

# Important Bird Areas in the Neotropics: The Backbone of a Coordinated, On-the-ground Bird Conservation Initiative in the Western Hemisphere<sup>1</sup>

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## Abstract

The Important Bird Areas (IBA) Program was developed by BirdLife International as an approach to conserving birds and associated biodiversity throughout the world. The IBA program seeks to identify and protect a network of sites, at a biogeographic scale, which are critical for the long-term viability of naturally occurring bird populations for which site-based conservation is appropriate. The IBA program, run by national organizations in each country, consists of four stages: site identification, site designation, advocacy and action, and assessment and monitoring. In the Americas the IBA program was launched in 1997 and since then 24 countries have launched IBA programs, with more than 3,381 IBAs identified across the region. Selected conservation actions are described from Brazil, Panama, Cuba and Argentina.

*Key words:* Caribbean, conservation action, Important Bird Areas, Latin America, national inventories, network, partnerships.

## Background

The Americas are home to the greatest avian diversity on this planet. A total of 4,339 species or nearly 50 percent of all known bird species occupy every habitat type from Alaska to Argentina (BirdLife International 2002a). The neotropical region hosts the highest concentration of species with Brazil, Colombia, Peru, Ecuador and Bolivia recognized as “mega-diversity” countries, which alone account for 50 percent of all the species found in the Americas (BirdLife International 2002a). Nearly 350 bird species face an imminent threat of extinction largely brought about by habitat destruction (BirdLife International 2000). Of the 12

ecoregions with the highest aggregation of threatened species worldwide, seven are found in the Americas (Mittermeier et al. 1999).

Amongst the many innovative regional conservation initiatives, the Important Bird Areas (IBA) program, initiated in the Americas by BirdLife International in 1997, is not only helping to identify those critical areas for birds, but is also embarking on the conservation of the most critically threatened sites. The IBA program seeks to identify and protect a network of sites, at a biogeographic scale, which are critical for the long-term viability of naturally occurring bird populations across the distributional range of those bird species for which a sites-based approach is appropriate (Wege 1997). BirdLife works through a national Partner in each country. These Partners (or in some cases, “Associates” where BirdLife does not have an official Partner) are responsible for coordinating the IBA program and liaising with all necessary stakeholders who are willing to contribute to the process.

The objectives of the IBA program are to:

- Identify and document globally important places for bird conservation in the Americas using agreed to criteria for threatened birds, species with restricted distribution, range restricted species, and congregatory species. In addition, some countries have identified national and/or sub-regionally important areas based on a set of similar criteria developed for national and/or sub-regional areas.
- Publish and widely distribute IBA directories at the national, sub-regional or regional levels in the appropriate languages.
- Establish a database containing critical information about IBAs in a format that can be maintained, updated and made widely available.
- Highlight sites that are threatened or inadequately protected.
- Inform decision makers and pertinent national authorities at all levels about the existence and significance of IBAs, and promote the acceptance and official support of the program.

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- Promote the conservation of critical sites and ensure their conservation and sustainable development.
- Ensure the involvement of local communities in the decision-making processes for the development and implementation of conservation activities.
- Incorporate and promote the work of international and national non-governmental agencies (NGOs), and help build national and regional networks of ornithologists and conservationists through training, capacity building, and network development.
- Establish the basis developing national conservation strategies, including national protected areas programs and bi-national, sub-regional, regional and global conservation agreements.

While global in scope, the IBA program promotes a comprehensive and extensive network of critical sites for birds in the Americas. Given that birds are generally accepted as indicators of the presence of broader biodiversity, IBAs also help identify critical areas for other taxa (e.g., reptiles, amphibians, and mammals; ICBP 1992).

IBAs are identified using a set of standardized criteria. The criteria used to identify sites of global significance are the same as those used in other regions throughout the world (*table 1*). These criteria were initially developed and later improved through a process of global consultation (Fishpool and Evans 2001). The application of these criteria to the identification of IBAs allows for a global comparison of sites (Estrada and Davidson 2001).

The implementation of the IBA Program usually follows a four-stage process. These stages consist of the following:

