Important Bird Areas as a Conservation Tool: Implementation at the State Level¹

Michael F. Burger² and Jillian M. Liner²

Abstract

In the mid 1990s, Audubon New York initiated an Important Bird Areas (IBA) program that had two goals, 1) to identify sites most critical for the protection of birds and 2) to take positive and coordinated action to promote the conservation of those sites. The first goal was achieved in 1997 when 127 IBAs were identified across New York State. Since then, in order to achieve the second goal, Audubon New York has been implementing a broad program based on advocacy, conservation planning, research and monitoring, and education and outreach. Advocacy efforts include political lobbying, promotion of site protection through acquisition and easements, and passage of state legislation establishing a state bird conservation area program. Through conservation planning, Audubon staff advocate for proper management of sites and assist land managers with technical aspects of bird and habitat conservation. Research and monitoring projects at IBAs are undertaken to assess and track populations, identify priority habitats, and encourage advocacy among citizen-scientists who participate in the projects. Education and outreach efforts aim to increase the public's knowledge of the importance of quality habitats for birds and other wildlife and to encourage them to advocate for the protection and proper management of those habitats. Outreach tools include public presentations, media coverage of IBA events, and a website (http://ny.audubon.org/iba). In all aspects of the program, Audubon New York partners with federal and state governments, other environmental organizations, and local citizens.

Key words: citizen science, conservation planning, IBA, New York, site protection.

Introduction

The first Important Bird Areas (IBA) initiative was begun in Europe by BirdLife International in the early 1980s. The idea of using standardized avian criteria to identify sites that are important for the conservation of birds subsequently spread across the globe to the Mediterranean region, Africa, Asia, and to the Americas (e.g., Commission for Environmental Cooperation 1999, Arizmendi and Valdelamar 2000, Cullinan 2001, Fishpool and Evans 2001, Bird Studies Canada and the Canadian Nature Federation 2002). In the mid-1990s Audubon launched an IBA program in New York State. The goals of the program were 1) to identify sites most critical for the protection of birds and 2) to take positive and coordinated action to promote the conservation of those sites. More than 250 sites were nominated as IBAs, and after review by a technical committee composed of 22 bird experts from around the state, 127 sites were identified as IBAs in 1997 (fig. 1), making New York the first state in the United States to complete the site identification phase of its IBA program (Wells 1998).

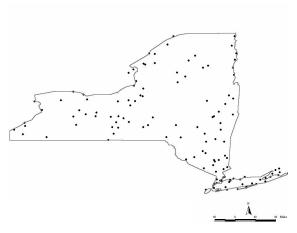


Figure 1—Locations of 127 Important Bird Areas in New York State.

Many of these sites are distinct habitats that support birds of conservation concern (e.g. New York State endangered, threatened, or special concern species), locations where birds congregate during migration and at other times, or areas that support distinct avian communities that are rare or threatened or exemplar for the region or state (*table 1*). Though IBAs vary in size, they are limited in area and often delineated by

¹A version of this paper was presented at the **Third International Partners in Flight Conference**, March 20-24, 2002, Asilomar Conference Grounds, California.

²Audubon New York, 159 Sapsucker Woods Road, Ithaca, NY 14850. E-mail: mburger@audubon.org.

Table 1-- Criteria used to identify Important Bird Areas (IBAs) in New York State.

New York IBA criteria

- 1a 2,000 waterfowl (loons, grebes, cormorants, geese, ducks, coots, moorhens)
- 1b 100 pelagic seabirds (shearwaters, storm-petrels, fulmars, jaegers, alcids) or terns; 10,000 gulls
- 1c 300 (inland) or 1,000 (coastal) shorebirds (plovers, sandpipers, snipe, woodcock, phalaropes)
- 1d 100 wading birds (bitterns, herons, egrets, ibises)
- 1e 8,000 raptors
- 1f exceptional diversity of species (includes migrant traps for landbirds)
- 1g significant number (>1% of state population) of a particular species
- 2 NYS endangered, threatened, or special concern species
- 3a assemblage of species of a rare, threatened, or unusual habitat within the state or region
- 3b assemblage of species of an exceptional representative of a natural or near-natural habitat within the state or region

ecological boundaries, e.g. changes in habitat type. New York's IBAs include high elevation forests, lakes, bogs, other wetlands, habitat islands in urban landscapes, grasslands, early-successional habitats, and other avian habitat types. Partners in Flight (PIF) priority species were considered during the nomination process in two ways. First, many PIF priority species are state-listed in New York and thus were addressed through the birds of conservation concern criterion. Second, the distinct avian communities for which IBAs were sought were composed mostly of PIF priority species, for example birds of high regional priority as identified in the PIF physiographic area plans. For more information about the habitats and species covered by IBAs in New York, see Wells (1998).

