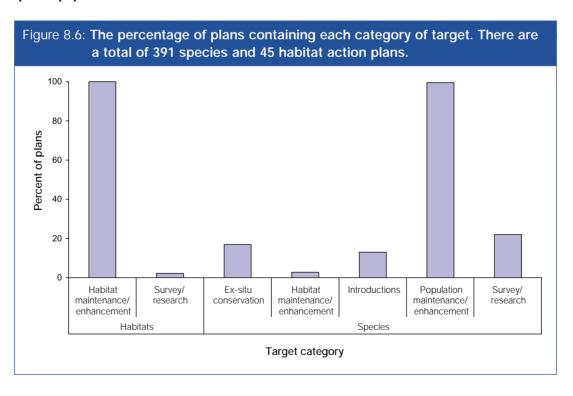
Figure 8.5: Priority species associated with BAP broad habitats. Action Plan species use a wide range of habitats. The 27 broad BAP habitat types shown here cover the entire surface of the UK and its territorial waters and encompass the 45 priority BAP habitats. In some cases ('primary associations') the habitat is very important to the survival of the species, in other cases ('secondary associations') the habitat is less important, but is used at certain times. Acid grasslands Arable and horticulture Boundary and linear features Bracken Broadleaved, mixed and yew woodland Built up areas and gardens Calcareous grassland Coniferous woodland Continental shelf slope Dwarf shrub heath Fen, marsh and swamp BAP broad habitat type Improved grassland Inland rock Inshore sublittoral rock Inshore sublittoral sediment Primary association Littoral rock ■ Secondary association Littoral sediment Montane habitats Neutral grassland Oceanic seas Offshore shelf rock Offshore shelf sediment Rivers and streams Standing open water and canals Supralittoral rock Supralittoral sediment 0 20 40 60 80 100 120 Number of priority species

What type of progress has been achieved?

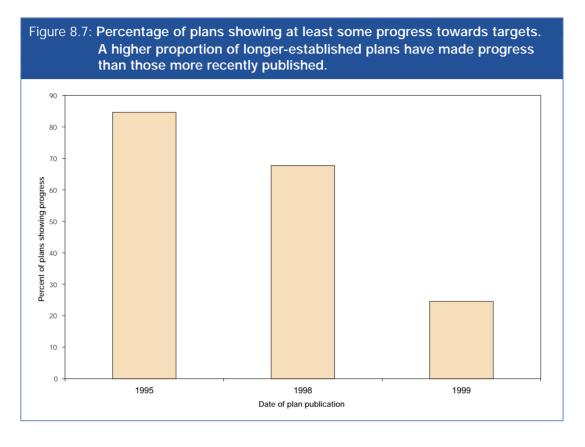
8.18 We can identify three main types of progress achieved since the Action Plans were published, one relating to biological progress (with biological targets) and the other two relating to the process itself (implementing action and commitment to partnership).

BIOLOGICAL TARGETS

- 8.19 The Action Plan approach involves a commitment to the delivery of biological targets, which if achieved, would contribute to an improvement in the conservation status of the priority habitats and species. The targets are measurable and often time-limited.
- 8.20 The targets are estimates based on what specialists and experts considered achievable at the time the plans were written. Consequently, achieving a target may not always represent the final conservation objective. Furthermore, as circumstances change or progress is achieved, the targets may need to be reviewed. This is particularly the case for those species and habitats lacking baseline biological status information. The Targets Group is considering procedures for future review of targets and for ensuring that the lists of priority habitats and species remain dynamic. It will continue to be important to work to realistic and measurable biological targets and ensure appropriate actions are in place.
- 8.21 The published targets are primarily aimed at the maintenance and enhancement of species populations and habitats (e.g. through restoration, see figure 8.6). In some cases, targets also exist for research and survey work (1 habitat and 86 species), and several species have targets for introductions and ex-situ conservation (51 and 66 species, respectively).
- 8.22 There has been some progress towards all types of target. Greatest success has been achieved towards research and survey targets, with 74% showing some progress. Less progress has been made towards other categories, reflecting a need for research and survey before other conservation actions are taken. In total, there has been progress towards 51% of habitat maintenance and enhancement targets, 39% of introduction targets, 36% of ex-situ conservation targets and 35% of those for the maintenance and enhancement of species populations.