1. **Site Identification.** After completing a training session on the IBA Program, each Partner organization, through their volunteer network of experts, identifies and nominates potential IBA sites. The nominated sites are reviewed by an appointed National IBA Coordinator and/or a national IBA Technical Committee using internationally agreed upon criteria (*table 1*). Information on each potential IBA is compiled and added to the World Bird Database (WBDB). The WBDB is designed to manage data on IBAs and bird species. During the identification stage, data entered into the WBDB (generally collected by naturalists in each country) can be used to help generate information on the significance of each potential IBA with the purpose of identifying all sites within a country that fulfill the IBA global criteria. National IBA site inventories are published and distributed to local decision-makers in efforts to support future site designations.
2. **Site Designation.** The designation process is lead by the Partner organization in each country. This may involve organizing press conferences, lobbying local and national governments, producing and disseminating information, and other activities related to a site's formal designation. Public dedication ceremonies are usually coordinated by local groups at or adjacent to IBA sites. Support for these activities is provided by the national Partner. There are a variety of mechanisms for designating a site. Designations sometimes result in areas being added to formal legally protected areas managed by the government. Some sites remain in the hands of private groups while still others are purchased and declared private reserves. There are a variety of ways of publicly announcing and disseminating information about sites that have been designated. However, the designation of an IBA as a protected area is only the first step towards ensuring the long-term conservation of its birds and biodiversity in general.
3. **Advocacy and Action.** Interested local groups are encouraged to develop management plans for each site, either on their own or in cooperation with other relevant stakeholders. Working with local and national stakeholders, the Partner organization coordinates a priority setting exercise that helps identify key areas where conservation work is critically needed, feasible and achievable. Activities at the site level include the development of land use planning strategies, cooperative management agreements with the local landowners, acquisition of land for the creation of private reserves, establishment of sustainable development programs, and environmental education initiatives. National Partners also work with governmental agencies to help ensure that IBAs are considered for inclusion in the system of nationally protected areas. This latter initiative is attractive for governments and helps meet their obligations under the Convention on Biological Diversity (Viada 1998).
4. **Assessment and Monitoring.** BirdLife Partners work with local groups to monitor specific threats to IBAs. The WBDB is an important tool for tracking change at sites, and regular updates on the status of each IBA are critical for ensuring the stability of the network of globally important sites. Site monitoring is an excellent mechanism for evaluating the status of bird species, including those that are critically threatened, because in many cases (particularly in South America) an

IBA may be the only known site for a species (e.g. the Black-breasted Puffleg [*Eriocnemis nigrivestis*]) which is endemic to the Mindo IBA in Ecuador. Regular monitoring also provides an

early warning signal for sites that are being impacted, which may provide time for addressing site degradation issues.

**Table 1—** Summary of global Important Bird Area categories and criteria.

Category	Criterion	Notes
A1. Globally threatened species	The site regularly holds significant numbers of a globally threatened species, or other species of global conservation concern.	The site qualifies if it is known, estimated or thought to hold a population of a species categorized as Critical or Endangered. Population-size thresholds for Vulnerable, Conservation Dependent, Data Deficient and Near Threatened species are set regionally, as appropriate, to help in site selection.
A2. Restricted-range species	The site is known or thought to hold a significant component of the restricted-range species whose breeding distributions define an Endemic Bird Area (EBA) or Secondary Area (SA).	The site also has to form one of a set selected to ensure that, as far as possible, all restricted-range species of an EBA or SA are present in significant numbers in at least one site and, preferably, more.
A3. Biome-restricted assemblage	The site is known or thought to hold a significant component of the group of species whose distributions are largely or wholly confined to one biome.	The site also has to form one of a set selected to ensure that, as far as possible, all species restricted to a biome are adequately represented.
A4. Congregations	(i) The site is known or thought to hold, on a regular basis, $\geq 1$ percent of a biogeographic population of a congregatory waterbird species.  <i>Or</i> (ii) The site is known or thought to hold, on a regular basis, $\geq 1$ percent of the global population of a congregatory seabird or terrestrial species.  <i>Or</i> (iii) The site is known or thought to hold, on a regular basis, $\geq 20,000$ waterbirds or $\geq 10,000$ pairs of seabirds of one or more species.  <i>Or</i> (iv) The site is known or thought to exceed thresholds set for migratory species at bottleneck sites.	This applies to waterfowl species as defined by Rose & Scott (1997). Thresholds are generated in some instances by combining flyway populations within a biogeographic region, but for others lacking quantitative data, thresholds are set regionally or inter-regionally, as appropriate. In such cases, thresholds will be taken as estimates of 1 percent of the biogeographic population.  This includes those seabirds not covered by Rose & Scott (1997). Where quantitative data are lacking, numerical thresholds for each species are set regionally. In such cases, thresholds will be taken as estimates of 1 percent of global population.  This is the Ramsar criterion for waterbirds, the use of which is discouraged wherever data are good enough to permit the use of (i) or (ii).  Thresholds are set regionally or inter-regionally, as appropriate.

## Development of the IBA Program in the Americas Region

The IBA program in the Americas is an initiative coordinated by the BirdLife Secretariat based in Quito, Ecuador. The IBA program was officially launched at the annual BirdLife Americas Partnership Meeting held in Cayambe, Ecuador in 1997. Since then, two additional regional workshops were held in Santa Cruz, Bolivia in 1999 and Madrid, Spain in 2000 which aimed to strengthen a coordinated approach to the IBA program, ensure Partners understood the methodology being used globally, and share experiences amongst the many organizations who had begun to implement the program in their respective countries.

