

# Opinion

## Action Plans: do they help conservation?

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### Introduction

IUCN (The World Conservation Union) published its first Action Plan more than a decade ago (Oates 1986). Many taxon-specific Specialist Groups working under the auspices of the IUCN Species Survival Commission (SSC) have since produced such documents, some of which are now in their second editions (e.g. Reeves and Leatherwood 1994). As we know only too well ourselves, Action Plans take a great deal of time and effort to compile, but what evidence is there to show that they are effective in achieving their prime objective of increasing the amount and quality of work that gets done to save threatened species from extinction?

Gimenez-Dixon and Stuart (1993) conducted an early questionnaire survey to assess the overall effectiveness of Action Plans, through the Chairs of some of the Specialist Groups. In general the responses were positive, but overall this survey suggested that at the time (October 1991) there were considerable limitations to the effectiveness of Action Plans as catalysts for the global conservation effort. For example, these authors listed only 12 Specialist Groups for which projects were being undertaken, 11 of which concerned groups or individual species of mammals. Most of the species that were the subject of projects were representatives of the so-called charismatic mammalian megafauna (e.g. elephants, rhinos, primates, cetaceans). These species benefit from a high level of world-wide public sympathy that has been harnessed effectively to yield considerable funds for research and conservation action. In most of these cases this probably would have happened whether or not the Action Plans had been written.

A further conundrum with the Action Plan approach was subsequently highlighted by Collar (1994). He made the important point that Action Plans, as the products of Specialist Groups, focus very much on threatened species in particular taxa, rather at the expense of identifying urgent conservation priorities on a regional basis. He argued persuasively that the latter approach might be used cost-effectively to identify opportunities for improving the survival prospects of several threatened species at the same time.

Recently the taxonomic bias towards large mammals has been reduced through the production of Action Plans for a much wider array of organisms, for instance including orchids (Hågsater and Dumont 1996) and dragonflies (Moore 1997), as well as megapodes (Dekker and McGowan 1995), the first one for a group of birds. As a response to the second point, SSC is now funding an

overlap analysis of all current Action Plans, which should go some way to answering Collar's plea for a regional approach, provided that the results are published promptly and prominently.

Here we reflect on the effectiveness of two particular Action Plans with which we were involved in both the compilation and implementation phases: those for pheasants (McGowan and Garson 1995), and the partridges, quails, francolins, snowcocks and guineafowl (henceforth "PQF", McGowan *et al.* 1995). We review their success to date in focusing scarce conservation funds and effort onto the most urgent issues, both in general and with reference to particular projects.

### Galliformes and the Action Plans

These two groups of birds within the Galliformes generate relatively little interest among the larger international conservation agencies and funding charities. There is little concern even at a national level, with the exception of a few pheasant species in certain Asian countries (e.g. Himalayan Monal *Lophophorus impejanus* as the national bird of Nepal). However they do enjoy the support of a small but dedicated group of aviculturalists interested in maintaining populations of many of the pheasants, and some of the other Galliformes species, in both zoos and private collections.

As we write, it is approaching three years since our Action Plans were published, so it is instructive to remind ourselves what objectives we originally had in mind when compiling them. As conceived by SSC, Action Plans are aimed primarily at Specialist Group members, research scientists and officers in government departments or non-governmental organisations (NGOs) with conservation remits, and are supposed to be blueprints for urgent action. Thus they usually consist of a comprehensive review of all available information on the conservation status of each species in a taxonomic group, together with recommendations for any action required to ensure the long-term survival or recovery of those considered to be threatened with extinction (Gimenez-Dixon and Stuart 1993). We adopted these conventional aims when preparing our Action Plans, and they lead us to three critical questions through which to assess their effectiveness:

- Do they provide useful conservation information?
- Do they catalyse the development of conservation-orientated projects?
- Do they help to save species from extinction?

#### *Do action plans provide useful conservation information?*

The process that we followed to prepare these Action Plans (McGowan *et al.* 1998) initially involved reviewing what was known about the distribution, status, threats and conservation initiatives relating to every species, or in some cases to subspecies or subspecies clusters of pheasant and PQF. Obtaining up-to-date information on all these taxa was a considerable task in itself and could only have been achieved by using the Specialist Groups' networks to the full. However an immediate result of this exercise was the publication in the Action Plans of much new or previously obscure information in a form that was potentially accessible to the whole international conservation community.

Although faced with the usual dilemma of balancing the need to make information available promptly against the desire to check and re-check every last fact, we believe that these Action Plans do represent a reasonable synthesis of the information available on each taxon in 1993–1995, including their assignment to a threat category (Mace and Lande 1991). Nevertheless it has to be admitted that there are substantial geographical gaps where the Specialist Groups have few if any contacts (e.g. Cambodia, Myanmar), and a woeful lack of information on many of the PQF species in Africa, and Central and South America.

