

The Important Bird Areas Program in the United States: Building a Network of Sites for Conservation, State by State¹

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Abstract

The Important Bird Area (IBA) program is an international effort to identify, conserve, and monitor a network of sites that provide essential habitat for bird populations. BirdLife International began the IBA program in Europe in 1985. Since that time, BirdLife partners in more than 100 countries have joined together to build the global IBA network. Audubon (BirdLife partner-designate for the United States) has been working since 1995 to identify and conserve hundreds of IBAs throughout the United States. There are 46 state IBA programs now underway in the United States with paid staff coordinators in 40 states. Ten states have completed documented IBA inventories totaling more than 1500 IBAs and encompassing more than 14.4 million hectares. The IBA program sets science-based conservation priorities and engages local action to safeguard the most essential sites for bird populations. More than 4,000 people have participated in the IBA nomination and conservation effort across the United States.

Key words: BirdLife, Bird conservation, IBA, Important Bird Area, National Audubon, site protection.

Background and Current Status

In order to implement broad-scale national and bio-regional bird conservation plans, sites must be identified across the landscape at which relevant actions are undertaken. These actions include site assessment, land acquisition, restoration, habitat management, resource monitoring, education, and outreach. To provide the most effective use of conservation dollars, these sites should be identified through a standardized and flexible approach that ensures that the most important sites are chosen and given priority for conservation actions. In

addition, and perhaps most importantly, programs that identify these priority sites should engage a broad bird conservation constituency and build the infrastructure necessary to implement on-the-ground conservation.

The Important Bird Areas (IBA) program, as part of a global initiative of BirdLife International and its Partners (National Audubon is the U.S. Partner), was originally developed in order to meet these goals (Evans 1994, Wells 1998, Heath and Evans 2000, Fishpool and Evans 2001). IBA inventories are comprehensive, recognizing not only sites that support rare and endangered species, but also those that support globally important concentrations of non-endangered species – a proactive approach to ensure these species do not become endangered. These sites include breeding as well as non-breeding habitats and vital migratory stop-over locations. IBAs may be publicly or privately owned and they may vary in size from a few hectares to tens or even hundreds of thousands of hectares.

IBA inventories are part of a global, all-bird conservation initiative that is implemented by in-country partners so that sites are put in a context that highlights their importance worldwide. In addition, IBA programs are unique in that they enlist grassroots citizen scientists in collecting the information needed for the IBA inventory. Investing this locally based constituency galvanizes them as advocates in the protection of birds and habitat at these sites.

The IBA Program was initiated in Europe by BirdLife International in the mid-1980s (Heath and Evans 2000). Since then, IBA programs have been initiated in over 100 countries throughout the world, including for example, the African continent (Fishpool and Evans 2001) and the Middle East (Evans 1994). IBA inventories for over 50 of these countries have been published (Fishpool pers. comm.). IBA programs are underway in many countries throughout the Americas including Mexico, Colombia, Cuba, Dominican Republic, Argentina, Brazil, and Ecuador (Estrada and Davidson this volume). Mexico (Arizmendi and Valdelamar 2000) and Panamá (Angehr 2003), already have published inventories of their IBAs and data from Canada are available at <http://www.ibacanada.com/>.

IBA programs have been responsible for safeguarding thousands of sites and millions of hectares around the

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world. Long-standing programs in Europe, Japan, and Taiwan, for example, have prevented the destruction of key habitats protecting endangered endemic bird species through the direct engagement of local citizens in conservation action (Heath and Evans 2000, Fishpool pers. comm.).

In the US, Audubon and the American Bird Conservancy began identifying IBAs in the mid-1990s. The American Bird Conservancy's IBA efforts are summarized in another paper in this symposium (Chipley this volume). Audubon has carefully invested in developing the infrastructure to sustain long-term conservation initiatives for IBAs. This is done by establishing state-level IBA programs (through Audubon state offices where they exist and with other partners where they do not) that enlist state agency personnel and other state bird experts and empower state and local constituencies to be conservation leaders for IBAs.