In this paper, we summarize the approach Audubon New York has taken to implement the second phase of its IBA program, i.e. taking positive and coordinated action to promote conservation of IBA sites. There are currently 46 U.S. states with IBA programs in various stages. Approaches toward conservation taken by state IBA programs vary to suit the environmental, social, and political situations in each state. Many state IBA programs have demonstrated their effectiveness in protecting IBAs, and in no way do we intend to imply in this paper that New York's approach has been more effective than others. Rather, the intention is to give the reader a feeling for the scope of the endeavor and the value of IBAs as bird conservation tools based on the experience in one state.

Audubon New York is the state program of the National Audubon Society and has more than 40 employees stationed at offices in Albany, Ithaca, New York City, and at Audubon Centers (environmental education centers) across the state. Of these full-time employees, several frequently work directly with the IBA program, including the Executive Director, Director of Conservation, Director of Bird Conservation, IBA Program Coordinator, Forest and Wetlands Program Coordinator, Director of Education, and Director of Government

Relations. Part-time Geographic Information Systems (GIS) technicians and conservation interns also routinely assist with the IBA program, as do seasonal field technicians. In addition, volunteers from 30 affiliated Audubon Chapters across the state as well as from other groups often play important roles in the conservation of IBAs.

Through a strategic planning process completed in 1998, Audubon New York determined that IBAs could be protected and conserved effectively by implementing a broad program based on advocacy, conservation planning, avian research and monitoring, and education and outreach. For the remainder of this paper, we will summarize how Audubon New York has pursued these four areas in our efforts to protect IBAs.

Advocacy

Many IBA-related activities fall under the category of advocacy. In general, our advocacy aims to accomplish three objectives: 1) promote the protection of IBAs through land acquisitions or conservation easements by federal or state government entities or private land trusts, 2) influence land management for bird conservation at IBAs, and 3) promote within the New York State government the Bird Conservation Area Program.

Audubon New York advocates for the protection of IBAs through property acquisition or easements in several ways. We work within the public input framework of the New York State Open Space Conservation Plan (OSCP) process to promote the inclusion of IBAs in the State's OSCP. Properties must be included in this plan for the state to pursue acquisition of or easements on them. Over the past several years, the state has acquired or otherwise protected more than 7,325 ha at more than 30 IBAs, including Black Creek Marsh, Sterling Forest, Montezuma Wetlands Complex, Braddock Bay, Fahnestock State Park, and Catharine Creek Marsh IBAs. In

the 2001 draft plan that was released in fall 2001, 73 out of the 127 IBAs were listed as priority projects, several others were identified as "other large projects," and the IBA program was mentioned in multiple places in the plan. Audubon accomplished this by sending all members of the regional Open Space committees across the state information about the IBAs in their regions that included discussion of why these sites were important for the conservation of birds. Staff from Audubon New York also attended regional hearings for public input on the draft OSCP.

Federal property acquisition at IBAs for conservation purposes has also been notable. With lobbying support from Audubon New York staff, Montezuma National Wildlife Refuge has received funding from the federal Land and Water Conservation Fund for habitat acquisition. In addition, Audubon New York was instrumental in the successful transfer of 223 ha of the former Galeville Airport to the USFWS as the new Shawangunk Grasslands National Wildlife Refuge.

Audubon New York also works with private land trusts that are in the process of protecting IBAs, either through acquisition or easement. For example, Audubon New York staff participated in site visits and landowner negotiations with the Finger Lakes Land Trust at Salmon Creek IBA, which led to the purchase of additional lands within the site. Similarly, we helped Save the County land trust contact landowners and set up a meeting to discuss habitat values of the Whisky Hollow IBA. This collaboration has led to the purchase of additional lands within the Salmon Creek IBA by the Finger Lakes Land Trust, with more acquisitions pending. Similarly, we helped Save the County Land Trust contact landowners and set up a meeting to discuss habitat values of the Whisky Hollow IBA.

