



WORLD PHEASANT ASSOCIATION REPORT

**SPECIES SURVIVAL COMMISSION ACTION PLAN  
EVALUATION**

**Philip McGowan**

**September 2001**

**World Pheasant Association**  
P.O. Box 5  
Lower Basildon  
Reading  
Berkshire RG8 9PF  
U.K.

**CONTENTS**

Executive summary	3
1. Introduction	5
1.1. The value of SSC Action Plans	6
1.2. SSC Strategic Plan	6
1.3. Terms of reference	7
2. Methods	7
2.1. Decide on three Action Plans	7
2.2. Design a telephone interview method	8
2.3. Carry out a series of in-depth telephone interviews	8
2.4.	

## **EXECUTIVE SUMMARY**

The Species Survival Commission has been publishing Action Plans under the auspices of IUCN since 1986 and now more than 60 plans have been published in what is now a well-established series. There are, however, doubts about the amount of real conservation action that they stimulate and so SSC has commissioned an evaluation of some aspects of its Action Plan Programme. The first phase of the evaluation assessed the type of actions that were recommended in 42 Action Plans. Although the way in which recommendations were categorised was artificial, some clear conclusions did emerge. The two most significant were that there was little consistency between plans in the way that recommendations were developed and presented; there was a broad division between general recommendations and specific actions; and that research of one form or another comprise a large proportion of the recommendations: 54% of all recommendations, and 39% of specific recommendations.

Phase 2 sought to assess the implementation of recommendations in a subset of 12 plans. Data were received on only six, four (equids, lagomorphs, otters and crocodiles) of which were complete assessments of the status of all priority projects identified in the Action Plans. A further response (cetaceans) provided information on the status of 50 of 56 priority projects and the sixth plan (canids) was only partially completed. The four complete responses reported on the progress of 284 recommendations, 18% of which were considered complete, 50% ongoing and 32% not started. A lack of resources (funds and/or personnel) was the reason that nearly half had not been started and political sensitivity accounted for a further 17%. Using the artificial categorisation of actions adopted in Phase 1, nearly 70% were classified as either research or ecological management.

This report presents Phase 3, which was designed to be a case study of three Action Plans that had been involved in Phase 2. Five plans were assessed to some degree, equids, lagomorphs, cetaceans and canids in some detail, and crocodiles to a lesser degree. In addition, the SSC management of the process was assessed, as was the value of the plans to a selected external (i.e. non-SSC) audience. It is recognised that the plans evaluated were a self-selecting groups plans that have been produced by exceptionally motivated and active Specialist Groups. Therefore, rather being a representative sample of SSC Action Plans they should be seen a selection of the most actively pursued plans.

There has been a considerable amount of action on Action Plan recommendations, and this has involved individuals from government research and management, universities and non-governmental organisations. Furthermore, the plans are seen as valuable resources by stakeholders as diverse as multilateral environmental agreement (CITES and International Whaling Commission), non-governmental organisations (Wildlife Conservation Society, WWF-US and the People's Trust for Endangered Species) and other parts of IUCN (Protected Areas Programme). It is difficult to say the degree to which conservation actions have taken place solely because of the publication of the Action Plans, and to some extent this question is notogasuestion is notogasuestion r,gld8this question is noto2999e,09. 5.

There has been little guidance provided to the Specialist Groups on how recommendations should be developed, and whilst the Secretariat had been hoped that these would not be limited to biological recommendations, there was no clarity in how these wider recommendations could be developed realistically. Two additional problems with framing recommendations were the breadth and diversity of the target audiences that the plans sought to reach, and a lack of any Action Plan recommendation implementation framework. Together, these meant that plans varied significantly in their recommendations: some recommend actions that the Specialist Groups themselves could implement within a five-year period, whereas others made more broad and ambitious recommendations.

The importance accorded to Action Plans within SSC appears to have changed considerably in the 15 years that the programme has been running. From being at the core of SSC's activities, the taxon plans now barely feature in the 2000-2010 SSC Strategic Plan. It is, however, not clear on what basis Action Plans have been demoted down the SSC workplan, other than the untested assumption that they are not having a significant impact.

The options are: 1) continue with the current process; 2) stop publishing taxon-based Action Plans; and 3) change the Action Planning Programme. Continuing with the current process does not appear feasible, partly because of SSC Secretariat resource constraints, but also so many different audiences now demand information on issues facing biodiversity and assessments of conservation priorities. It is almost certain that a single document cannot satisfy all of these demands and therefore, at the very least it is desirable to tighten the focus of the plans and target them towards explicitly stated audiences.

If SSC was to stop publishing Action Plans, it is likely that some Specialist Groups would find this very difficult to comprehend, having been so actively encouraged to produce them in the past. Should this option be chosen it would have to be very carefully managed and the change explained as a positive one, if at all possible. In terms of conservation impact, it is likely that some information that is important to the conservation process, and on the ground conservation action has resulted from the implementation of some Action Plan projects. It is ap



section. This is especially

higher levels still. Through the development of the Species Information Service (SIS) more problem-orientated analyses and outputs will be possible in response to the increasingly complex questions being addressed by national and international biodiversity agencies. Problem-oriented integrated Action Plans (e.g. for specific regions or countries) will receive higher priority than the traditional taxonomic-based ones.”

It was not, however, stated explicitly why this change in emphasis was required. In the paired-ranking exercise used to determine priorities, the importance of the ‘problem-orientated’ Action Plans compared with taxonomic Action Plans is indicated by the adoption of “Problem-oriented, interdisciplinary Action Plans addressing sign Tm1[020.98 98 m3.96116ion3j0.0004 Tc 0.1266 3.5402disgn Tm1[0





#### **2.4.1. Phase 1**

Phase 1 was concerned with assessing the type of actions that were identified as priorities in the Action Plans and determining whether these had changed over time. Forty-two Action plans were included in this assessment (carried out by SSC intern Joshua Shachter). The full report is presented at Appendix 1.

#### **2.4.2. Phase 2**

Phase 2 was concerned with assessing the degree to which the priority actions identified in a set of Action Plans had been implemented. Twelve Action plans were identified at the start of this assessment (carried out by SSC intern Ammy Gillesberg), although replies were received on only six. The full report is presented at Appendix 2.

#### **2.4.3. Phase 3**

The present study was the third and final stage of the evaluation and it was designed to assess whether the Action Plans had influenced the amount of conservation action that had taken place. Given the variety of problems associated with this kind of study (see Gimenez-Dixon and Stuart 1993), the approach that was adopted (see Terms of reference in Section 1.3) was to carry out case studies of three Action Plans (see Section 2.1).

#### **2.4.4. Other SG evaluations**

The World Pheasant Association (with the relevant Specialist Group) undertook an evaluation of the value of the three 1995-1999 Galliformes Action Plans when these were revised in 1999. The emphasis and approach were different from the present study, as the data were collected through a questionnaire survey of the people that had carried out each project (Principal Investigators). In this survey they were asked reasons why they had carried out the project, how the objectives related to those stated in the Action Plan, whether the Action Plan and the Specialist Group endorsement was important in securing funds and what publications and reports, and conservation action had resulted from the work. A draft manuscript from this evaluation is presented at Appendix 4, and is not for further circulation.

### **3. RESULTS**

#### **3.1. Decide on three Action Plans**

The Action Plans that have been selected for this exercise are:

1. Rabbits, hares and pikas (Lagomorphs: Chapman and Flux 1990);
2. Zebras, asses and horses (equids: Duncan 1992);
3. Dolphins, porpoises and whales (cetaceans: Reeves and Leatherwood 1994); and
4. Foxes, Wolves, Jackals and Dogs (Ginsberg and Macdonald 1990)

Some information was also collected on

5. Crocodiles (Thorbjarnarson *et al.* 1992)

These were the groups that provided the most complete responses to Phase 2 of the evaluation.

#### **3.2. Design a telephone interview method**

The questionnaires are appended at Appendix 4 and their content is summarised below.

##### SG planning and process

The intent of this questionnaire was to determine why an action plan had been compiled, what its objectives were and the nature of the compilation process. It was targeted at compilers, authors or editors.

##### Product quality and content

This questionnaire was designed to assess the confidence that users had in the plan. A question in the 'non-SSC' questionnaire also addressed this.

Process management and distribution by IUCN Secretariat

This was really designed to describe the process by which the Secretariat manages the compilation of Action Plans and then promotes them to those able to act.

Implementation of Action Plan recommendations

The intent of this questionnaire was to ask researchers, government officials and others about the degree to which they have taken notice of the priorities stated in Action Plans in their work, and whether the plans guided their efforts to any great effect.

Utility of Action Plans for non-SSC people

This questionnaire was designed to ask those people not involved in SSC about their perceptions and use of the plans. The interviewees were also asked whether the plans did not cover areas that they would find useful.

**3.3. Carry out a series of in-depth telephone interviews**

Telephone interviews were carried out with:

SG planning and process

Josh Ginsberg (Canid AP co-author)

Patrick Duncan (Equid AP editor)

John Flux (Lagomorph AP co-compiler and co-editor)

Randall Reeves (Cetacean AP co-compiler)

Product quality and content

Mariano Gimenez-Dixon (Programme Officer)

See also those listed under "Utility of Action Plans for non-SSC people", where there were two questions related to this (see Appendix 4).