The first state-based programs were established in Pennsylvania in 1995 and New York in 1996. Both of these states have published their IBA inventories (Wells 1998, Crossley 1999). Since these early successes, state-based IBA programs have been initiated in 46 states, and it is expected that programs will be launched in all 50 states by 2004. IBA inventories have been completed in ten additional states (Ritter 2000, Audubon Colorado 2001, Cooper 2001, Cullinan 2001, Audubon Maryland 2002, Lyon 2002, Audubon North Carolina 2003, Pranty 2003). With paid IBA staff in 40 states (mostly Audubon employees) and an annual budget of approximately \$2,000,000, Audubon's IBA program constitutes the largest IBA effort in the world. Moreover, Audubon's commitment to the IBA program has grown, and, in fact, the IBA Program is now a central part of Audubon's "2020 Vision" for implementing the long-term conservation goals of the organization.

In addition, as the U.S. Partner Designate of BirdLife International, Audubon has established a U.S. National IBA Technical Committee to review all state IBAs and others for consideration as Global and National IBAs. This committee includes representatives from all four major bird conservation initiatives (waterfowl, waterbirds, Partners in Flight, and shorebirds). Audubon also is developing an online IBA database to serve as the central repository of all US IBA data and has entered into agreements with the North American Waterbird Conservation Plan and the U.S. Shorebird Conservation Plan to identify IBAs for colonial waterbirds and shorebirds.

Goals and Objectives

The development of state-level IBA Programs in the US has generally occurred in three stages: start-up, site identification, and conservation action and outreach.

Start-up

In the start-up phase a state coordinator is designated and, preferably, hired in full-time capacity and an IBA Technical Committee is established. Some states also have established a separate IBA Steering Committee, or Conservation and Outreach Committee, to assist in those initiatives. The IBA coordinator then works with the IBA Technical Committee to develop and finalize the IBA identification criteria for that state.

IBA committees play a crucial role in coalescing the many state agencies and conservation groups around the IBA Program and ensuring the greatest impact. The IBA Technical Committee usually numbers approximately 12 individuals and consists of the top ornithologists and bird distribution experts in the state. This committee establishes the state IBA criteria, assists in collecting data about sites, and reviews these data on potential IBAs to identify which sites qualify as Important Bird Areas. The IBA Steering Committee or Conservation and Outreach Committee function in an advisory capacity. Its members are drawn from state agencies and conservation organizations. This committee recommends the most appropriate conservation strategies for specific IBAs, in coordination with ongoing efforts of participating groups.

The IBA criteria are the benchmarks by which potential sites are deemed to qualify as official IBAs. The criteria provide a scientific, objective basis for determining the importance of a given area to bird populations. Criteria have been developed and refined over more than 10 years, first by BirdLife International for sites around the world, and then in the United States by the National Audubon Society. To qualify as an IBA a site must support threshold numbers for congregatory species, species of conservation concern, or range-restricted (endemic) species, or biome-restricted species. Global-level thresholds have been established by BirdLife International (Fishpool and Evans 2001) and Continental-level thresholds by Audubon's U.S. National IBA Technical Committee, in coordination with IBA coordinators from Canada, Mexico, and BirdLife. State-level thresholds are modeled after these standardized criteria but are sometimes modified in response to the particular biogeographical needs of that state.

Identification

Identification is the second phase of the IBA process. During this phase, birding experts, ornithologists, conservation biologists, and the public are invited to

nominate sites that they feel meet the established state IBA criteria. Site nominations must be supported by bird survey data and to achieve this, paper and online forms are made widely available. An outreach effort typically is mounted at the same time in order to ensure the broadest possible participation. Often Audubon chapters and bird clubs within the state work cooperatively with the state IBA coordinator to nominate sites within their areas. All of this is done in order to maximize the number of sites nominated and to increase the eventual grassroots capacity for conservation at sites that are identified as meeting IBA criteria. At the end of the nomination process (typically 6-9 months) the state IBA Technical Committee reviews the nominations and identifies sites that meet the IBA criteria. To ensure that this inventory is as complete as possible, state IBA coordinators usually draw upon available data from state wildlife agencies, state Natural Heritage Databases, and other conservation groups active in that state.