In another example of how we advocated for the protection of an IBA, Audubon New York staff supported the Friends of the Great Swamp's efforts to protect the Great Swamp IBA by writing a letter of support for their North American Wetlands Conservation Act grant proposal, co-hosting an IBA designation ceremony, and lobbying state government for Environmental Protection Fund support for land acquisition.

Acquisition by a conservation organization or government entity, alone, does not always guarantee that an IBA will continue to support the birds for which it was identified. Therefore, Audubon New York also advocates for proper management at IBAs. Our actions generally are planned in advance; however, in many cases unforeseen threats to IBAs arise to which we must respond. Notably, Audubon New York and grassroots efforts contributed to the rejection of a golf course planned for an important bird habitat at Joseph Davis State Park within the Niagara River Corridor IBA. We

continue to be involved in several ongoing advocacy efforts, such as opposing the development of a recreational pathway and instead promoting marsh restoration at Jamaica Bay National Wildlife Refuge, opposing private resort developments near the Bashakill Wildlife Management Area, and altering public access projects within the Niagara River Corridor. We led a successful grassroots campaign to support the staff of the Shawangunk Grasslands National Wildlife Refuge in their decision that the flying of model airplanes and associated activities were an incompatible use of the refuge's grasslands. In addition, we successfully advocated for the management of early successional forests and shrub lands within Sterling Forest State Park, which is an important site for Golden-winged Warblers (Vermivora chrysoptera) and other species that prefer early successional habitats. Other examples in which Audubon New York promoted conservation of IBAs include serving as a resource during the New York Power Authority land transfer along the St. Lawrence River in the Town of Lisbon, encouraging management of the Plattsburgh Airbase in a manner compatible with the habitat requirements of grassland birds, and providing information on the implications of oil and gas exploration on bird populations in the Finger Lakes National Forest.

An important accomplishment for the IBA program was the passage in 1997 of New York's Bird Conservation Area (BCA) Program law (Environment Conservation Law Section 11, Title 20). This law allows state-owned lands and waters that meet criteria similar to our IBA criteria to be designated as BCAs and requires that bird conservation needs be considered in the management of these sites. Due to lobbying efforts by Audubon New York, funding for the state BCA Program has increased from \$200,000 in FY 1999-2000 to \$300,000 in FY 2000-2001. Four full-time biologists have been hired by the New York State Department of Environmental Conservation for the BCA Program. As of March 2002, 18 BCAs have been designated in New York State, totaling nearly 61,000 ha (see Burger et al. this volume).

Conservation Planning

Audubon New York promotes conservation planning at IBAs on multiple levels including local, state, national, and international. For example, at the local level we assisted the citizens of the Town of Greece (Braddock Bay IBA) in the development of a document identifying priority wildlife habitat and open space, and the Town has since submitted a grant to acquire one of these identified sites. Similarly, we sent information on bird usage at the Fort Edwards IBA to Laberge Group and Town of Fort Edwards to incorporate into their updated Town Master Plan. We also have begun a conservation plan for the Constitution Marsh IBA to help guide

future management actions and set guidelines for recreational access.

At the state level, Audubon New York has promoted conservation planning through our continued collaboration with the BCA Program. In 2001 and early 2002 we assisted in the designation of seven new BCAs (Constitution Marsh, Sterling Forest, Harbor Herons, Perch River, Adirondack Sub-alpine Forest, Champlain Marshes, and High Tor) and contributed to the development of management guidance summaries for those sites. Audubon New York reviews and contributes to these management guidance summaries, which have been completed for all 18 BCAs.

At the national and international levels, Audubon New York promotes the inclusion of IBAs in the planning efforts of PIF and the North American Bird Conservation Initiative. This is being accomplished through regular participation by Audubon staff in PIF New York and Northeast Working Groups and planning meetings for the Lower Great Lakes–St. Lawrence Plain Bird Conservation Region (BCR 13). At these planning meetings, Audubon provides information on habitats of priority species (i.e. IBAs) in New York State. We also have participated in and made IBA information available to the planning efforts of other organizations including Wildlife Conservation Society, The Nature Conservancy, and Shawangunk Greenway Coalition.