8.23 Seventeen habitat plans (71%) and 177 species plans (53%) have achieved some progress towards their targets, together representing 54% of all plans for which reports were received. The proportion of plans achieving progress has been similar for species and habitat plans published in the same year, with the greatest progress being for the 1995 action plans (85%) and, as expected, less for plans published in 1998 and 1999 (68% and 25% respectively, see figure 8.7).

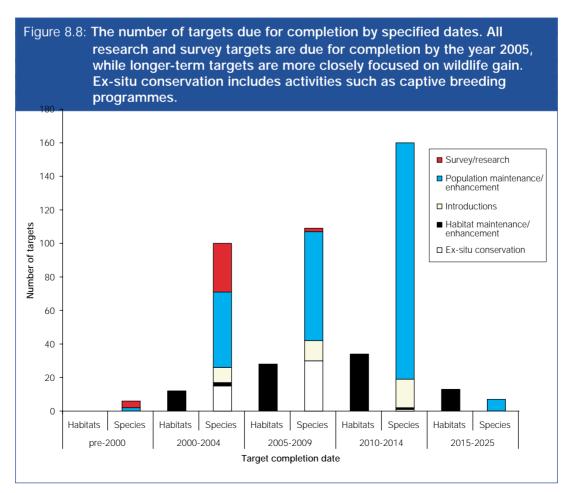


- 8.24 Eighty-six plans (representing 24% of reports received) are showing progress towards all their targets. The majority of these plans are for species that have become restricted to a few sites, and the success has been in maintaining and protecting the remaining populations, or finding new colonies. For example, implementation of the Action Plan for the Green Shield Moss *Buxbaumia viridis*, formerly known at one site in Scotland, has consolidated the moss's population at its known site, generated new research to ensure that it will be properly managed into the future, and led to the discovery of a new population. In addition, there has been progress towards all targets for nine habitats and a number of more widely distributed species. An example is the Corncrake *Crex crex* whose decline has been reversed thanks to a change to more sensitive farming techniques, backed by financial incentives including the Corncrake Initiative.
- 8.25 At the other end of the spectrum, no progress has been recorded towards the targets of 164 plans (46%). Most of these plans are recently published and there is insufficient information for Lead Partners to determine whether or not any progress has been made. However, they also include some long-established plans where particular problems have arisen.



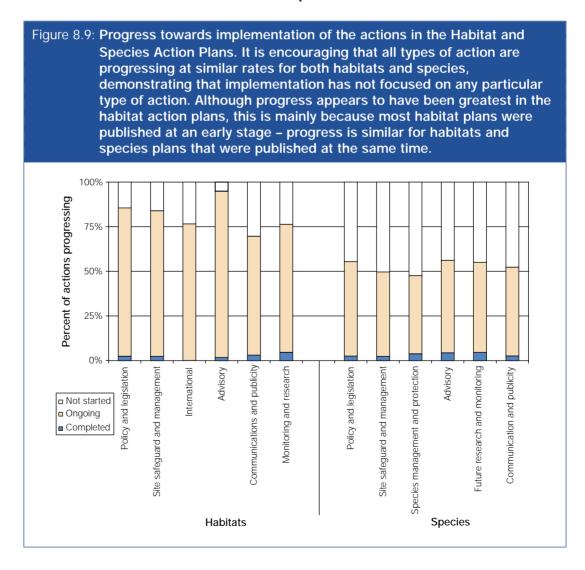
Collisions with fencing erected to protect woodlands from deer contribute to the decline in capercaillie populations.