Given the varying capacities of each partner to implement conservation activities, the IBA program is evolving at different stages in each country. This creates a challenge for implementing a coherent IBA program following standards developed and in practice in over 100 countries worldwide (L. Fishpool, pers. comm.). Regional coordination is key to ensuring that the program is carried out in a standardized fashion and also helps facilitate the sharing of information and experiences.

Identifying critical sites is crucial for deciding where to best invest limited conservation resources to affect the greatest benefit for conserving birds. The IBA program provides a useful and simple tool for identifying priority areas at the national and regional levels. Currently, 20 partner organizations are actively advancing the IBA program in 24 countries in the Americas. Canada, Mexico and Panama have finished national IBA inventories and are initiating site conservation at critical sites. Argentina, Bahamas, Belize, Bolivia, Brazil, Chile, Cuba, Ecuador, El Salvador, Falklands, Jamaica, Paraguay, Uruguay, the United States of America, and Venezuela all have initiated IBAs through data compilation and, in some cases, are completing national inventories and/or are engaged in site conservation activities. In addition, “Associates” in six non-partner countries (Dominican Republic, Colombia, Costa Rica, Puerto Rico, Peru, and UK Territories) have been advancing their IBA programs. In 2003, the Royal Society for the Protection of Birds will publish the first Caribbean UK Territories IBA Inventory.

As of January of 2004, 3,381 IBAs were identified throughout the Americas (*table 2, fig. 1*, other IBA articles in this volume), most of which have been entered into the WBDB. This valuable tool was developed for managing and analyzing data and producing reports on a variety of topics, including the status of individual sites and their species. These reports can be generated in a simple way that can be used to inform

stakeholders, decisions makers and conservationists about each IBA. The WBDB has also been used to:

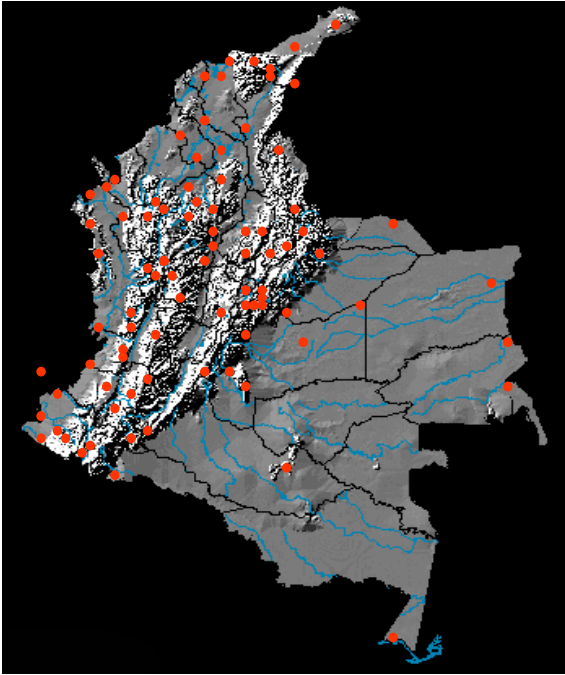
- Generate national IBA directories describing important sites for birds, including an evaluation of their conservation status, threats and necessary priority actions.
- Identify key sites in each country for species conservation.
- Assist in developing maps, posters, drawings, summaries, articles that publicize and promote results from analyses of information on sites.
- Support the development of regional publications that combine the results from all the IBAs in each of the countries in the Americas (Estrada and Davidson 2001).

**Table 2**— *Number of IBAs identified in selected countries as of January 2002.*

Country	No. IBAs
Argentina	182
Bahamas	90
Bolivia	43
Brazil	161
Canada	597
Chile	14
Colombia	105
Cuba	54
Dominican Rep.	43
Ecuador	105
Jamaica	54
Falklands	28
Mexico	225
Panama	88
Paraguay	42
Peru	198
Puerto Rico	54
United States	1200
Uruguay	25
Venezuela	64
Total	3,381

## Select Conservation Actions at Critical IBAs in the Americas

In some countries, BirdLife Partners have already embarked on conserving IBAs in globally important habitats. The following is a description of selected activities in critically threatened ecosystems that support species and site conservation.



**Figure 1**— Map of Colombia showing 105 potential IBAs according to the results of Colombia’s first National IBA Workshop, March 2002.

