18. Reflections on Heron Conservation

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Herons are intriguing animals. Most are highly noticeable elements within their environment. Worldwide their well-appreciated images are often painted and sculpted; they grace signage of businesses, homes and government; they serve as symbols of conservation and scientific organisations, and otherwise have come to represent what is beautiful, natural, and serene within their landscape. A stately heron gazing in a sunlit pool, perhaps framed by swamp trees, is an experience commonly shared by observers of nature.

They are intriguing too because they are for the most part survivors. They belong to one of the oldest bird orders still surviving, the Ciconiiformes, which dates back some 55 million years. After having admired the grace of flying and foraging herons, an observer who is able to penetrate into a colony will be amazed by the sight of thousands of noisy chicks struggling for life, the smell of guano and decay, and the sight of regurgitated prey below the nests. It is a strange world that contrasts remarkably with the one humans are used to now. One feels propelled thousands of years back into a world in which man is nothing but an intruder from another time. Heron colonies today probably look very much the same as they used to for time immemorial.

Today, some species are in the process of expanding or consolidating their ranges, and probably have been for thousands of years. Just within the last 15-year period that this book particularly covers, species have invaded new continents and have shifted their population centres within continents. The adaptability of many of these species in the face of human alteration of the landscape is a marvel.

Yet there are clearly limits to the inherent adaptability of herons. Several species are reduced to a few individuals and others have become extremely restricted geographically, and such species, subspecies and populations are certainly worthy of being considered as endangered or threatened or of special concern, as we have done.

Defining the limits of these generally adaptable species is the crucial step in designing conservation action. We need to understand their biology sufficiently to understand their limiting factors. And we need to understand their habitat requirements sufficiently to understand how to manage habitat for their benefit.

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Herons offer an immense field of research to answer important biological questions of general interest both for science and for conservation. This is because many important wetland areas host a guild of sympatric species coexisting there. Their biometrics, morphology and behaviour differ considerably among species, making them an ideal subject to study adaptive behaviour, interspecific competition and resource partitioning. Marking schemes allowing recognition of individuals in nature, developed during the 1980s showed that at least certain species of colonial herons are suitable for studying fundamental demographic parameters, such as survival, mortality and dispersal. The results of these studies offer new possibilities to conservationists who require good knowledge of the functioning of both wetland ecosystems and bird populations they want to protect.

In this book, we have attempted to bring together what is known about the distribution and conservation needs of these species. Much of this information is new and is derived from the on-the-ground experience of many correspondents from whom the authors drew much of the data for their analyses. The present population numbers of many species, the depth and breadth of understanding of basic heron biology, and developing approaches to establishing inventory and monitoring systems suggest that these herons are species for which conservation action could be rewarding.

Conservation action must take place at all scales. Most especially heron conservation is a local matter. The fate of an individual or a population is fundamentally in the hands of those who protect, manage, conserve, use, develop, drain or alter their nesting or feeding habitat and who protect, secure, harass, or kill individuals. Without local involvement in heron protection, larger-scale conservation action has little chance of succeeding. We encourage wildlife officers, wardens, local refuge, sanctuary and park managers, local and regional planners, developers, local public officials, conservationists and conservation societies to consider herons in their planning and enforcement efforts. Preserving and protecting a local colony site, managing a local feeding site, protecting local birds from depredation, bringing herons into local environmental education programmes all are essential efforts that should be undertaken by those concerned about their local environment. To the extent that aspects of heron biology can serve as indicators of ecosystem health and as symbols of their natural areas, herons hold the potential of being used to address more general environmental concerns. The ideal local heron conservation plan is one that places herons within the context of wise and sustainable use of the landscape. In this way herons should be a part of the larger scheme of local conservation action.

Conservation also needs to be coordinated at regional, national, flyway, and continental scales. The multitude of local activities need to sum into a population-wide strategy that assures the survival of the population of concern. Monitoring and multi-colony and multi-site conservation action must be coordinated. Again, it is best if herons are considered not just by themselves, but as integral parts of larger conservation initiatives. This is particularly the case for species dependent on wetlands, which must be managed on a watershed basis.

The dependence of many species and populations of herons on wetlands is both a challenge and a benefit. It is a challenge because wetlands are under threat worldwide—not only from drainage, but also from very subtle hydrological and biological alterations and from over-exploitation. It is a benefit because wetlands

have a high priority for conservation and management in many parts of the world. In this situation, heron conservation can be placed in the more encompassing context of regional wetland conservation and management.

It is important not to equate herons entirely with wetlands, as some species of herons do not depend on traditional wetland habitats. They use stream edges, forests, grasslands, coral reefs, and seashores. It turns out that these heron species are among the most threatened, and we know little about their requirements. These habitats too are under increasing threat from human activities. It is crucial that our lack of understanding of herons in these environments be rapidly remedied.

Herons are one group of birds that have the potential to remain a part of the human dominated landscape. But this will not be assured without intervention. Herons need their champions, so that management of the landscape by humans will not proceed without the needs of herons being considered. Herons need conservation plans, at local, national and continental scales, that define these needs. Herons can be used by conservationists to develop broader plans that benefit the herons by achieving more encompassing conservation goals leading to sustainable human use of the landscape.

We honour the founders of heron conservation, such as those to whom this book is dedicated. We cherish the many colleagues who have worked so hard for the past decade and more for heron conservation. We anticipate eagerly the work of the next generation of heron conservationists, new ideas, new information, new understanding and exciting new successes in conservation of herons and their habitats. We hope that this book will prove of some value along the way.