To facilitate further conservation planning at IBAs, we have created a Geographic Information Systems (GIS) database for New York's IBAs. This database includes various GIS themes useful for land use planning, including digitized IBA boundaries, landuse/landcover, and bird distribution data from New York's Breeding Bird Atlas. In addition, we worked with BirdLife International and National Audubon in the development of a North American version of the World Bird Database by beta testing and critiquing the database. This database will serve to better organize New York IBA information and make it available to land managers and the general public throughout the world.

Avian Research and Monitoring

Several objectives were established with regard to research and monitoring. One objective is to increase volunteer-based monitoring of IBAs, both in general and for particular species. Another objective is to conduct research for site-specific purposes.

Avian Inventory and Monitoring Teams were established to conduct surveys for species of conservation priority at 15 IBAs in 1999 and at an additional 14 IBAs in 2000. A coordinator was hired for the 2000

surveys. In cooperation with Massachusetts Audubon, surveys were conducted on many sites across New York State for grassland bird species. In cooperation with the Cornell Laboratory of Ornithology, an assessment of where Golden-winged Warblers are found in New York State, both within and outside of IBAs, was initiated. Audubon New York continues to work with National Audubon's and the Cornell Laboratory of Ornithology's BirdSource (Audubon and Cornell Lab of Ornithology 2002a) and eBird (Audubon and Cornell Lab of Ornithology 2002b) projects to develop tools for online reporting of bird sightings at IBAs and elsewhere.

Audubon New York continues to develop volunteerbased research and monitoring programs at IBAs for specific purposes. Beginning in 2001, we partnered with the Vermont Institute of Natural Science in their Mountain Birdwatch program (Vermont Institute of Natural Science 2002), which uses volunteers to monitor Bicknell's Thrush (Catharus bicknelli) and other high elevation birds throughout the northeastern US. In 2001, we implemented a program to monitor shorebirds at the Montezuma Wetlands Complex to provide information to the Montezuma National Wildlife Refuge about shorebird habitat through the fall migration season. In 2002, we initiated a project to inventory Cerulean Warblers (Dendroica cerulea) at the Hemlock and Canadice Lakes IBA in central New York and to complete an assessment of part of this IBA that may undergo selective logging in the near future.

Education and Outreach

Education is a long-term strategy for the conservation of IBAs in New York. We continue to update our IBA website (http://ny.audubon.org/iba) with the latest information on the IBA program and sites, including site descriptions, data on bird usage, and information on conservation issues. The IBA website also has been incorporated into Audubon New York's newly revised, highly visited website. A 3-panel IBA display was designed and created and has been presented at numerous meetings and multiple local environmental fairs. In addition, we have supplied the text and photos for kiosks at several IBAs (Rochester Urban Parks, Montezuma Wetlands Complex, and Niagara River Corridor). IBA information has been integrated into the development of environmental education centers at the Montezuma Wetlands Complex IBA (completion expected fall 2003) and Prospect Park IBA (grand opening was held April 26, 2002). The establishment of a fall birding competition at the Montezuma Wetlands Complex IBA is another outreach effort of Audubon New York. The Montezuma Muckrace-a day-long birding event that raises money for and awareness of bird conservation at

the IBA-was held for the sixth straight year in September 2002.

Presentations at national conferences and to local groups also have been critical to our outreach efforts. Audubon New York staff regularly attend and give presentations at several state and national conferences each year. We also give numerous IBA presentations to local Audubon chapters, bird clubs, and other groups. In addition, we often lead bird walks for groups at various IBAs and field many requests for information from the public and the media.

In the spring of 2002, we launched the Adopt-an-IBA initiative (modeled after Audubon Pennsylvania's program) in conjunction with Audubon New York's education program to encourage local organizations and Audubon chapters to implement monitoring and education programs at IBAs. Audubon New York's IBA monitoring efforts are volunteer-based, citizen science projects that provide important outreach opportunities in addition to gathering valuable data (see Avian Research and Monitoring section). We are in the process of developing bird checklists for several IBAs, including Prospect Park, Great Swamp, Montezuma Wetlands Complex, and Rochester Urban Parks, as tools for public outreach and to encourage participation in monitoring.