Process management and distribution by IUCN Secretariat

Mariano Gimenez-Dixon (Programme Officer)

Linette Humphrey (Publications Officer 1987-2000)

Simon Stuart (Species Programme until 2001: also some questions on planning and process and quality and content)

Craig Hilton-Taylor (Red List Programme Officer)

Implementation of Action Plan recommendations

Ann Oakenfull (Equid AP)

Ken Sugimura (Lagomorph AP)

Brian Smith (Cetacean AP)

Fernando Cervantes (Lagomorph AP)

Gopinathan Maheshwaran (Lagomorph AP)

Peter Novellie (Equid AP)

Claudio Sillero-Zubiri (Canid SG)

Perran Ross (Crocodile SG: electronic fe

Phil Clapham (National Marine Fisheries Service, US: e-mail discussion)

**3.4. Summarise findings of all three phases of the action plan evaluation and those of other SGs**

The earlier two phases of the Action plan evaluation were obtained and assessed. The evaluation carried out on the 1995 Galliforme

1. the evaluation did suggest that a large number of recommendations were research orientated, although this may be overstated in this evaluation because of the way in which recommendations were classified;
2. some actions were presented in a very specific manner and others were presented as more sweeping aspirations. The relative merits of these two approaches seem likely to depend upon the audience; and
3. there was little consistency in the way that priorities for action were presented, both in terms of format and content.

### **3.4.2. Phase 2**

Phase 1 was concerned with assessing the degree to which the priority actions identified in a set of twelve Action Plans had been implemented. The full report is presented at Appendix 2.

Information was gathered on the progress of all recommendations in four Action Plans (lagomorphs, equids, otters and corcodiles), virtually all projects in the cetacean plan and some of the actions in the canid plan. These four plans had made 284 conservation recommendations. The responses indicated that 18% were complete, 50% were ongoing and 32% were not started. Of the actions not started, lack of resources (both funding and people) was the most significant factor, although impracticality and political sensitivity were also important reasons.

Gillesberg classified the actions that been proposed into the categories used by Schacter and concluded that nearly 70% were "Research" or "Ecological management". "Ex-situ management" and "Legislation and policy" recommendations were fairly equally represented and together accounted for a further 20% of recommendations. It is not clear which type of actions comprised the recommendations that were completed and which

SSC Action Plans were first produced in the 1970s (for elephants, rhinos, primates, marine turtles and crocodiles) for WWF, which was then the fund-raising part of IUCN. In the mid-1980s Simon Stuart was employed with the task of promoting a rather different Action Plan programme that would be aimed at a broader target audience. Indeed the audience was seen as any organisation or government that might be in a position to implement them. In 1990, SSC had received the 'Oman gift', which was a USD1 million donation from the Sultanate of Oman that was allocated to Specialist Groups for the preparation of Action Plans and for promoting their implementation. This gift was a significant boost to the Action Plan programme. In April 1991 SSC had 3227 members.

The programme was designed to re-orientate the idea behind the plans that were compiled for WWF in the 1970s. The relaunch was seen as a way of re-invigorating Specialist Groups and encouraging them

It is considered that the plans have helped contribute towards SSC's targets, although the degree to



The Red List and the Species Information System have both adopted Authority Files (see < [www.iucn.org/themes/ssc/sis/authority.htm](http://www.iucn.org/themes/ssc/sis/authority.htm)>) for the coding of information for Habitats, Major Threats, and Conservation Measures. When identifying conservation measures needed “assessors are asked to be realistic and not simply select everything. The selection should be for those actions which are most needed and which could realistically be achieved in approximately the next five-years.” Although assessors can add more detail for each measure, it is expected that most will simply state the action needed as one or more bullet points. Therefore, there is a clear link between this part of the Red List and the function that the Action Plans are perceived to serve. It is anticipated that one of the indices that will be published every four years or so will be an index of how many of these needed actions have been carried out. This document will then be used for advocacy purposes.

## 2. *Rabbits, hares and pikas Action Plan*

**Production of the Action Plan.** The Lagomorph Action Plan was compiled because SSC requested that it be done. The final chapter, which stated what the conservation priorities were for this group of 80 species, was produced once the other chapters were written. Different people who were involved had different ideas about what the objectives of compiling the plan should be. Broadly, there was a desire to bring all information together and assess the status of species. However, there was concern that a lack of information on some species meant that there was not even a basic idea of what the conservation needs were for those species. As a result, some field visits were carried out beforehand to talk to relevant people, e.g. visiting Sumatra to collect local information to include in the plan and one SG member travelled from the UK to India to look for the hispid hare so that some comments could be made about its conservation requirements.

The plan took more than two years to compile, which was too long, but it was not really possible to make this time any shorter as the reliance on volunteer effort was so significant. There were 5-10 Specialist Group members heavily involved in the compilation and a further 11-20 provided a smaller amount of input. Most of the relevant people who were known to the compilers were involved, although there were some specialists who would not join groups like the Lagomorph Specialist Group. The SSC Secretariat was involved in the process right from the start and was very responsive to all matters that arose.

The plan was not written with a definite shelf-life in mind and so it was not explicitly stated that the recommendations should be implemented within a five or ten year period. There were probably two limitations to the type of action that was proposed. The first was that because there was such a lack of information for some species, it was just not possible to state what action was required with any confidence. For example, the highest priority stated for the Sumatran rabbit *Nesolagus netscheri* was to locate the species in the wild. The second limitation was that the plan was largely written by biologists and so the recommendations were largely proposed from that perspective.

There was no strategy to implement the plan once it was published and it was felt that project initiation would be opportunistic. Rather it was intended that the plan be targeted at the global conservation community, and especially at students given that many of the projects proposed involved global





Direct conservation gains have followed. For example, as a result of a big project on the status and abundance of *Lepus* carried out in the mid-1990s, he suggested to the Mexican government that that they should not allow the most threatened species to be hunted when they were writing the regulations that determined the hunting season. The government agreed and omitted the species. However, there is illegal hunting.

**Implementation of Amami rabbit recommendations in Japan.** Work on the Amami rabbit began in 1985 with funding from the US based East-West Centre and subsequently WWF-Japan, and then a private Japanese insurance company. This work is being carried out by the Research Head of the Environmental Planning Laboratory of the Forest Management Division in the Japanese Forestry and Forest Products Research Institute. In 1985 clear felling was a problem for this and other Amami species. Introduced species were seen as a problem in 1992. The Japanese governmental researcher is involved in this work only partly because it is in the Action Plan, the other main reasons being that it is a national priority for non-governmental organisations in Japan, and through his interest in Am

accepted that a lengthy compilation was in the nature of the exercise. Furthermore, it compilation of the plan was seen as part of the process of conserving equids, and that0 9 502.g5p a68 747.20057.0006 did notss



#### ***4. Dolphins, porpoises and whales Action Plan***

**Production of the Action Plan.** The plan reviewed here, the 1994-1998 version was produced as a response to perceived expectations. There was an Cetacean Action Plan published in 1988 and which was updated in 1989. Then the Chair of the Specialist Group changed and the new Chair believed that the Specialist Groups were expected by SSC to produce plans at five-yearl

The Specialist Group has made significant progress on the implementation of many of the projects stated in the Action Plan. There are projects, notably those on the right whale (projects 2 and 3) that are being pursued by the United States National Marine Fisheries Service that do not involve the Specialist Group and are not influenced by the Action Plan. The issues here is that the work is being covered by the relevant US governmental agency. However, the Action Plan's summary of the status of the stock and the problems facing it is in accordance with that of the United States National Marine Fisheries Service. There would be merit in IUCN maintaining better contact with the Service to see if there are areas where they have a mutual practical interest. Overall, these are a very small minority of projects that fall into this cCN



plan means that it is now used less and a new plan is eagerly awaited. This is because although the broad needs are similar, different activities are now required to address them. The Action Plan proved a very valuable overview of issues and a good introduction to the Specialist Group and it is this contact with the Specialist Group that is now more important. All parts of the plan were valuable, but the assessment of key issues was most important initially. The indication of priorities was also very important as this provided a guide as to where resources should be spent. The final part of the plan that was very often used was the listing of taxonomy and conservation status.

The Head of the programme had a very high opinion of the technical content of the plan and this is now bolstered by respect for many of the authors that she has now dealt with. The plan was a great resource in creating the programme as she was determined not to overlap needlessly with other work, but to find a discrete and valuable niche. In considering what areas might be useful, it was felt that more material on the Red List would be useful, such as the biological data that were used to determine which criteria were met.

It would be possible to promote an Action Plan to other members of the WWF family and it has already been important in highlighting the importance of by-catch to cetacean conservation. The Action Plan was used in justifying this to WWF-US and now WWF-US is building this initiative up and hopes that other offices will help and take this on. There is to be a meeting on the by-catch issue in January 2002 to be attended by both cetacean conservationists and fisheries personnel. The Head of the WWF-US Whale and Dolphin Conservation Programme also co-ordinates action on threatened whales, dolphins and porpoises for the whole WWF family and so keeps track of all WWF projects.