### **Brazil’s Atlantic Forest**

In 2002, BirdLife initiated its Brazil Program with a focus on helping to conserve the globally important and highly fragmented Atlantic Forest along the eastern coast of Brazil. While little more than 7 percent of the original forest cover remains, the habitat still supports an astonishing 103 globally threatened bird species (Bencke and Mauricio 2002). Relying on an expert network in Brazil, BirdLife identified Murici and Serra das Lontras; two critically threatened sites supporting over 13 globally threatened species of birds including the Alagoas Foliage Gleaner (*Philydor novaesi*; Bencke and Mauricio 2002). After initial fieldwork at each site, a concerted effort was mounted to ensure sites were nationally recognized for their globally unique collection of fauna found nowhere else on the planet. As a result, 6,616 ha of forest at Murici were officially declared by the President as a Scientific Station (the equivalent designation in other countries is “Ecological Reserve”) and successful efforts at Serra das Lontras have resulted in increased public awareness and over \$100,000 USD have been raised for private land purchase. Although the declaration of the Murici site as a protected area is significant, the site continues to suffer from habitat destruction and species loss. This highlights the need for maintaining pressure on governments to ensure a site’s conservation while at the same time, working with communities to empower them to become custodians of IBAs. To date, 161 IBAs have been identified in the Atlantic Forest alone and

efforts are currently underway to complete a preliminary list of IBAs for all of Brazil (Goerck and Wege, this volume).

### **Panama’s Pacific Coastal Wetlands**

Efforts to conserve the globally important Rio Bayano IBA in Panama provide an example of community involvement in conserving IBAs. Financed by the Canadian International Development Agency (CIDA) and the German Technical Agency (GTZ), the Panama Audubon Society is working with local villagers to develop a strategy for increasing revenues through ecotourism activities. Rio Bayano, one of the most important sites in the Western Hemisphere for shorebirds, attracts an enormous concentration of Western Sandpipers during the boreal winter months. Fishermen in the surrounding communities have been trained to guide ecotourists to areas rich in both shorebirds and other “exotic” resident species. This is helping to diversify and enhance local incomes. It is believed that in the long-term, the increased revenue will result in a greater awareness and appreciation for the importance of maintaining the mangrove forests upon which both birds and fish depend (BirdLife International 2002b).

### **Cuba’s Extensive Eastern Forests**

Through its government Affiliates in Cuba, BirdLife is embarking on a program to identify IBAs in the largest remaining tract of Caribbean pine and oak forests in the eastern end of the island. These forests support healthy populations of both Caribbean and Cuban endemics as well as exceptionally rare species, probably still including the Ivory-billed Woodpecker (*Campephilus principalis*) that was extirpated from the United States in the early 1900s (J. Wells, pers. comm.). Newly identified IBAs will be assessed and those identified as globally important will be submitted for consideration for legal protection. Additionally, several Cuban institutions are now working towards the designation of a critical wetland in the eastern forests of Cuba as a Ramsar site (BirdLife International 2002b).

### **Argentina’s Pampas Grasslands**

In Argentina, the IBA program is focusing on the identification of sites in the temperate grasslands that include the well-known Pampas. The Pampas support many endemic grassland-dependent birds and at one time hosted the now possibly extinct Eskimo Curlew (*Numerius borealis*; Di Giacomo 2001). To date, 26 global threatened bird species have been located in this ecosystem, which extends from south of Buenos Aires up into western Uruguay and eastern Paraguay. BirdLife’s Partner, Aves Argentinas, has been communicating with the government to promote the use of alternative and less damaging land use practices which

currently include the planting of exotic species such as eucalyptus. More than 60 sites in the grassland region have been identified as IBAs. On-the-ground work with local landowners is underway to develop more sustainable land use practices at critical grassland sites that are compatible with biodiversity conservation (Di Giacomo 2002).

## Conclusion

The IBA program, initiated in the neotropical region by BirdLife International, is beginning to demonstrate tangible conservation results. These include: site protection through both legal means and via the purchase of critical habitats; increased awareness of the impacts of habitat degradation on birds; improved data on species distribution and habitat requirements; new alliances among conservation groups; strengthened capacity of NGOs to lead on-site conservation projects; improved communication among the ornithological community; and an evolution of ornithological groups with greater focus on conservation action. The success of some of these initiatives depends on the collaborative nature of the IBA program, which encourages participation at all levels to deliver conservation results. It is also clear that the IBA program depends on its linkages with other regional initiatives including the North American Bird Conservation Initiative, the North American Waterbird Management Plan, Partners in Flight, the Convention on Migratory Species (the Bonn Convention), Conservation International's Hot Spots Program, National Audubon and Jocotoco's Land Securement Program, to name but a few. The IBA program is inclusive and unlike some of the successful species initiatives in North America, it addresses all species through a site-based conservation approach. The IBA conservation approach covers most species. Widely dispersed species in some cases are not, and strategies need to be developed to address these species. With many bird species on the brink of extinction in the Americas, the IBA approach is a proven method for helping conservationists and other interested stakeholders, determine those most important areas for immediate conservation action.

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