

PART 4. FUTURE DIRECTIONS FOR THE RESEARCH AND CONSERVATION OF FLYWAY POPULATIONS OF WADERS

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DISCUSSION

Several issues arising from the papers presented at the Workshop were covered in a wide-ranging discussion at the end of the meeting. This section reports and summarises the views expressed by participants at the Workshop.

Discussions covered particularly:

1. Has research now yielded enough information on the distribution and movements of waders, for effective use in wetland conservation?
2. Would funding be now better invested more directly in wetland conservation efforts, than in further research especially in southern wetlands?
3. Does expedition-based research, especially in the developing world, aid wetland conservation.
4. What can WSG do to aid future wader research and conservation?

THE NEED FOR FURTHER RESEARCH?

Waders have long been a focus of attention for many researchers both amateur and professional. Hence there is now a very great deal known about their distributions, ecology and behaviour. Because many waders make spectacular migrations between their breeding and wintering grounds, much attention has been paid to researching this phenomenon in particular, as is amply illustrated by the Flyway Reviews in this volume. However these reviews have also revealed that there are many fundamental gaps still remaining in even apparently well-studied parts of the world.

The fundamental basis of conserving wetlands for waders is a knowledge of the important sites for species and populations. Most, perhaps all, sites supporting large numbers of wintering waders are now known in some parts of the world, such as western Europe. Yet even this basic knowledge is not yet known in some other areas, particularly parts of the developing world such as South-east Asia, where the wintering grounds for some species, such as Asian Dowitcher, are only now being discovered. Although the major wetlands for waders, in terms of total numbers, have been, or are being, identified, this alone is not necessarily a basis for developing conservation priorities. The distribution of individual species and populations is often more poorly known, yet is vital for the effective conservation of these birds.

The value of migration staging areas, and how birds use them during a migration, is much less well understood, even in well-studied parts of the world and for well-known species such as Knots migrating through western Europe. Yet this knowledge is no less vital in developing the conservation priorities for waders.

Equally, there is little large-scale quantitative information on the breeding

grounds of waders. Even in Europe, a first attempt at collating this data - *Breeding Waders in Europe*, published by WSG in 1986 - has only just been made. Effective conservation of waders and wetlands depends on sound information from all parts of the system.

Wader populations are not static: population sizes and distributions are changing continuously. Hence there are serious risks in basing a conservation case on historical data, since this may no longer reflect the current usage and distribution of the birds. Continuing research is needed to identify these changes.

It is important to distinguish between the level of information needed in the developed and developing worlds to defend a wetland site against a development threat. In parts of the developing world the numerical importance of the site may be sufficient information on which to build a sound conservation case. However, especially within the tight legal framework of the developed world a very strong conservation case is needed for site defence, to stand against very high-level challenges. For this we need basic information on the distribution of the birds, and the links between sites, both nationally and internationally. Furthermore, birds behave differently in different places, so the behaviour at the site being defended also needs to be known. There is usually a short-fall in this sort of information. For example, assessment of the impact of the proposed development of a tidal power barrage on the Severn Estuary in western England is needing extensive, and often fundamental, research into the use of the estuary by waders, and of their behaviour at this site.

IS WADER FLYWAY RESEARCH STILL COST EFFECTIVE FOR WADER CONSERVATION?

Compared to the sums of money put into particularly the developing world by international development agencies for major development projects affecting waders and wetlands, the funding available to and from conservation organisations is extremely small. Conservation bodies have to place priorities on how their money is spent. Often this means that funds are available for the initial location of important sites, but not for the further studies, whose value we have described above, into how the birds use the site. Furthermore, the magnitude of the threats, and the speed of destruction and modification of wetlands, in many parts of especially the developing world, mean that there can be little time available for detailed research on waders or other parts of the wetland ecosystem. Rather, all efforts are concentrated on immediate attempts to safeguard the conservation interest of the site.

If funds for wader research were limited to providing just this site location information, would the additional monies released appreciably benefit the wetland conservation effort? We have described above a number of reasons why research into the biological processes leading to the observed pattern of

site use are vital in developing the conservation case. There are further benefits to conservation of research on waders.

Much of the work into both site location, and the behaviour and ecology of waders, has been done by student, amateur or voluntary groups and expeditions. Many of the major discoveries about wader migration systems have resulted from such studies. Work conducted by student and amateur groups is extremely cheap, and is very cost-effective for the great deal of information it provides. Hence the amount of funds that would be released to aid more direct wetland conservation, should such research studies cease, would be small.