We used our status summaries, the threat categorizations and several selection criteria (e.g. urgency, feasibility, access, cost) to identify projects deserving international priority during the effective period of our Action Plans (1995–1999). The resulting lists featured several types of activity, including global projects, regional surveys, single species conservation initiatives, and strategic research programmes. Projects in these two Action Plans also cross-refer to one another where a cooperative effort would increase efficiency.

As a result of our approach, we think these Action Plans succeeded in highlighting a combination of single species problems, regional priorities, and widely applicable research agendas (e.g. experimental reintroductions, DNA profiling for phylogenetics), albeit only in the context of species in these two groups within the Galliformes.

#### *Do action plans catalyse the development of conservation-orientated projects?*

The potential for Action Plans to stimulate increased activity on priority tasks will only be realized if they reach a large and appropriate international readership. These Specialist Groups currently include as members anyone who is actively involved with work on the conservation or sustainable use of their species anywhere in the world. Their combined membership totals about 150, covering all regions and almost all the species' native countries. The rate at which little-known species are being studied anew and previously unknown areas are being surveyed certainly appears to have increased since Action Plan publication, but our existing members are almost entirely responsible for this. Thus the Action Plans seem to have had this catalytic effect through stimulating and focusing action by people already interested in these species, rather than through bringing in new recruits to the cause of Galliformes conservation.

A rapidly accelerating interest in the lesser known PQF species is especially evident. Since 1996, the PQF Specialist Group has been submitting one selected proposal per year to the Small Grants Programme of the Chicago Zoological Society. In the first year, 2 proposals were submitted to the Specialist Group for selection as its single nominee; in the second year there were 6, and in the third year 12 proposals. Choosing just one of these proposals for this annual competition has now become difficult: they mostly seek to address acknowledged priorities and are of high quality. An additional catalyst for PQF priorities has resulted from the proactive decision by a conservation charity in Germany, *Stiftung Avifauna Protecta*, to fund several projects.

We believe that both biologists and fund managers have reacted in a positive way to these Action Plans because their publication raised the profile of our species, as well as focusing attention on widely agreed international priorities.

Perhaps through making project selection easier for both parties, the linking of active conservationists, committed fund managers, and projects has become less accidental than it might otherwise be, thereby increasing the overall take-up rate.

We can take the example of the endangered Orange-necked Hill-partridge *Arborophila davidi* to illustrate the consequences of Action Plan publication on a single species. It was rediscovered in Vietnam in 1991 (Eames *et al.* 1992), but no further work was undertaken until 1996. Then a survey based on the Project Brief in the PQF Action Plan was conducted, and it now appears likely that a Vietnamese postgraduate biologist who was involved will soon commence an intensive investigation of its conservation needs. Amongst pheasants, there is a continuing international effort to improve the prospects of survival for the endangered Green Peafowl *Pavo muticus* (McGowan *et al.* this issue), which was undoubtedly stimulated by a comprehensive Action Plan Project Brief on this species. Similarly, survey work in north-east India has recently been extended to cover several of the states bordering Myanmar and Bangladesh, as suggested in both the Action Plans.

A number of the highest priority projects outlined in these Action Plans are of the traditional type, focusing on either the provision of reliable status and distribution information, or the conduct of management-related research on individual threatened species. There can be no doubt that in a good number of such cases we now have much more information (or soon will) upon which to base sound conservation action than existed three years ago. For instance, the Bearded Tree-partridge *Dendrortyx barbatus* is a species about which very little was previously known, beyond its occurrence in a very small and highly disturbed range in Mexico. The Action Plan Project Brief for this species served as the framework for cooperative work by a number of conservation groups, thereby helping to produce a wealth of new information on this bird's status and ecological requirements, as well as practical strategies for its conservation. And again for pheasants, a current project aiming to identify the habitats and management regimes that are most suitable for Cheer *Catreus wallichi* is designed on the basis of an Action Plan Project Brief.

#### *Do action plans help to save species from extinction?*

This is of course the most fundamental question posed by Giminez-Dixon and Stuart (1993) and represents the ultimate test of the utility of Action Plans. As with the two previous questions, it is too early for us to say anything very authoritative or quantitative. It will obviously take a few more years for practical conservation initiatives, based on results from Action Plan projects and implemented promptly, to have a measurable effect on the status of any threatened species or their habitats.

In some cases, however, there already seem to be good reasons for predicting a crucially useful outcome. A project on Sichuan Hill-partridge *Arborophila rufipectus* (see Dai Bo *et al.* this issue) has already lead to specific recommendations for forestry management and a proposal to extend a protected area. Survey work in Kalimantan (Indonesian Borneo) suggests that the critically endangered Bornean Peacock-pheasant *Polyplectron schleiermacheri*, probably still occurs in all the main river catchments (see O'Brien *et al.* this issue), a finding that paves the

way for more detailed studies of its ecological requirements and the status of its tropical forest habitats. In China, the discovery that mushroom collectors were routinely taking eggs from nests of Brown Eared-pheasant *Crossoptilon mantchuricum* and thereby causing frequent breeding failures has been translated into an effectively policed ban on the entry of these people into Pangquangou National Nature Reserve (Zhang Zhengwang 1995).