In concluding, she was very aware of the immense amount of work that the Specialist Group members put into running the group and Action Planning. Therefore, despite a very tight budget, she indicated that if some intern support or similar was required to help finalise the new Action Plan she would endeavour to see what could be found in her budget and 'chip-in'.

#### ***5. Foxes, Wolves, Jackals and Dogs Action Plan***

**The production of the Action Plan.** This Action Plan was effectively authored as it put together by a postdoctoral research fellow working at Oxford University with the Canid Specialist Group Chair. SSC had asked the Canid Specialist Group Chair to compile an Action Plan and there had been some work over the previous two years towards this, although progress had been slow. Broadly speaking, the plan aimed to carry out most of the functions that have been ascribed to Action Plans, namely bring all conservation information on the species group together, review the information that was available on the species and assess their status, set priorities, and state the action that was most needed for the group. With hindsight, the priority-setting is now seen as the weakest part and it is felt that perhaps this part should have been put at the front.

Contact with the SSC Secretariat started right at the beginning and was good throughout. The other parts of SSC that were contacted were the Trade Programme and the Wolf Specialist Group. The Law Centre was the only part of the rest of IUCN th





Overall, he feels that many of the actions in the Canid Action Plan were vague and that the recommendations that stand the best chance of being implemented are those that are manageable. For example, 'reduce habitat loss' is simply too big an issue, and how would it be tackled? Within the bounds of a five-year plan, any recommendations must be realistic and specific. He feels that there is no direct evidence that the plan has influenced decision-makers or conservation managers. In contrast there is some evidence that the two single species plans have achieved this.

The two single species plans were collaboratively written by those working on the relevant species programmes and therefore the Canid Specialist Group Conservation Officer feels that there is clearer guidance in those plans on what action is required than in the plan for all canid species. This clarity extends to the type of project, its duration and cost and in the case of the Ethiopian wolf, the plan has been cited in all applications made since 1996 (e.g. to the Born Free Foundation, Fauna and Flora International and St. Louis Zoo.). Whilst generally dismissive of the support provided by IUCN for any activities, he did concede that the names and logos of both IUCN and SSC were useful when making these applications. Indeed, he felt that this was the only advantage provided by the Action Plan process and suggested that the same content without the IUCN and SSC authority would have less impact.

It was noted that it seemed anomalous to have the European wolf in a separate Specialist Group. Apparently this species is the best canid for raising funds and to have it in a separate group when its appeal could be helping other canids was seen as unfortunate. This, he believes should be addressed. Indeed, perhaps it would be sensible to link the carnivore Specialist Groups in some way so that resources can be pooled and effectiveness increased.

**Donors.** Comments below under "People's Trust for Endangered Species" seem likely to be especially relevant to this Action Plan and the Canid Specialist Group. This is because the Trust has a good relationship with the Chair and has funded Ethiopian Wolf work amongst its projects.

#### ***6. Crocodile Action Plan***

The Crocodile Specialist Group has secured a core group operational budget of about USD65,000 per year, largely from private 0.98 0 0agp9907 0 1343 380.4243 Tm( priva3.0239 Tm( about USD65,0)3 380.4

*Orinoco crocodile (workshop)*

Private donor USD1,500

Japan leather Industry Association USD2,000

WWF-US USD2000

*Cuban Crocodile (producti*~~pan~~ *leather*



Congress in Durban, South Africa in September 2003. Effective networks of protected areas are fundamental to effective species conservation and the Programme on Protected Areas feel this link needs to be developed in a more effective way. As many Action Plan recommendations concern protected area management (see Section 3.4.1 and Appendix 6.1) this would clearly be appropriate.

**European Commission CITES Office.** The Scientific Expert of the CITES Office said that Action Plans are used by the office to a moderate degree. He believes that he does not see all of the plans and is not aware which ones have been published and which are near to publication. Those that have proved useful include the orchid, crocodile and caprinid plans. As the Office is not systematically informed of publication (or near publication), there are almost certainly decisions that have been taken that may have been different if the office and the constituents they serve had been aware of the plans. The most useful part of the plan is the review of information on species and he has a high degree of confidence in the technical standard of the plans. There is probably sufficient biological information in the plans for his purposes, but additional discussion on national and international level management and policy issues would be useful, as would discussion of community level socio-economic issues. Of most interest would be an assessment of whether local communities value species as a resource. It was, however, acknowledged that the Specialist Groups are comprised of volunteers and that it is difficult for them to address these needs as they would require a lot of resources.

issues, and these are basically concerned with the management of species. For example, has CITES listing worked? The Secretariat could help with dissemination to relevant CITES Parties, such as to range States of the taxon concerned and by making them available at appropriate meetings.

Overall, it was accepted that there is a need for a balance between generic recommendations and the specific description of action that can address particular issues and that this can be difficult. The more specific recommendations are also those that are more tangible. The plans themselves do not have a standardised presentation and that can be an obstacle to an audience that has an interest in more than one plan. The Secretariat would like CITES to be an audience for the Action Plans: there are some heavily traded groups that are not covered by an(I3an)Tj10.98 0 0 10.98 291. cwx289.4652 6468nf0 06 106p c:27 s

**Wildlife Conservation Society.** This interview was carried out with one of the regional directors, who has also been involved in producing Action Plans. He found the Action Plans very useful in his work, but the difficulty in obtaining some of them was a significant disadvantage. All parts of the plans were useful, with the review of information on species of most value, followed by the assessment of key issues and the setting of priorities. Overall, the assessment of potential solutions was perceived as the weakest part. The degree of confidence in the technical standard of the plan was generally high, but in some cases it fell short of this. The critical factor is the scientific training of the author or compilers which influences their ability to reliably assess information. The extent of peer-reviewing is also important and there is perhaps a need for guidelines on this.

Considering the content of the plans, the discussion of all of the biological aspects (knowledge of the species, assessment of the issues and the biological recommendations) tends to be satisfactory, but there is always scope for improvement. Dealing with national or international level policy and management issues is problematic in plans that cover many species that inhabit several countries. It may be possible to cover these in single species plans in sufficient detail to be useful. Discussion of community-level socio-economic issues is not really appropriate to SSC plans that should be biologically driven.

Overall, there is trade off between scale and grain: the bigger the scale (i.e. the more species), the coarser the grain (i.e. the less detail). In the late 1980s Action Plans were seen as an amplification of the Red List process, but this does not seem to be the case now.

#### **3.4.4. Other Specialist Group evaluations**

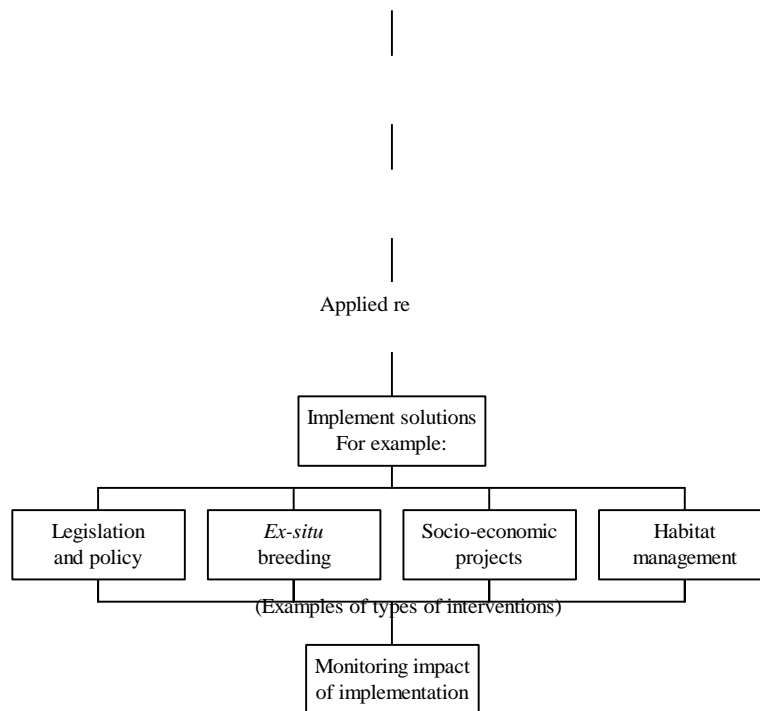
The World Pheasant Association (with the relevant Specialist Group) undertook an evaluation of the three 1995-1999 Galliformes Action Plans when these were revised in 1999. The emphasis and approach were different, as the data were collected through a questionnaire survey of the people that had carried out each project (Principal Investigators). In this survey they were asked: reasons why they had carried out the project; how the objectives related to those stated in the Action Plan; whether the Action Plan and the Specialist Group endorsement was important in securing funds; what publications and reports had been produced; and what conservation action had resulted from the work. A draft manuscript from this evaluation is presented at Appendix 4, and is not for further circulation yet.

The conclusion is that a substantial amount of conservation-relevant output was achieved from Action Plan-based projects. The results also show close involvement by the relevant Specialist Group in funding applications (bearing in mind that the Specialist Groups themselves have no funding directives) and that Principal Investigators were making the link between the profile of an Action Plan project and the chances of securing funding. Perhaps, however, there is room for this link to be strengthened even more.