8.26 Where appropriate, deadlines for completion were specified for the Action Plan targets. Completion dates were defined for 440 targets (some 40% of the total) and they range from 1996 through to 2025, with over 95% due for completion by the end of 2010 (figure 8.8). Many of the early targets relate to research and survey or the establishment of ex-situ conservation programmes, while the longer-term targets are focused on wildlife gain, for example through the maintenance and enhancement of habitats or through species re-introductions. Six targets were due for completion by the time the Lead Partner reports were received in the Summer of 1999. Five of these had been achieved and there had been good progress towards the sixth. In 1999 there had also been encouraging progress towards the year 2000 targets, with about 85% showing at least some progress.



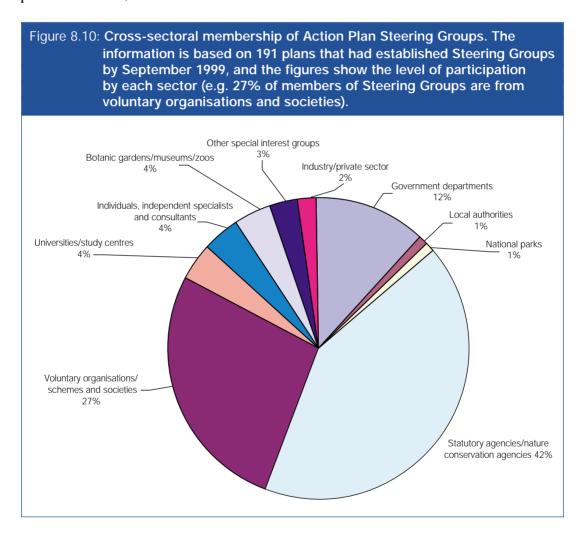
IMPLEMENTING ACTIONS

- 8.27 The actions defined in each plan help to steer and prioritise the activity of Action Plan Steering Groups and inform regional and local action. Across all plans, 53% of actions were either underway or completed and 284 plans (79%) had made some progress against one or more actions. As might be expected, there had been greater progress in the plans published in 1995 (tranche 1 Action Plans), than those published in 1998 and 1999 (tranche 2). Only three (3%) tranche 1 species Action Plans had made no progress on actions, while for tranche 2 species the figure was 72 (33%). In 67 of these 72, broad-scale action was being planned to address the requirements of several plans simultaneously (for example, concerted action was intended for 35 lower plants and fungi). All habitat plans had made some progress with the exception of eutrophic standing waters, for which action was to be undertaken in co-ordination with the mesotrophic lakes action plan.
- 8.28 Broadly, Lead Partners and Steering Groups were starting to make progress on all types of actions. This is encouraging because some actions, for example those relating to policy, are likely to require considerably more cross-sectoral commitment and effort than others, such as site-specific management actions. Progress against actions will continue to be assessed in the future, however it is worth noting that some, particularly those relating to monitoring, must be continuous, and so can never be 'completed'.



PARTNERSHIP AND COMMITMENT TO THE PROCESS

8.29 The Action Plans have proved successful in galvanizing activity and developing partnerships. By the summer of 1999, around one third of all plans had a specific work plan in place, rising to two thirds of 1995 Action Plans. 87% per cent of HAPs and 53% of SAPs had a steering group to guide and oversee activity. The figures rise to 100% and 72% respectively for the more established (tranche 1) plans. Steering Groups, where they exist, draw a broad membership from government departments, statutory conservation agencies, voluntary conservation organisations, and from individual specialists, academia, botanic gardens, museums and industry. Information about the membership of Steering Groups was available for 191 plans. Together they involve 243 organisations with an average of 8 members per Steering Group. The lowland wood pasture and parkland HAP had the most partners involved, at 33.



8.30 The commitment of such a range of organisations to the preparation and implementation of over 400 individual Action Plans speaks largely for itself. Entec's report noted that a high number of respondents agreed that the action plan process produced targets that for the first time provide a clear definition of objectives and priorities, a focus for action and a good means of measuring achievements. Others commented that the focus on priority species and habitats was a good means of engaging organisations including business and the general public, raising awareness of the plight of species and providing a common agenda for action. At the same time, there was an acute awareness of the need to avoid planning for its own sake and the risk of mistaking activity in the action planning process for gaining real achievements on the ground. There remain significant challenges in keeping the process alive.



