Talks given at the Western Hemisphere Shorebird Reserve Network Workshop, Ottawa, Ontario, 13 May 1995

The following are transcripts of two closing speeches made to the final plenary session of the Western Hemisphere Shorebird Reserve Network (WHSRN) Workshop held in Ottawa from 11-13 May 1995. The workshop was organized by Wetlands for the Americas (WA) to celebrate the tenth anniversary of the WHSRN Program and to evaluate its progress in North and South America.

Dr. Enrique Bucher (special advisor to WA and the WHSRN Program) and Dr. George Finney (Chairman of WA) agreed to summarize the workshop outcomes and provide commentary on how WA could follow-up on a series of recommendations presented to the plenary session earlier in the day. Although therefore focussed on the issues coming out of the WHSRN workshop, there is much in these talks of relevance to developing and guiding research and conservation on wader flyways worldwide

Please note that the following are direct transcripts of the presentations at the workshop, only edited slightly to make sense to a wider readership, and should be read as such. Edited proceedings from the three-day workshop are being prepared and will be available shortly. Those interested in copies, and who were not able to attend the WHSRN Workshop, can contact Ian Davidson, Wetlands for the Americas, 7 Hinton Avenue, Ottawa, Ontario, K1Y 4P1, Canada.

Western Hemisphere Shorebird Reserve Network: looking to the future

Enrique H. Bucher, University of Cordoba, Argentina

I am surprised and delighted, in trying to summarise the outcomes of this WHSRN conference, by how many interesting ideas and points were raised in the several workshops that included themes including: shorebird ecology, conservation and management, and outreach. Although is inevitable that some important points may be missing, the following are, in my opinion, the main driving concepts that emerged during the workshop:

1. WHSRN needs a hemispheric shorebird conservation strategy

After ten years of work, today the scenario has changed both in terms of conservation needs and human resources. I am especially impressed by the growing number of people working with interest and commitment in both South and North America. Therefore, there is a clear need for a strategic planning process that ideally should be flexible, adaptive, and which promotes a great deal of interaction between those who work in the field and those who plan and write proposals.

In that context, something that has clearly emerged from the discussions and from WHSRN's history is that we should focus on species and conservation goals, but we should also care about people. In that context, and accepting that I may be somewhat biased about the South American scenario, I would like to pay tribute here to those that for ten years have been working in sites, in research, and in conservation doing many valuable things by themselves and alone. That speaks of strong professional commitment as well as a deep love for nature and for the places where they live.

Recognition and support for that valuable human component of WHSRN's action has to be included in a strategic plan that, therefore, needs to go beyond just technical or scientific goals. We have to somehow promote and recognise the effort of many dedicated people who have contributed to the success of WHSRN throughout the continent, sometimes with very little resources and under difficult circumstances. Let me say that from my own experience in activities related with science policy and planning I have learned that usually 95% of the progress achieved in any human endeavour comes from 5% of the people with 1% of the resources. We should keep that in mind when thinking of future planning.

2. More interconnection and mutual support are needed

We need to make more connections and to strengthen the fabric in the sense that we need to help and interact with each other more. The twinning of sites, for example, is an excellent idea that needs more support, and I hope that from now on it will gain momentum. In that context I hope that the twinning of Mar Chiquita (Argentina) and Salt Lake (Utah, USA) could take the lead soon.

There is tremendous potential not only for twinning, but also for the development of a network that could assist the sites, not only technically but also providing advocacy and political support, for example when facing political or strategic problems of confrontation of interests or any other threat to their area sites. There is also a need to work effectively at different scales and at every discipline. We need the local scale, where we have people working with the sites and the community. A species-oriented group like WHSRN needs to keep a global perspective understanding that shorebirds are part of larger systems that include wetlands, basins, and the whole continent. Therefore, without losing identity, and perhaps through Wetlands for the Americas and other organisations, we need to promote a deliberate effect to keep a more global and integrated approach by using shorebird species as indicators of ecological conditions, as flags for public education, as tools in terms of wetland management.

3. Improve co-ordination and communication

A common theme in all workshops has been the need better communications. For example, easy access to databases was a frequently expressed desire. There is also clear need for readily available technical support to the sites, which often face problems that need urgent solutions but with no local expertise available (like, for example, pollution spills of some kind). Availability of a technical network help enormously in such circumstances.

4. Process the already accumulated information

There is a need to deal with the information that has already been accumulated. Thanks to the Pan-American Shorebird Program (PASP) and other projects there is a considerable amount of data accumulated in terms of banding results, sightings, etc. that should be elaborated, published, and put into service so as to make it accessible to those interested in using the information. It would be a pity to lose the valuable and irreplaceable results of many hours and days of field work along more than a decade.

5. Keep an adequate balance and a dynamic interaction between science and conservation

Another outcome of this workshop has been the need to blend science and management in an effective way. In the last years we have seen a growing dichotomy between both, which results in what I would call a negative "schizophrenia" within the conservation movement, by which each sector works independently.

Conservationists feel that science is becoming too disconnected from the real needs while enough is already known to implement adequate management practices; whereas scientists try to pursue their favourite themes ignoring conservation needs and looking with disdain to "practical" questions. This is a common issue when discussing rainforest conservation, for example. A growing stream of opinion thinks that we in fact should stop supporting sophisticated science and instead face the real needs, by, for example, protecting pieces of land that still hold fragments of the original biodiversity.