After breaking down the projects into individual objectives, the picture was slightly different, with fewer of the original objectives being achieved. This was interpreted as showing that projects necessarily evolved as they were carried out, and suggested that it would be unrealistic to expect every specific objective mentioned in the original Action Plan project description to be carried out to the letter. This implies that species-specific project proposals should be written in a way that allows (and even encourages) this evolution, but within a specific framework ensuring that the information collected is useful in directing conservation action.

The over-riding conclusion of the evaluation was that the function of species-based synthesis (i.e. Action Plans) has to be seen as part of the conservation process from the collection of basic information, through the gaining of more sophisticated understanding of issues and solutions to direct intervention and the monitoring of its impact. The synthesis itself cannot be expected to lead to major policy changes at governmental levels simply by virtue of being published. Its essential function is to provide and referee good quality conservation-relevant information and recommendations and so to form of the continual process leading from information gathering to action. Others must play their part if the Action Plans are to be successful in helping to stem the loss of biodiversity.

From information to action in species conservation





Plan Programmes. Whilst knowledge of the distribution and ecology of cats may well b

promotion to governments and other organisations was it really feasible to expect that any action would follow? In practice it was left to the Specialist Groups to drive the implementation of the

Action Plans. Therefore, they are for the most part a sympathetic audience. Again, this is biased, but it does indicate what the potential impact of the plans could be.

It is clear that there is a great many potential audiences for Action Plans. The smallest audience is that which is the most specialised (in terms of biological understanding and the biological detail that it seeks). In contrast, the largest variety of audiences is that which requires least biological detail, but perhaps information in other areas, such as appropriate land-use or appropriate policy changes. These audiences might include planners and hydrological engineers, development agencies, agricultural and forestry agencies etc, none of which require detailed biological information. Is it realistic to aim a single document at all of these audiences? Given that almost every single potential audience will have too much paper on their desks and too many targets to meet, the answer is almost certainly no. A broadly targeted document will not satisfy the demands of the conservation biologist and a document that is biologically highly technical will be incomprehensible to a non-specialist.

Which target audience Action Plans should be aimed at will be affected by the abilities of the compilers to provide relevant information (and the resources available to do so), and the likelihood that these audiences will act on the recommendations. A clearly

in. Such partners should be those who have most interest in the final products and promoting their recommendations.

#### 4.1.4. The nature of the recommendations

As Phase 1 of this evaluation concluded, there is little consistency between plans in the way that recommendations are formulated. This appears to partly due to a lack of any kind of guidance of how to determine what action is needed (i.e. formulate recommendations), but also because of a desire by the Secretariat not to inhibit the Specialist Groups by being too prescriptive. The first of these can surely now be overcome and the second is now arguably of dubious value as there is little reason why plans cannot have a consistent approach to determining what action is required. The lack of consistency was highlighted as an issue in this evaluation, although there were not enough opinions on this to be sure what all of the audiences would find most valuable.

The fundamental dichotomy is between the very detailed statement of what action is needed, right down to costed project outlines, and the much more general recommendations that are almost aspirational in nature. Both approaches have their advocates and which is most appropriate almost certainly depends upon who is expected to act on them.

A second fundamental difference of opinion is the degree to which Action Plans can and should go beyond the biological recommendations. Whilst many potential audiences feel that this is desirable, the resources to provide the necessary extra input are likely to remain in short supply. For example, the IUCN Wetland and Water Resources Programme feel that broader input would make the plans much more useful to their constituents and this would obviously be good news

eesee,nBiodierrsityee teseen679 Tw 10.98 0 0 10.98 71.9998 304152.

bea( psitivhe reuposee tosu(chaosud)Tj10.98 0 0 10.98 48605323 68.92323 Tmggesctionn)Tj0.006

An example of a UK Biodiversity Action Plan is given at Appendix 5 (Section 6.5); that for the black

The increasing

Given these other information products that SSC is proving, it may be time to re-orientate (and re-brand) the Action Plan Programme. The suggestion made by the CITES Secretariat that what is really needed are “Conservation Management Guides” is definitely worth serious thought. Such guides could be compiled by Specialist Groups and would have a clear focus. These could be more thorough consideration of the key issues (such as hunting or by-catch) and then contain a series of standardised ‘Action Plans’ for the species most in need of attention. These documents would then be clearly management orientated and accessible to a variety of potential implementers.

The key issue remains of the target audiences. At present it seems that far too much of the implementation is left up to the voluntary Specialist Groups and this is probably not sustainable. Therefore, the solution may be to spread the responsibility by drawing in a wider constituency by forming a partnership that represents some of the most enthusiastic users of existing Action Plans. This could include the CITES Secretariat, the EU CITES Office, the Wildlife Conservation Society, as well as other parts of IUCN, such as the Protected Areas Programme and an appropriate body concerned with sustainable use. If each of these bodies would be prepared to help with resources (either funds or access to appropriate expertise), then there would be a broad partnership of organisations that not only help facilitate the compilation of the plans, but would also be key to the implementation of the recommendations.

A rebranded and tightly focussed Action Plan Partnership would potentially be a powerful tool for implementing action on behalf of the wo 0 0 10.98 132.1015 06 a powerfuqhe 0 49410.98 0 0 10.9t8 24i59 Twsuch a

I thank Neville Ash for preparing some of the groundwork for this assessment, especially in starting the design of the evaluation method. Various SSC staff assisted in highlighting the key components to address. SSC Intern Ammy Gillesberg answered questions of Phase 2.

The enthusiasm of virtually all interviewees was remarkable and I am very appreciative of the often considerable time that they spent answering my questions. A complete list of interviewees is given in Section 3.3.

## **6. REFERENCES**

Chapman, J.A. and Flux, J.E.C. (1947) *The Development of the SSC*. London: HMSO. Pp. 1-100.





## 7. APPENDIXES

### 7.1. Report on Phase 1 of assessment

#### DRAFT

#### Review of Action Distribution in 42 Action Plans

Joshua Schachter

### 1. Background

This review was undertaken during March and April 1998 to identify trends in the types of actions recommended in Action Plans. Hopefully the understanding gained from this study can serve as the first step in a larger process to evaluate the role and effectiveness of Actions Plans.

### 2. Methodology

All Action Plans published as of March 1998 were included in this study. The actions in 42 Action Plans were identified and categorized according to the following criteria:

#### Research

Status Surveys; Distribution Studies; Behavioral, Ecological, Biological and Taxonomic Research; Population Monitoring; Research on Management Techniques, Threats, Captive Breeding, Legislation, etc.

#### Ecological Management

Management of Species Populations; Management and Restoration of Habitat; Invasive and Introduced Species Management; Development of Future Action Plans; Ecological Management of Protected Areas; Production of Protected Areas Management Plans; Ecosystem/Multi-Species Management Planning; Establishment of Private Reserves; Land Acquisition

#### Ex-situ Management

Captive Breeding; Reintroduction; Introduction; Plant Nurseries; Cultivation; Hatcheries; Translocation; Rehabilitation

#### Use Issues and People

Exploitation; Law Enforcement; Trade; Ethnobotanical Use; People-Species Conflict Management; Community-Based Projects, Income Schemes for Local People/Sustainable Use Alternatives (e.g. Captive Ranching); Ecotourism; Work with Private Landowners; People and Protected Areas; Dams, Mining and Related Use Activities

#### Education & Communication

Public Awareness Raising Activities; Public Workshops; School Programs; Publications

#### Legislation and Policy

Legislation; Policy-making; International Agreements; Designation of a Protected Area/Corridor; Change Official Status of a Protected Area or Species; Land-Use Planning; Legal/Political Actions Related to Trade and Law Enforcement

#### Capacity Building:

Technical Training Programs and Workshops; Financial, Technical, Infrastructural, and Staff Support; Institutional Establishment; Building Cooperation and Improving Communication between Individuals, Institutions, Countries and Governments; Establishment and Maintenance of Information Management Systems; Expand Capacity of Specialist Groups

In addition to classifying actions according to the above themes, actions were categorized according to scope. Actions which applied to all species in an Action Plan (referred to as general actions) were separated out from actions that applied to specific species, groups of species, or geographical locations.

An action was only recorded if it truly involved action, rather than purely a statement about existing information or activities.

If surveys (or any other type of action) were recommended for several species, each survey for each species was recorded as a separate action, unless it was stated or implied that the surveys could overlap across species. For example, if the following was stated: "Surveys are needed for the Harris's and bushy-tailed olingos, the white-nosed coati and the cacomistle," this was counted as four separate actions. Similarly, if a list of areas in need of protected area designation was provided, the designation of each area was recorded as a separate action.

If the same action was recommended for one species but in different locations, then each action in each location was recorded separately. For example, if the following was stated: "Survey for the Least Grebe in Arizona, California, the Virgin Islands, western Ecuador, Panama and Brazil," this was recorded as six separate actions.

On occasion an action fit the criteria of two action categories, in which case the action was recorded in both categories.

If an action was too general to categorize, then it was not recorded. Examples of overly generic actions include such statements as: protect species habitat; or improve protection of protected areas.

### **3. Potential Sources of Bias:**

Due to the fact that non-research actions were often more general than research actions, and at times too general to categorize (and therefore not recorded), the number of research actions in relation to other types of actions would be inflated.