At the end of the identification phase, the state IBA coordinator produces an IBA report with detailed documentation on all of the state's IBAs. This information also is entered into a national database. These data include the location of each IBA, a description of the habitat, quantitative data on the species for which the site is important, and conservation threats and actions. The IBA report sometimes also includes an overall analysis of the IBAs and a set of preliminary recommendations for conservation. The IBA report is disseminated to decision-makers, land-use planners, conservationists, agency personnel, and other key stakeholders and its use encouraged as a blueprint for conserving vital habitats for birds throughout the state.

Conservation Action and Outreach

The conservation action and outreach phase of the IBA Program is ongoing and long-range in its goals. In the first year of a state program, often a small number of sites are selected that clearly meet the criteria as "model IBAs." These serve as keystone sites to demonstrate the IBA process, promote the concept, and implement conservation measures where they are needed. For example, one or more public IBA designation events may be held to recognize the landowner for stewardship of the site. Events like this across the United States and the world have generated media attention and helped focus the spotlight on birds and their habitats. For example, a binational IBA dedication ceremony in Niagara Falls was attended by United States and Canadian mayors and leaders of both countries' federal environmental agencies, resulting in extensive media coverage.

After the inventory and report of IBAs have been completed, a state's IBA Conservation and Outreach Com-

mittee may be asked to prioritize sites based on where the greatest unfulfilled needs are and to determine ways to best meet those needs. In some states a subset of IBAs may be chosen for focused attention. Plan development is carefully coordinated with the input of landowners, land managers, local land trusts, conservation groups, and other stakeholders. Finally, bird monitoring procedures are established in many states with state IBA Coordinators recruiting volunteers to conduct them. The resulting data can then be used to monitor the progress of the program as it is reflected in changes in bird populations.

The most important phase of IBA programs is that which follows site identification – the conservation action phase. For example, sites identified as IBAs can be integrated into Partners in Flight planning efforts as focus areas at which conservation activities can be undertaken. IBA programs in many states are already achieving successes in all-bird conservation in various ways from increasing rates of land acquisition for conservation by state wildlife agencies to changing land-use policies that are detrimental to birds. Other IBA programs have taken on outreach and education efforts and developed bird monitoring networks at IBAs. Some of the ongoing state IBA conservation successes are listed below.

Montana

- Audubon Montana signed a 10-year license to protect 175 hectares of cottonwood habitat that supports a host of neotropical migrant songbirds near Kalispell. Located at the confluence of the Stillwater and Flathead Rivers, this area serves as key open space for the Kalispell community, and it has been nominated as an Important Bird Area.
- Audubon Montana is developing and implementing a management plan for the Owen Sowerwine Natural Area IBA located in the Flathead Valley. This area is a magnet for wildlife because of its mix of wetland and upland habitats. In addition, this IBA contains important habitat for 10 Partners in Flight priority neotropical migrant songbird species.

North Carolina

- Audubon's IBA program has secured permanent protection for 30 percent of the 2,000-hectare Lea-Hutaff Island IBA, providing key habitat for neotropical migrant waterfowl, colonial waterbirds, shorebirds, and songbirds. Audubon expects to acquire the remaining area within the next 12 months.

- Bullhead Mountain, the key component of the Bullhead-Mahogany Rock IBA, has been purchased through a cooperative effort by the Conservation Trust for North Carolina, the Blue Ridge Rural Land Trust, and the North Carolina Division of State Parks, and Audubon North Carolina. Audubon will manage the site and plans to build a platform to allow visitors to view the many neotropical migrant raptors that pass over the area.