Plantlife's 'Back from the Brink Campaign' has sought to raise awareness of threatened plants like the Deptford Pink.

Constraints to progress

- 8.31 Lead Partners identified a number of constraints to action and highlighted changes that would advance implementation (table 8.1). Many constraints are common to a substantial number of Action Plans and would benefit from pooling effort and developing common approaches. By far the most frequently cited requirement, identified in 299 plans, was for further research and survey, as discussed earlier in this chapter. Other needs identified include: extra resources to overcome shortfalls in staff time and funding (176 plans); better access to existing biological information (169 plans); improved public awareness and wider support (163 plans); and changes to agri-environment schemes, particularly their voluntary nature (99 plans). Some of these issues are discussed in more detail in chapters 9-15 to follow.
- 8.32 Interestingly, the major cross-cutting issues which impact on many species and habitats, such as changes in the Common Agricultural Policy or ameliorating the effects of climate change, featured less frequently as perceived constraints than might have been expected. We suspect this is because Lead Partners focused on the specific issues that would more immediately influence the implementation of their individual species or habitat plan and where support from the biodiversity partnership will continue to be important.
- 8.33 It is unsurprising that resources are seen as a significant constraint by such a large number of Lead Partners. The BAP costing study by Baker, Shepherd, and Gillespie (see chapter 7 and Appendix 7) drew no generally applicable conclusions about where the resource pressures are most keenly felt. Certain plans have been highly successful in drawing down funding from central sources (such as the EU and the National Lottery). Others have identified opportunities for joint action (for example, by delivering species targets through habitat action), or made links with business champions. We expect the developing HAP/SAP database (see chapter 15 and Appendix 6) to continue to facilitate the identification of actions and funding requirements that are common to a number of plans and where cost-effectiveness can be improved. We are generally confident that the existence of the Action Plans has begun to provide a focus for the prioritisation of expenditure from other main programmes (such as agri-environment, woodland and water management schemes) and we expect this process to continue and intensify.

Table 8.1: The top 20 changes that would aid Action Plan implementation, as identified by Lead Partners for 358 plans (24 habitats and 334 species). The amount of information provided by Lead Partners varies, consequently, in the less comprehensive reports, some constraints to implementation may not have been identified, so the figures presented here may understate the position.

Requirement identified by Lead Partner	Percentage of plans		
·	Habitats	Species	Total
Additional research and survey	87.5	83.2	83.5
Extra resources (funding and staff time)	91.7	46.1	49.2
Improved access to information (e.g. a national database)	83.3	44.6	47.2
Improved habitat and species management	87.5	44.3	47.2
Communication and publicity to achieve increased			
involvement and awareness among land-owners,			
managers and the general public	75	43.4	45.5
A need for ex-situ conservation and reintroduction			
programmes	0	29.6	27.7
Changes to agri-environment schemes	91.7	23.1	27.7
Habitat enhancement (increasing habitat area and/or quality)	66.7	24.6	27.4
Increased protection on statutory sites (including designation			
of additional sites)	70.8	22.5	25.7
Legislation and policy changes	79.2	18	22.1
Changes in farming practice	58.3	18.9	21.5
Improved management of fresh water systems	29.2	10.5	11.7
Improved conservation outside protected areas	41.7	9	11.2
Reducing the impact of tourism and human recreational			
activities	16.7	10.2	10.6
Changes to the Common Agricultural Policy	62.5	5.4	9.2
Improved species-specific management (reducing the effects	00.0	0.4	0.0
of competition, non-native species, hybridisation or disease)	20.8	8.4	9.2
Reducing pollution	20.8	6.9	7.8
Reducing the impact of building works and other human	10.5	F 4	F 0
development	12.5	5.4	5.9
Ameliorating the effects of climate change	12.5	4.2	4.7