Continuing fundamental research serves another important role, by drawing high-quality people into conservation. The more attractive this is, the better the style and the greater the substance of conservation research. Many people participating in this Workshop began as wader researchers, and have become increasingly involved in conservation-oriented work and research. Furthermore, conservationists must themselves continue research if they are to make effective input into resource management.

Finally continued research also has benefit in maintaining public interest in wetlands and their birds: new discoveries about e.g. spectacular migrations can catch peoples' enthusiasm, and so help maintain a high profile for wader conservation.

AN INTEGRATED APPROACH?

Waders are only one, albeit often major, component of many wetlands, especially coastal areas. It is not always necessary to use waders in arguing the case for wetland conservation. Thus although arguments can be made to environment ministries that they should be concerned with shorebirds, arguments to development assistance agencies must be based on needs. Such arguments are particularly powerful if existing developments are not proving successful and the community is interested in developing projects that avoid past problems and give sustainable use of wetland resources.

However, migratory waders are a very important tool in wetland conservation. The long-distance migrations of waders make such birds valuable examples of the need for international co-operation in conserving wetlands, since these birds need a chain of sites during their year. Increasingly, international efforts are being made to safeguard wetlands. For example there are now US regulations that do not permit funding of projects in Latin America that are damaging to the US environment. Similarly, through its Directive on the Conservation of Wild Birds, the European Community is showing increasing interest in the conservation of African sites.

Waders are also valuable in attracting the general public to wetland conservation: warm bodies are better at attracting interest than mudflats, hence the usefulness of waders for wetland conservation in general, and in promoting such schemes as the Western Hemisphere Shorebird Reserve Network.

Wader research has at times been conducted rather separately from the wider issues of wetland conservation and socio-economic arguments for sustained wetland use. It is particularly important for expedition-based studies, especially those working in the developing world, to work closely with local people, and local and national governments, to

help in both training and education. There may at times be a trade-off between achieving long-term local commitment, and the nature of the data collected. However, the risks of alienating local people by working on high-level research in isolation are great; the opportunities for expedition-based studies to promote commitment to wetland conservation are also great. The risks of alienation are not restricted to the developing world, and the antagonism of local people to outside influence can be just as great in areas such as the Wattenmeer and Scotland as countries such as Malaysia and Indonesia.

The conservation case has to be taken in a socio-economic context. The only proper way of ensuring continued safeguarding of wetlands is to develop economic renewable resources. In some locations the main force promoting this may be the bird lobby; in others there may be many common interests. Many government decisions to permit destruction of wetlands are essentially political. Waders are a valuable tool in raising public awareness for the conservation of wetlands, and so strengthening the conservation lobby to governments.

Wader researchers have a vital role now and in the future to work closely with conservationists and others in developing effective safeguarding of wetlands through socio-economic arguments. To fail to use all available means to defend wetlands against the very many threats to their continued existence would be most remiss.

THE ROLE OF THE WADER STUDY GROUP

The Wader Study Group is an association of those involved in research on waders. Its great value is its ability to link up both amateur and professional waders researchers worldwide. Many of those associated with WSG have increasing involvement in conservation bodies. However it is not WSG's role, nor does it have the resources, to become directly involved in wetland conservation, although much of the information it collects can be used for this purpose.

Rather, WSG has two major roles to play in relation to the conservation of flyway populations of waders. Firstly it can identify the gaps in knowledge of wader migration systems, as has been done with this workshop, and co-ordinate and encourage research to fill these. In particular its international research membership gives WSG the opportunity to continue to develop international projects linking up existing research projects and observers, aimed at studying movements between sites. This is a major gap in the understanding of most wader migration systems.

Secondly, WSG should continue to develop close links with other wader and wetland research groupings such as IWRB, WIWO in the Netherlands, and Interwader, and conservation organisations such as IUCN, to ensure that the information collected on waders can be used to best effect to safeguard wetlands. Such liaison is vital also to ensure that the priorities of conservation bodies for information on waders are passed back to the membership of WSG. Such liaison can only help to increase the effectiveness of wader conservation efforts worldwide.

Participants in the discussions were: N.Buxton, N.A.Clark, N.C.Davidson, P.J.Dugan, A.Evans, P.R.Evans, D.Eyles, I.Forsyth, G.H.Green, H.Hotker, F.Mawby, M.E.Moser, J.P.Myers, R.I.G.Morrison, D.Parish, M.W.Pienkowski, P.Prokosch, T.Piersma, and M.Smart.