Often the locations of research actions were more clearly defined than for non-research actions. For example, an Action Plan might recommend conducting survey

Figure 2. Type of actions recommended in Action Plans (including general actions)

Figures 4 & 5 illustrate change in the distribution of actions in Action Plans from 1987 to 1997. Research, followed by legislation and policy, were the predominant actions during all three time periods (see Figs. 4 & 5) between 1987 and 1997.

Figure 4. Type of action recommended in Action Plans in three time periods

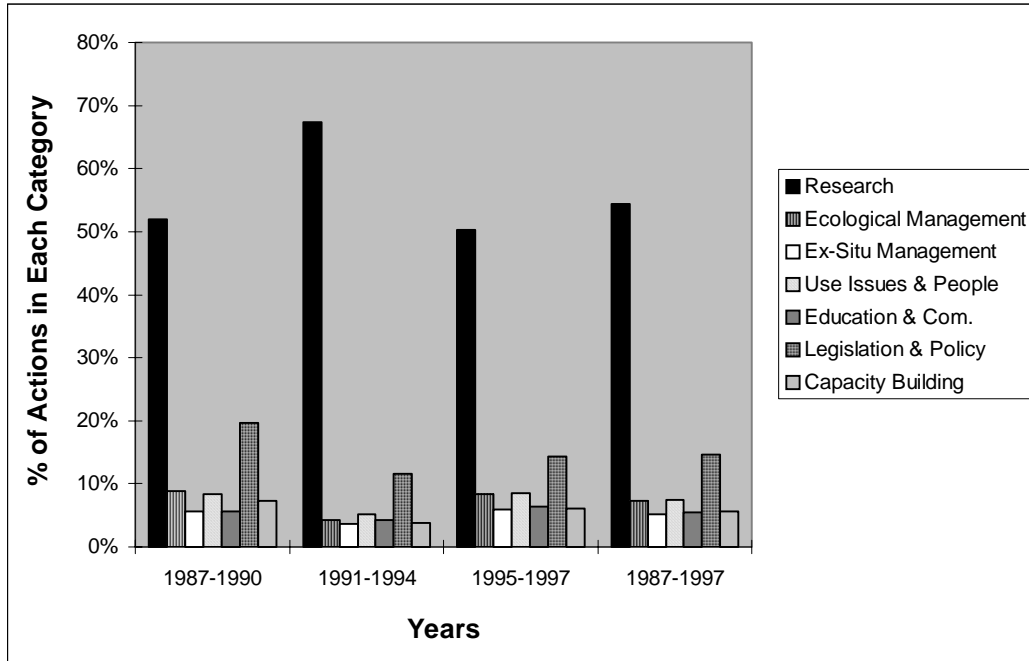
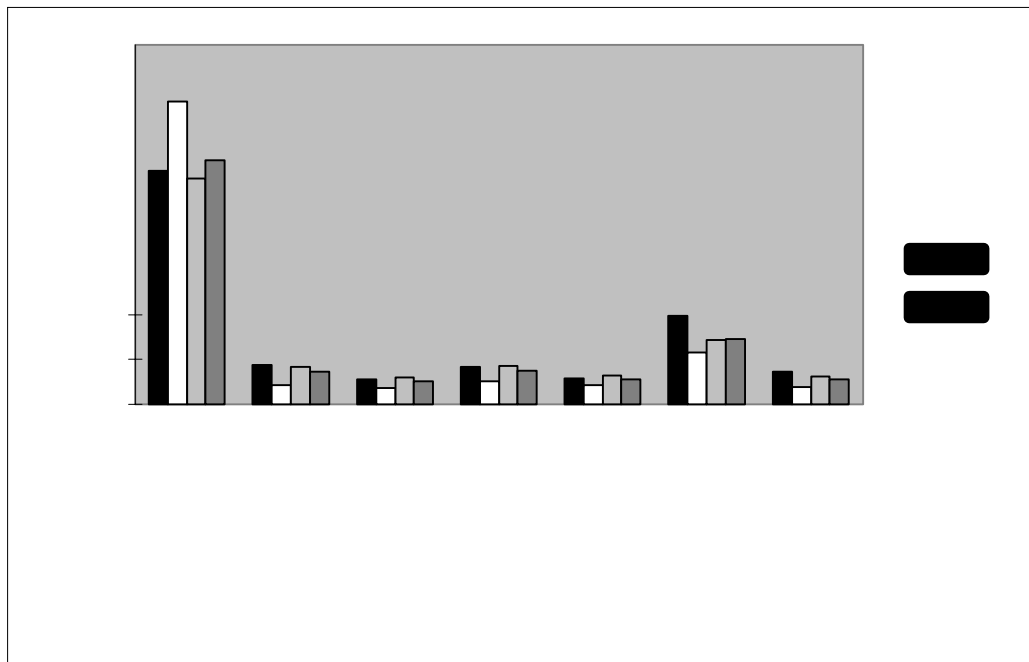


Figure 5. Type of action recommended in Action Plans in three time periods



plant Action Plans. It should be noted that because there were only four plant Action Plans it is difficult to make any definitive conclusions.

Figure 7. Type of actions recommended in plant compared with all Action Plans

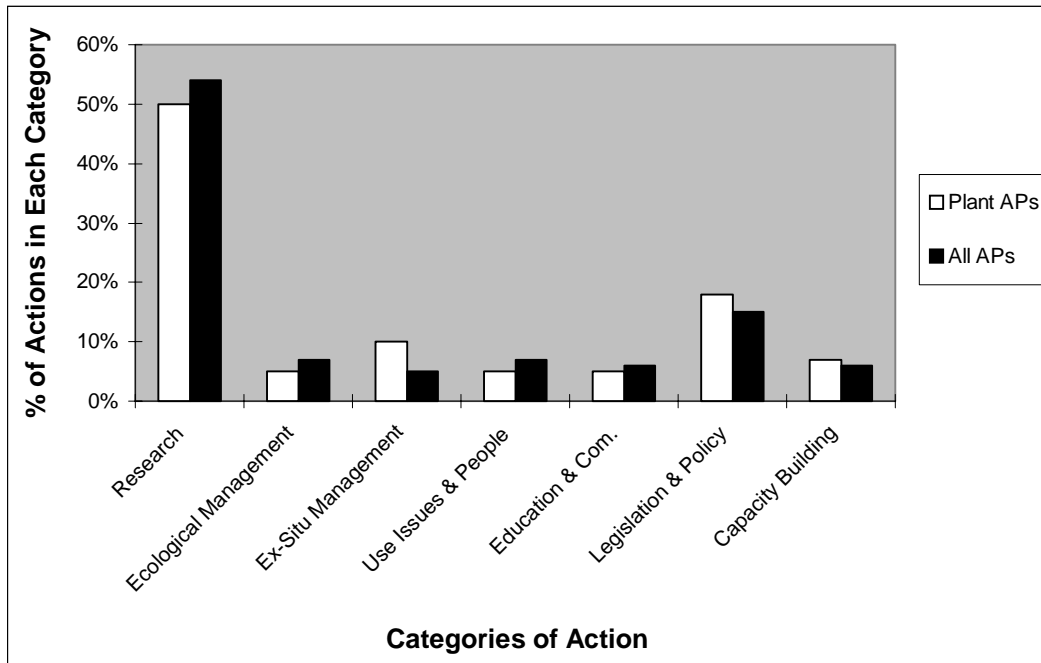
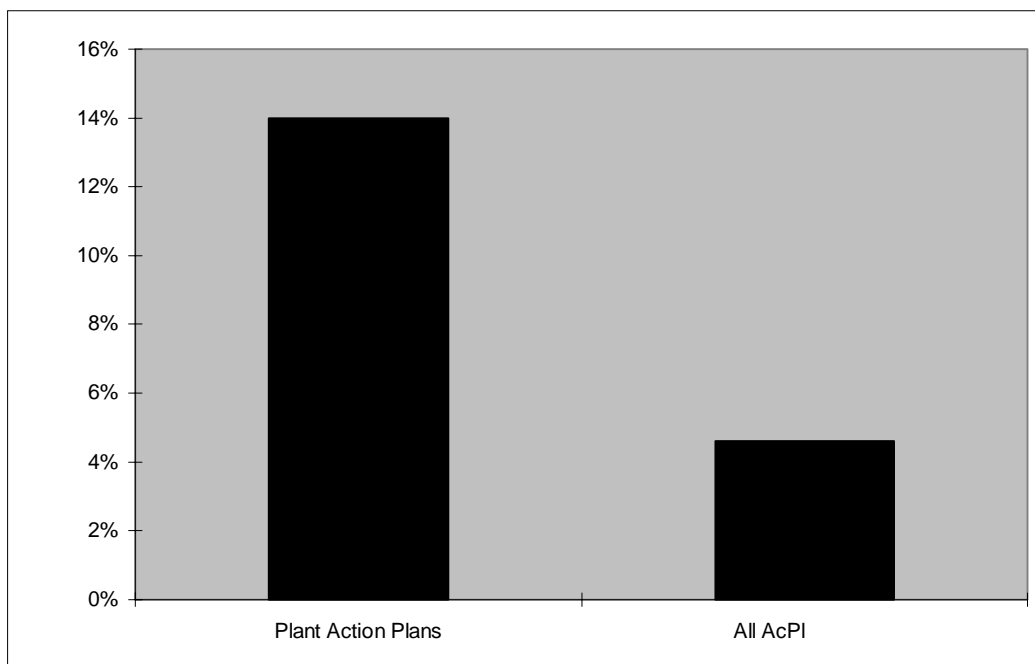