Bird conservation staffs continue to work with Audubon New York education staff to integrate IBA avian monitoring needs with citizen-science education efforts. To date, citizen-science monitoring efforts have focused on Prospect Park, Moriches Bay, Edith G. Read Wildlife Sanctuary, and Rensselaer Forest Tract IBAs. Projects are designed to match the skill levels of the citizen scientists. The goal is to collect useful data for the IBA program, while at the same time teaching the participants about birds, their habitats, and science.

Conclusion

Audubon New York's strategy for implementing the conservation phase of its IBA program is based on advocacy, conservation planning, research and monitoring, and education and outreach. This strategy would not be effective without the partnerships we have formed with Audubon chapters across the state, federal and state governments, other environmental organizations, and local citizens. Cultivation of this support was and continues to be one of the most important factors contributing to the success and growth of our IBA program. Outreach through media and public events has been central to increasing statewide awareness of the IBA program. While working collaboratively with various partners on the identification and conservation of

IBAs has generated support and encouraged involvement in IBA-related issues.

Equally as important to Audubon New York's IBA success has been the organization's continued commitment to the IBA concept. IBAs are more than a catalog of important bird habitats in the State; they have become an organizing principle for the conservation efforts of Audubon New York and have helped focus how we utilize our limited financial and personnel resources. By promoting protection and proper management of these sites, responding to threats that require immediate action, and educating the public and others about the importance of these sites, Audubon New York continues to demonstrate its commitment to the conservation of IBAs.

Our experiences in New York State have shown that IBAs can be an effective tool for achieving bird conservation. With the generation of partner and public support, combined with an organizational commitment to the IBA concept, implementation strategies similar to what we described could be developed elsewhere with equally successful results.

Acknowledgments

The authors thank a number of people for their continued support of New York's IBA program and for recognizing the value of IBAs as a bird conservation tool. In particular, we thank D. Miller and other Audubon New York staff; F. Gill, J. Wells, D. Niven, and J. Cecil of National Audubon's Science Department; Audubon chapters across New York; and the many birders and citizens of New York who nominated and continue to advocate for IBAs. Many people have helped to improve New York's IBA program through consultation and critique, including staff within the New York State Department of Environmental Conservation and Office of Parks, Recreation and Historic Preservation; Ken Rosenberg and other staff at the Cornell Lab of Ornithology; and Audubon IBA leaders from other states. Lastly, we thank those who supported New York's IBA program by providing funding, including the Commission for Environmental Cooperation, Ellsworth Kelly Foundation, North American Fund for Environmental Cooperation, the New York State Biodiversity Research Institute, Park Foundation, HSBC, Henry Luce Foundation, New York Community Trust, Canon U.S.A. Inc., and many individual donors.

Literature Cited

Arizmendi, M. C., and L. M. Valdelamar. 2000. Areas de Importancia para la Conservacion de las Aves en Mexico. Mexico City, Mexico: CANOBIO.

New York IBA Program - Burger and Liner

- Audubon and Cornell Lab of Ornithology. 2002a. **BirdSource: Birding with a purpose.** 13 January 2003. Available at: http://www.birdsource.org.
- Audubon and Cornell Lab of Ornithology. 2002b. eBird. Available at: http://www.ebird.org. Last accessed 13 January 2003.
- Burger, M.F., D.J. Adams, T. Post, L. Sommers, and B. Swift. This volume. The New York State Bird Conservation Area (BCA) Program: A model for the United States.
- Commission for Environmental Cooperation (CEC). 1999. North American Important Bird Areas. Montreal, Canada: Commission for Environmental Cooperation.
- Cullinan, T. 2001. Important Bird Areas of Washington. Olympia, WA: Audubon Washington.

- Fishpool, L. D. C., and M. I. Evans. 2001. **Important Bird Areas in Africa and associated islands.** Cambridge, UK: BirdLife International.
- Bird Studies Canada and the Canadian Nature Federation. 2002.

 Important Bird Areas of Canada. Available at: http://www.ibacanada.com/index.html. Last accessed 13 January 2003
- Vermont Institute of Natural Science. 2002. "Conservation biology: Citizen science: Mountain Birdwatch. Available at: http://www.vinsweb.org/conservation/citizenscience/mb_background.html. Last accessed 13 January 2003.
- Wells, J. V. 1998. Important Bird Areas in New York State. Albany, NY: National Audubon Society.