Mississippi

- Audubon Mississippi is assisting the Lower Mississippi Valley Joint Venture (<http://www.lmvjv.org/>) with a citizen-science effort to monitor neotropical migratory shorebirds (<http://www.lmvjv.org/shorebird/>) throughout the alluvial valley of the lower river states. Much of the monitoring in Mississippi will occur at nominated IBAs. This monitoring effort will assist researchers in estimating the number of shorebirds migrating through the valley (now estimated at 500,000 birds each fall) and help them learn more about the habitat needs of the birds.
- Audubon Mississippi, along with its partners, is developing a long-term conservation initiative involving the Pascagoula River and associated habitats. The Pascagoula is the largest free-flowing, essentially unfragmented river system in the lower 48 states. The river and the bottomland hardwood forest that borders it, much of which is public land, provide a protected corridor for neotropical migrant songbirds, nesting and roosting habitat for Swallow-tailed Kites (*Elanoides forficatus*), and habitat for a variety of wading birds. Several candidate IBAs have been nominated along the Pascagoula River.

New York

- Audubon New York increased the number of IBAs included in the state government's Open Space Plan from 40 to 83. These sites will be priorities for land acquisition over the next five years and will result in the protection of tens of thousands of acres of habitat supporting thousands of neotropical migrants.
- Audubon New York is working with several land trusts to increase their acquisition efforts on behalf of neotropical migrant songbirds. This includes a partnership with the Finger Lakes Land Trust to acquire an 80-hectare riparian IBA for Cerulean Warblers (*Den-*

droica cerulea) and landowner outreach for eventual acquisition of a 160-ha grassland complex supporting breeding Henslow's Sparrows. An effort with Save the County land trust was initiated to begin acquiring parcels in the Whiskey Hollow IBA, which supports breeding Golden-winged Warblers (*Dendroica chrysoptera*) and Cerulean Warblers.

- At Sterling Forest State Park IBA, plans to manage hundreds of hectares for valuable successional habitats that support key populations of Golden-winged Warblers were included in the park's master plan through Audubon's efforts.
- At the Montezuma Wetlands Complex IBA, which hosts massive numbers of neotropical migrants including waterfowl, waterbirds, shorebirds, and songbirds, Audubon helped obtain \$2.5 million of Lands and Water Conservation Funds for habitat acquisition and restoration affecting thousands of acres.

Pennsylvania

- Audubon Pennsylvania's IBA program has embarked on an ambitious IBA conservation planning initiative which will culminate in the completion of IBA conservation plans for all 78 of Pennsylvania's IBAs.
- Along the lower Susquehanna River, Audubon-Pennsylvania worked on the development of a cooperative agreement and 35-year FERC licensing agreement with Safe Harbor Power Company to maintain neotropical migrant shorebird habitat (mudflats) throughout the spring and fall migration season at the Conejohela Flats IBA above Safe Harbor Dam.
- Audubon Pennsylvania assisted The Conservation Fund to acquire 960 hectares of forested habitat supporting breeding neotropical migrant songbirds such as the Scarlet Tanager (*Piranga olivacea*) and Wood Thrush (*Hylocichla mustelina*) along Bald Eagle Ridge IBA.
- Audubon Pennsylvania acquired 30 hectares of forested habitat at Miller's Gap, along the Kittatinny Ridge IBA.
- Audubon Pennsylvania helped develop a rating system with the Pennsylvania Department of Conservation and Natural Resources that provides a 20-point advantage for all Com-

munity Conservation Partnership Grant requests that involve IBAs and that will result in more resources becoming focused on the needs of neotropical migrants.

- Audubon Pennsylvania created a broad community-based coalition of over 30 organizations working together to conserve the entire length of the Kittatinny Ridge, a 72,000-ha IBA spanning 11 counties and recently hired a conservation planner to work directly on the project. The IBA hosts exceptionally large numbers of migrating neotropical migrant raptors as well as breeding neotropical migrant songbirds characteristic of the Ridge and Valley PIF physiographic region like Worm-eating Warblers (*Helminthos vermivorus*) and Louisiana Waterthrushes (*Seiurus motacilla*).

Conclusions

The IBA Program has gained momentum around the world because it provides a common sense quantitative way to set conservation priorities for protecting sites that support vulnerable bird populations. The long-term goal is to use this prioritization process to inform long-term conservation planning and actions. This will be done in cooperation with relevant stakeholders at all levels, from grassroots, locally concerned citizens, to state and federal agencies responsible for large scale land stewardship.

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