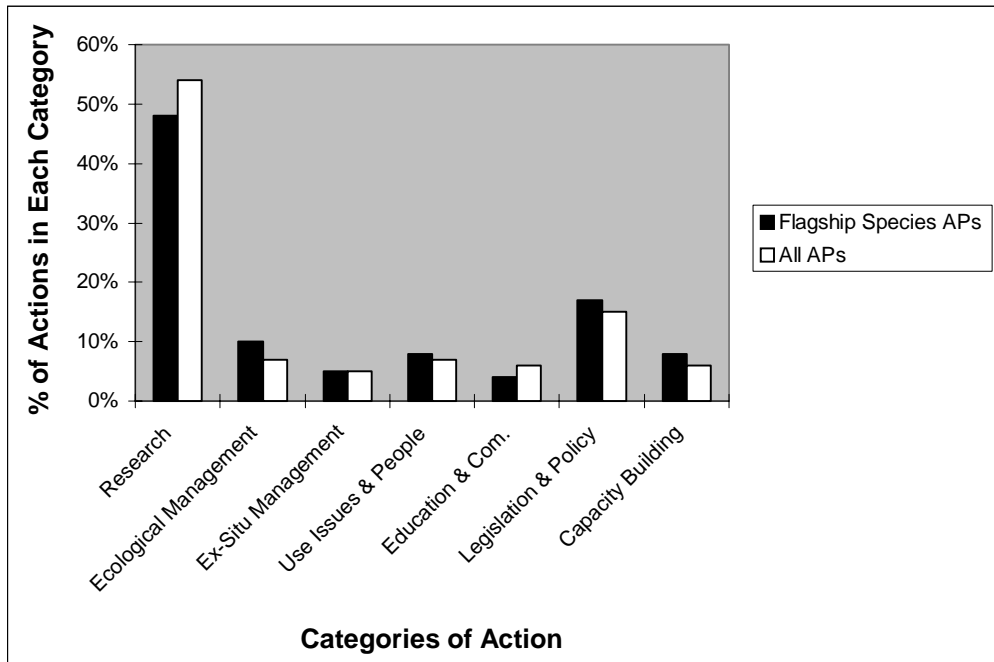
Figure 7 revealed a higher percentage of general actions in plant Action Plans (14%) compared to all 42 Action Plans (4%). This is most likely due to the generally larger number of species within plant taxa compared to animal taxa (maybe with the exception of invertebrates).

Figure 7. Percentage of general actions recommended in plant Action Plans and all Action Plans



There appeared to be little difference in action distribution when comparing flagship species Action Plans with all Action Plans (Fig. 8). There was a slightly lower percentage (48% vs 54%) of research actions and slightly higher percentages of ecological management, legislation and policy, and capacity building actions in Flagship species Action Plans.

Figure 8. Type of actions recommended in flagship species action plans compared with all Action Plans. Note: The Flagship Species Action Plans used in this figure were: Asian Rhinos (1st Edition), African Elephants & Rhinos, Asian Elephant, Dolphins, Porpoises & Whales (2nd Edition), Wild Cats, African Primates (1st Edition), and Asian Primates



## 5. General Comments on Action Plans:

There is little consistency across Action Plans:

Many Action Plans have global and regional recommendations, while others only have species-specific recommendations.

Some Action Plans have actions at the end of chapters, while others have all the actions at the end of the Plan. In other cases specific actions are recommended throughout the Action Plan, and a summary of those actions in the form of budgeted projects is provided at the end of the Plan. In this case, I found it particularly useful when the actions in the body of the text were cross referenced with the projects listed at the end of the Action Plan.

In some cases, recommended actions were more statements than actions. Moreover, Action Plans sometimes recommended an action but did not explain how it was going to be undertaken. For example, an action might call for reducing poaching, but it did not explain whether to do this through sustainable use projects, legislation, increased anti-poaching staff, education, etc.

## 6. Recommended Future Projects on Action Plans

Evaluate the types of actions that have been implemented as a result of Action Plans.

Investigate how Action Plans have been used by their authors and others following publication.

Evaluate if the information in Action Plans could be disseminated in an alternative format which is more audience-specific and cost-effective.

Establish a central tracking system to determine who is requesting and receiving Action Plans.

Consider producing a card to insert into Action Plans that would be sent by Action Plan readers to SSC. This card could include a brief series of questions to get readers input on the usefulness and role of Action Plans.



<b>Research</b>	<b>Ecological Management</b>	<b>Ex-situ Management</b>	<b>Use Issues &amp; People</b>	<b>Education &amp; Communication</b>	<b>Legislation &amp; Policy</b>	<b>Capacity Building</b>
28, 1(G) pp.23-27	14, 1(G) pp.23-27	0	2 pp.25, 26	0	13 pp.23-27	6 pp.23-27
76, 1(G) pp.38-51	18 pp.38-51	5 pp.p				



The Cranes	86 pp.45-204	57, 1(G) pp.46-210	82, 1(G) pp.44-205	106 pp.46-204	137, 1(G) pp.44-206	64, 8(G) pp.44-210
Orchids	7, 1(G) pp.52-123	14, 7(G) pp.57-126	6, 1(G) pp.58-123	7, 7(G) pp.124, 126	16, 4(G) pp.58-126	12, 10(G) pp.67-126
Palms: Their Conservation and Sustained Utilization	6 pp.46-84	26, 1(G) pp.19-84	11 pp.45-82	7, 1(G) pp.19-75	22 pp.19-84	4, 2(G) pp.19-86
Conservation of Mediterranean Island Plants. 1	4, 4(G) pp.83-85	2, 2(G) p.82	1, 1(G) p.91	2, 2(G) pp.88, 90	5, 5(G) pp.81,91	4, 4(G) pp.77-90
Asian Rhinos (Second edition)	9 pp.44-72	8 pp.58-93	22 pp.44-90	2 pp.55, 90	2 pp.44, 71	23 pp.47-92
Wild Sheep and Goats and their relatives	63, 2(G) pp.26-336	29 pp.19-334	69 pp.19-289	18 p.23-307	117 pp.19-335	28 p.21-336
The Ethiopian Wolf	3 pp.85-94	6 pp.92-94	5 pp.84-85	9 pp.86-95	5 pp.84-93	8 pp.84-95
Cactus and Succulent Plants	10 pp.130-141	16, 6(G) pp.129-143	13, 1(G) pp.129-142	13, 3(G) pp.129-142	65, 2(G) pp.128-144	20, 2(G) pp.128-142
Dragonflies	4, 4(G) pp.9-22	0	0	1, 1(G) p.11	4, 4(G) pp.10-22	3, 3(G) pp.19, 23
The African Wild Dog	4, 2(G) pp.88-122	2, 1(G) pp.100, 121	12, 1(G) pp.88-123	11 pp.118-123	15, 4(G) pp.88-123	0

## **7.2. Report on Phase 2 of assessment**

### **2001 Action Plan Evaluation: a summary Anne-Marie Gillesberg**

A great deal of time and effort (not to mention money) goes into producing species Action Plans

The general approach taken in the 2001 investigation builds on the previous evaluation efforts (considered Phase 1) and involves a preliminary review of a subset of APs (Phase 2), followed by an in-depth analysis of a smaller subset of APs (Phase 3).

#### Data collection and analysis for Phase 2:

Twelve APs published between 1990 and 1995/96 were chosen for taxonomic and geographic representation, and in consideration of the responsiveness of compilers. The date of publication was specified to allow sufficient time for implementation to have occurred and to include plant APs in the review.

Compilers of selected APs (and/or Chairs of the associated Specialist Groups) were contacted by phone or email and asked to respond to a brief questionnaire to determine what had happened with respect to conservation action since publication of the AP (see letter to compilers and response form).

Responses were collected and tabulated, indicating whether actions/projects were “completed”, “ongoing”, or “not started”. Reasons given for those “not started” were also recorded. Only six responses were received after repeated requests for information from compilers/Chairs. Results should, therefore, be treated as inconclusive.

#### Results of Phase 2

Of the 12 APs selected for review and compilers/Chairs contacted, only six (Lagomorphs, Crocodiles, Canids, Cetaceans, Otters, and Equids) responded and, of these, two (Canids and Cetaceans) remain incomplete (*Note: the Pheasants AP was considered well in hand and would represent another response*).

The four “complete” responses received (Lagomorphs, Crocodiles, Otters, and Equids) listed a total of 284 recommended conservation actions/projects. Of these, nearly 50% were listed as ongoing, about 18% were considered completed, and approximately 32% had not been started. Of the reasons given for those not started, a lack of funding accounted for about 25%, a lack of funding and

**7.3. Draft evaluation of three Galliformes Action Plans undertaken by the World Pheasant Association and the Megapode SG, the Partridge, Quail and Francolin SG, and the**

**Methods**

The implementation of these three action plans was intimately bound up in the way that they were comp

because project was suggested in 1995 Action Plan (25%);  
 because of national/regional research priorities (25%);  
 because the Specialist Group suggested the work (16%);  
 because the Principal Investigator was already active in the field (16%);  
 because some funds were already available in advance (14%); and  
 other (4%).