Certainly, this is not true with shorebird conservation. We need both good science and goal-oriented management interacting in a positive way. In fact, one of the main limitations to shorebird conservation is precisely our lack of adequate scientific knowledge. After ten years of work it is time now to reconsider the prevailing paradigms in shorebird conservation. For example, many comments challenged the idea of preserving sites with great concentrations of birds as the only way to approach conservation of shorebirds, given the importance of other more subtle factors involved such as their tendency to overdisperse while in the southern hemisphere. Moreover, a common theme that emerged with great consistency in all workshops is how much we do not know about shorebirds. For example, there is no research done on the connection between pollution and shorebirds, although shorebirds are sampling different sites throughout the western hemisphere, and commonly feeding upon filterfeeding organisms that usually are good candidates for being hit by pollution problems.

The same issue comes from the very interesting ideas presented of Theunis Piersma and Gonzalo Castro on shorebird ecology and physiology: their work points out that many dynamic aspects of shorebird biology are still unknown. There is, therefore, a clear need for thinking of new ways of understanding the relationship between resources, habitat, and population dynamics in shorebirds. For example, we still ignore identifying which are the key factors that balance their population.

Developing that point, it is therefore interesting to note that shorebirds are, in general, long-lived species (in relation with their size) and yet highly productive. This could imply that there is no need for a trade-off between reproductive effort and longevity in birds that, thanks to their migratory habits, live in highly productive environments throughout most of the year. In turn, high productivity in a long-lived population means that it is very likely that shorebirds could support considerable losses without affecting the population size. In that case. however, how does population regulation take place? Are density-dependent mechanisms the dominant regulating factors? Where and how do they act? Are the limiting factors critical during the breeding season, or in the wintering area, or while migrating? Or, alternatively, is population regulation driven by catastrophic events like droughts along the migratory routes that result in abrupt variations in population size? In any case, how can we estimate extinction risks for shorebird populations? The classical approach based on population size and geographical range is at least very difficult to apply here.

Certainly, we have more questions than answers. However, it is essential to make progress in this area if we are going to be successful at preserving shorebird populations. Otherwise, we may orient our conservation goals based on conceptual assumptions that are too simplistic and perhaps erroneous. For example, the first obvious approach with highly colonial birds is to protect concentration sites, in both breeding and non-breeding sites. However, are we sure that this is the key factor involved? The extinction of the Passenger Pigeon suggests that other more subtle factors beyond mortality in concentration sites may be involved, sometimes operating in a complicated, non-intuitive way.

In the same vein, many participants suggested that availability of alternative wetlands along the shorebirds' migratory routes could be crucial to compensate for temporary or permanent losses of traditional "refuelling" sites resulting from climatic or other unpredictable events. As every pilot knows, alternative airports are always required when planning long-range flights. In other words, assessing the availability of alternative sites for breeding, wintering, and migration remains as a critical, but unsolved, question for shorebird conservation. Therefore, the logical conservation priority is to detect, and protect with a high priority, those "hot spots" or "bottlenecks" where there are no alternative sites within the known flight range of the different shorebird species. To me this is a new area of research that deserves considerable attention and priority.

To summarise, there is a clear need for more research, with emphasis on dynamic aspects. Although monitoring and population counts are obviously needed, we should

not simply concentrate on collecting descriptive information but rather make an effort to understand the dynamic aspects of the system, particularly the interaction between habitat characteristics and shorebird ecology. Without an adequate conceptual model of the ecology of the shorebird species it would be difficult, and perhaps impossible, to develop effective conservation.

6. Promote interdiscipline

Although good natural science is essential for conserving shorebirds, WHSRN should not forget other needs in order to respond to the new challenges in conservation. We also need good science and good planning to promote education and better management at all levels. In the case of environmental education, for example, we need to find new alternatives to protect wetlands and shorebird sites where local communities are non-existing. Many wetlands in South America are empty spaces that cannot speak for themselves in political terms. In those areas the priority has to be to educate the politicians and probably the urban communities that will decide, even from a great distance, the future of the sites. Therefore we need to resource not only to ecology, but also to social sciences and other disciplines to deal in an innovative way with the peculiar problems associated with shorebird conservation

I would like to close this review by saying that this workshop has been a tremendously successful and stimulating event. The many ideas and initiatives discussed here will certainly provide the adequate momentum and guidance for the next ten years of WHSRN activity, which we all expect will be as successful as this first decade of existence that we celebrate today.

Western Hemisphere Shorebird Network: looking to the future

George Finney, Canadian Wildlife Service (Chairman, Wetlands for the Americas)

I have very briefly categorized the commitments to the group that I am proposing to put before Wetlands for the Americas and the Western Hemisphere Shorebird Reserve Network (WHSRN). I have divided these into four broad categories. There are obviously things as well that I will have missed.

1. A hemispheric shorebird conservation strategy

First, I think it is clear that the time has come to develop the hemispheric shorebird conservation strategy and I believe that it is entirely appropriate that WHSRN and WA take the lead in its development.

It is not only appropriate but it is absolutely necessary to have a broad ecosystem approach to analyse the situation and develop conclusions. The WHSRN sites program is going to be an integral and focal part of the strategy, but that is probably not enough.

One of the strengths of the shorebird network has been that it did not grow specifically out of one place in the continent and then land on the heads of the rest. It is always difficult when you are spanning as many miles as we do in this program to consistently have the interests of parties represented, but we have tried, and the trying I think has led to a group which is more cohesive than many others that I have seen.

Therefore, in developing this shorebird strategy we will involve people broadly throughout the hemisphere and we will provide an opportunity for ample input by people who