Even these few selected examples illustrate that the ultimate action used to save species and their habitats often involves such things as framing new legislation, better law enforcement, the identification and sound management of crucial protected areas, assessing the practicability of sustainable use (e.g. hunting, non-timber forest products), and inducing the adoption of sympathetic human resource-use practices. The implementation of such actions will usually be a matter of policy, often also involving rural development and public awareness initiatives. All these areas of activity are well outside the competence of the Pheasant and PQF Specialist Group memberships, but such skills are available through local NGOs that lobby their governments, and via agencies and schemes dedicated to implementing sustainable development programmes (e.g. World Bank/Global Environment Facility, UNDP/FAO). Thus as we progressively reach our targets for the provision of sound scientific information via projects, we agree with Gimenez-Dixon and Stuart (1993) that the formation of cooperative partnerships between project investigators and representatives of locally active conservation NGOs and rural development agencies will have an important effect on whether or not any suggested recommendations for conservation action become realities. Compiling Action Plans and completing projects are only the first steps in the long and more complicated process that should result in the saving of threatened species from extinction.

### **How have these Specialist Groups achieved their high level of activity?**

These two Specialist Groups are typical in being voluntary self-help networks, without the capacity to employ staff, promote their work, raise funds or execute projects themselves. However they are highly unusual, if not unique, in being greatly assisted in these tasks by no less than three parent organizations: SSC, BirdLife International and World Pheasant Association (WPA). At the outset, most members of the Pheasant Specialist Group became known to us as a result of WPA's energetic international liaison work during 1975–1993. The combined efforts of WPA and The Game Conservancy Trust in the U.K. were responsible for the founding of the PQF Specialist Group at a specially convened symposium in 1991. Subsequently, the publication of our Action Plans would simply not have been possible without special funds and staff time being made available by WPA and SSC. Of equal importance during the long preparation phase was our extensive pooling of contacts and information with the team at BirdLife International's Cambridge secretariat, then involved in drafting *Birds to watch 2* (Collar *et al.* 1994).

Periodic self-assessments or audits are one good way of monitoring the effectiveness of organizations in the achievement of their targets. Thus an important benchmarking occasion for these Specialist Groups and their Action Plans was provided by the International Symposium on Galliformes held in Malaysia

during September 1997, from which the papers in this issue are a selection. That meeting provided a first opportunity for many of those now actively involved in diverse efforts to conserve Galliformes species to discuss their projects and other initiatives in a knowledgeable international forum. WPA took a leading role in the organization and funding of this meeting and thereby provided the Specialist Groups with a timely opportunity to discuss varying opinions, new knowledge and future plans.

It must be clear to anyone that we would not have made nearly as much progress as we have since the foundation of our Specialist Groups without all this support. As a result we see the development of close relationships with organizations possessing complementary skills as a crucial factor in determining how fully any Specialist Group will realise its potential.

### **So, are action plans really useful?**

We believe that the answer to this question in our two cases is at least a qualified *yes*, because our Action Plans appear to be stimulating much new activity designed to provide useful information on threatened species and their habitats. In the course of time we believe that at least some of the results obtained will be used to derive practical mechanisms for saving them from extinction. These Action Plans were focused on needy cases and urgent problems. Especially amongst the much less well known PQF species, our original compilation alone indicated just how little we knew about many of the species, but the admission of this in print may itself have galvanized individuals into action.

However, our answer of *yes* has to come with some caveats. For one thing it is difficult to separate the effects of Action Plan publication from that of other initiatives designed to stimulate more activity, such as the foundation of these two Specialist Groups just a few years beforehand. That said, many of the projects outlined in these two Action Plans are rather modest in scope and cost. This reflects the pragmatic rather than idealistic approach adopted by those involved in compiling the texts, in an effort to increase the likelihood of project implementation. Given that there is a self-imposed five-year time limit on project initiation, no other strategy would have been sensible.

Many people involved in the preparation of Action Plans for the Galliformes dedicated a great deal of time and effort to their production and we often agonized over the questions we have attempted to answer here. As we move through the second half of their defined life-spans, our personal belief in their usefulness can be judged from our declared willingness to be involved in the preparation of second editions to cover the years 2000–2004. We will be undertaking this task during 1999, which is also the year in which BirdLife International's *Asia Red Data Book* is scheduled for completion. All parties in these enterprises have already agreed to share their knowledge and contacts once again, in an effort to make the resulting publications fully consistent with one another and as up-to-date as possible. As before, cooperation will surely be the key to success.

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