Even though the questionnaire was marketed as an AP evaluation exercise, respondents were probably genuine in their answers as several did not even mention the relevant AP.

Of 90 funding applications made by the Principal Investigators carrying out the 1995-99 priority projects, 10 failed, 5 were pending at the time of the evaluation and were 75 successful. There is almost certainly under-reporting of failed bids, although we did ask for details of all applications. Thirty-eight of the applications were made to funding sources that the Specialist Groups had suggested to the Principal Investigator. The endorsement letter issued by the Specialist Group (see Methods) was sent with the funding application in 41 cases. The appropriate AP was referred to explicitly in 41 of the funding applications, and the AP project brief was sent with the application in 36 instances.

Following through AP projects to concrete conservation action must be the key measure of their success, but is very difficult to do in a quantitative way (Gimenez-Dixon and Stuart 1993). Our evaluation identified 36 specific actions resulting from the projects identified in the 1995-1999 Galliformes Action Plans (Table 2)

Table 2. Specific conservation actions arising from the three 1995-1999 Galliformes Action Plans.

Category	No. of actions	Types of actions
Management	22	Adverse development stopped Control of introduced species Control of minor forest product collection (2) Disturbance stopped (2) Future designation of new/extended protected areas promised (3) Hunting stopped (2) Management recommendations made (5) New/extended protected areas designated New controls on poaching planned New habitat management planned Poaching stopped Re-introduction
Information	8	Information supplied for conservation projects (8)
Research	2	Improved effectiveness of other projects (2)
Education	2	Raising awareness of local people to conservation issues (2)
Financial	1	Funds provided at local level

For example, ecological research on the brown eared-pheasant *Crossoptilon mantchuricum* in northern China revealed that mushroom collecting was a likely explanation for low breeding success at Pangquangou National Nature Reserve (Zhang Zheng-wang 1998), and measures have now been put in place to control such activities within the reserve. In addition, illegal hunting and poaching has been restricted in the reserve. New distributional data collected on the maleo *Macrocephalon maleo* in Sulawesi as a result of an action plan project have enabled a large-scale site selection exercise to be performed (Butchart & Baker 2000), and local government funds are becoming available for further conservation work at these sites.

In addition to action on the ground, 133 outputs during the implementation period of the Galliformes

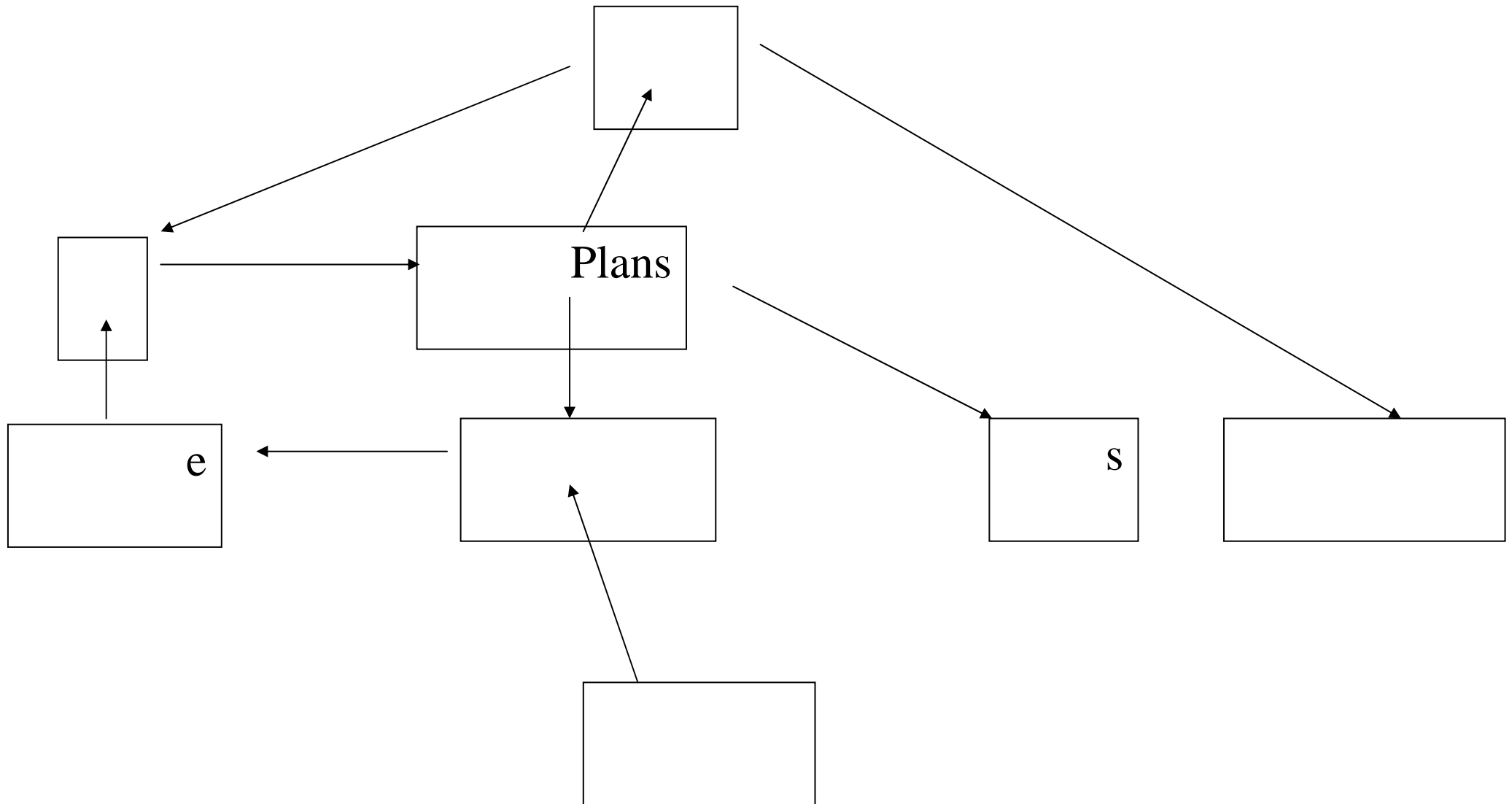


Action Plans were identified (papers, talks etc.). Of these, 45 were papers in journals (of varying quality, but all peer-reviewed), and 88 were non peer-reviewed reports, talks, newsletter items etc.

### **Discussion**

These results clearly show a substantial amount of conservation-relevant output from action plan-based projects. That six pheasant projects were not initiated was due largely to lack of personnel coming forward, as the PSG was not involved directly in soliciting funds and personnel for projects. One project has been dropped (4.6.8), but the remaining projects have been included again in the 2000-04 action plan (one in altered form), indicating that they are still viewed as priorities for action (Fuller & Garson 2000). The results also show close involvement by the relevant specialist group in funding applications (bearing in mind that the SGs themselves have no funding directives) and that PIs were making the link between the profile of an AP project and the chances of securing funding. Perhaps, however, there is room for this link to be strengthened even more.

Figure 1. The place for species-based synthesis in the conservation process.



This process is well illustrated by our own situation. It is possible to visualise a gradual progression up a hierarchy of information required to assess adequately the conservation status of a species (Fig. 2). Firstly, taxonomic units must be clarified. Only after populations or groups of populations have been identified as evolutionarily significant units (Vogler & Desalle 1994) or species, can they be placed meaningfully into threat categories. The taxonomic status of several Galliformes taxa is still controversial, for example the imperial pheasant *Lophura imperialis* is either a Critically Endangered species or a hybrid between silver pheasant *L. nycthemera* and Edwards' pheasant *L. edwardsi* or Vietnamese pheasant *L. hatinhensis* (Fuller and Garson 2000). The outcome of taxonomic research has huge implications on the priorities for conservation action. Such uncertainties underline the

particular, we are reaching a situation where we have enough distribution and status information on many pheasant species to go on and conduct deeper ecological research and analytical population modelling exercises. The iterative design of the action planning process is well suited to situations where the state of knowledge is in continuous flux. (Possibly build in Snyder's comments on the lack of information leading to badly designed Californian condor programme from the Parrot AP as an indication that some of implied criticisms of APs are the result of fundamentally different priorities).

Communication of these targets and research recommendations is accomplished via the publication of species-based action plans. It is at this point where the translation of the species-based information into site-based synthesis and policy recommendations occurs. There is a clear mismatch between the composition of SGs and the people able to implement the kind of work suggested by Collar/McNeely etc. SGs typically comprise scientists, zoo-based captive breeding expertise etc, rather than people involved in the advocacy and decision-making needed for policy changes and development planning. This arrangement is appropriate because the species-based research should independently assess the status of organisms and drive further research in the correct direction outside the confines of what is realistically likely to happen on the ground. Authors of APs can only synthesise species information from researchers and recommend what should be done to address threats and further our knowledge about what threatens species. How this is turned into physical action is the responsibility of governments through NGOs and international organisations such as IUCN, and resides in the spheres of sociology, psychology, economics and politics rather than biology (Vane-Wright 1996). Such bodies should assimilate species-based information and produce syntheses based on geography, government department etc. as appropriate in a given situation. With that arrangement, we can be sure that the best, independent scientific information is taken, tested for feasibility and political reality, and then implemented.

This discussion implies a more limited but focused role for species-based synthesis, and suggests that perhaps the problem is not necessarily with the SGs/APs, but with the readers and those in a position to turn science into advocacy. The process of species-based synthesis cannot j10.98 0 0 10.98 102



#### **7.4. Questions used to evaluate Action Plan effectiveness in telepho**

- 10) How many SG members played a significant role in compilation (including identifying priorities)?
- i) <5
  - ii) 5-10
  - iii) 11-20
  - iv) 21-50
- 11) How many SG members played a lesser role in compilation (including identifying priorities)?
- i) <5
  - ii) 5-10
  - iii) 11-20
  - iv) 21-50
- 12) Are there key

**Questions for product quality and content**

- 1) Overall, is the plan a high quality document? (Do you have confidence in it?)
  - i) Yes
  - ii) Moderate
  - iii) No
  
- 2) What is the scientific standard of the plan?
  - i) High
  - ii) Acceptable
  - iii) Poor
  
- 3) Does the plan cover all necessary areas that are relevant to the conservation of the species group?
  - i) Status reviews
  - ii) Key issues
  - iii) Potential solutions
  
- 4) What are important omissions?
  - i) Input from key people



- 9) Do you think that the plan has played a role in the conservation of the species group?
- i) Significant
  - ii) Large
  - iii) Minor
  - iv) None
- 10) Why?

**Questions for process management and distribution by IUCN Secretariat**

- 1) How well does the AP fit the AP guidelines?
  - i) Very
  - ii) Partially
  - iii) Not
  
- 2) Does it contribute to SSC targets?
  - i) Yes
  - ii) Partly
  - iii) No
  
- 3) What is the scientific standard of the plan?
  - i) High
  - ii) Acceptable
  - iii) Poor
  
- 4) To what extent was the technical content of the plan reviewed?
  - i) Not at all
  - ii) By Program Officer at HQ
  - iii) By other SSC staff
  - iv) By other specialists
  
- 5) Did the draft require much editorial work to make it suitable for publication by IUCN?
  - i) No
  - ii) Yes - on content
  - iii) Yes - on style
  
- 6) Did the plan contain a clear expression of priorities as envisaged by the Secretariat?
  - i) Yes
  - ii) Partly
  - iii) No
  
- 7) As far as you know were any relevant people not involved in its compilation?
  - i) I am sure everyone relevant was
  - ii) As far as I know everyone relevant was
  - iii) I believe that one or more key person/organisation was not
  - iv) I am sure that one or more key person/organisation was not
  
- 8) How much work was required to make the content suitable for publication by IUCN?
  - i) A considerable amount
  - ii) Moderate amount
  - iii) Little
  - iv) None
  
- 9) Did SSC 'promote' the plans within IUCN?
  - i) Yes to every part of IUCN
  - ii) To some parts of IUCN
  - iii) No



**Questions for implementation of AP recommendations**

- 1) When did the project start?
  
- 2) When is it due to finish?
  
- 3) Are you carrying out/funding the project because it is in the Action Plan?
  - i) Yes
  - ii) Partly
  - iii) No
  
- 4) If not because of the Action Plan, why did you carry out this project?
  - i) For scientific reasons
  - ii) The funding was available
  - iii) It is a national research priority
  - iv) The Specialist Group suggested the work
  - v) I am interested in the species group
  
- 5) Was the project's inclusion in the Action Plan a key factor in attracting funds?
  - i) Yes
  - ii) No
  - iii) (evidence)
  
- 6) Have you sought to carry out the project exactly as identified in the Action Plan?
  - i) Yes
  - ii) Partial overlap with our own project priorities
  - iii) No, Action Plan is not important for my research
  
- 7) How successful has the project been in achieving its objectives?
  - i) All achieved
  - ii)

- 11) Do you think that it is your responsibility to promote conservation action arising from your work?
- i) Yes
  - ii) Partly
  - iii) No
- 12) If not (or partly), whose responsibility is it?
- i) Specialist Group
  - ii) SSC



## 7.5. Example of UK Biodiversity Action Plan: black grouse *Tetrao tetrix*

From UK Biodiversity Group (1999)

### Current status

1.1 Black grouse are largely dependent upon the suitable management of moorland/woodland edge in Scotland and Wales, and the moorland/farmland fringe in northern England. The black grouse also utilises young conifer plantations and clear-felled areas with well-developed field and shrub layers that include rushes, cotton-grass, heather and bilberry. Mature plantations with widely-spaced trees also support suitable ground vegetation and can be important for the species.

1.2 The black grouse declined in range by 28% between 1968-72 and 1988-91, and the most recent UK population estimate (1996) is 6510 lekking males compared with an estimate of 25,000 in 1990.

1.3 The black grouse is protected under the Game Acts (close season: 11 December-19 August), Annex II/2 of EC Habitats Directive, and Appendix III of the Berne Convention.

### 2. Current factors causing loss or decline

2.1 Over-grazing and agricultural improvement have removed key food plants such as bilberry, heather and birch scrub in many areas. These plants also support invertebrate prey items important for chicks, and provide nest sites. Sheep grazing in woodland can reduce the shrub understorey which is utilised by the species.

2.2 The shading out of the understorey in maturing conifer plantations.

2.3 Drainage and overgrazing of mires destroy two important black grouse food sources - the flowers of cotton grass and invertebrates. Rushes, which provide nesting cover and sources of insect food, are also affected adversely. Loss of wet flushes and riparian vegetation in afforested areas also leads to loss of food plants and invertebrates.

2.4 The re-seeding of traditional hay meadows or enclosed rough grazings destroys plants such as sedges, rushes, sorrel, buttercups and clover, which are important food plants.

2.5 Over-frequent moorland burning can lead to the formation of impoverished acidic grasslands.

2.6 Fragmentation of black grouse habitat often leads to small populations which are unlikely to persist.

2.7 Considerable numbers of black grouse are killed by collisions with deer fences. Overhead power and telephone cables may also be a problem.

2.8 Predation may be a limiting factor in some regions. Studies have shown the main predators to be foxes and crows.

2.9 Disturbance of lekking birds has been identified as a severe problem at some isolated sites.

### 3. Current action

3.1 Management measures to regenerate woodland, reduce grazing and control predators, based on research by the Forestry Commission, Game Conservancy Trust (GCT) and RSPB, have been shown to increase black grouse populations.

3.2 Guidelines for conifer forest management were published by the FC in 1993 and are incorporated into FC Forest Design Plans and Native Woodland Management Plans. Guidelines are being given a broader policy context through the UK Forestry Standard. The Forestry Authority has issued a guidance note on deer, forest regeneration and fencing.

3.3 Research by GCT is intended to lead to the production of a management handbook detailing practical work to encourage black grouse through the improvement of its different habitats.

3.4 A variety of grant aid mechanisms, including the Woodland Grant Scheme (WGS), ESAs, Tir Gofal, the Countryside Premium Scheme, and the Moorland Scheme, have the potential to improve much black grouse habitat through funding habitat management and fence removal. Individual 'challenge funds' under WGS/Woodland Improvement Grant Scheme target: management of existing native woodland in the Cairngorms; expansion of native woodland in Deeside and the Forest of Spey; and enhancement of upland oak woods in Wales and Argyll. A challenge fund targets new native woodland in national parks in England and Wales.

3.5 Collaborative recovery projects for black grouse are being developed and implemented by a range of organisations in different parts of the UK, including: the North Pennines (RSPB/EN/GCT and

MoD); Tay



5.4.3 As far as possible, ensure that all agri-environment and forestry advisers are advised of locations of this species, management requirements and potential threats. (ACTION: CCW, EN, FC, MAFF, NAW, SE, SNH)

### **5.5 Future research and monitoring**

5.5.1 Ensure the continuation of a collaborative population monitoring programme. (ACTION: CCW, EN, SNH)

5.5.2 Continue to investigate black grouse demography to understand the factors limiting populations. (ACTION: CCW, EN, SNH)

5.5.3 Continue research into black grouse ecology, with particular reference to diet, habitat and spatial requirements. (ACTION: CCW, EN, SNH)

5.5.4 Monitor the effectiveness of measures introduced to increase or restore black grouse populations, including agri-environment prescriptions and forest management by FE. (ACTION: CCW, EN, FE, MAFF, NAW, SE, SNH)

5.5.5 Continue research to minimise or eliminate the problem of grouse colliding with forest fences and overhead lines, for example by developing new methods of marking, new materials, and new fence designs. (ACTION: EN, FC, SNH)

### **5.6 Communications and publicity**

5.6.1 As appropriate, use the black grouse to illustrate the issue of sustainable agricultural management in the uplands. (ACTION: CCW, EN, MAFF, NAW, SE, SNH)

5.6.2 Promote literature and other information sources detailing management measures to enhance black grouse populations, as further information from research work becomes available. (ACTION: CCW, EN, FC, SNH)

### **5.7 Links with other action plans**

5.7.1 This action plan should be considered in conjunction with those for blanket bogs, native pine woodland, purple moor-grass and rush pastures, upland oakwoods and upland heathland.