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Important Bird Areas AMERICAS

UNITED STATES OF AMERICA

John Cecil, Connie Sanchez, Iain Stenhouse & Ian Hartzler





Country facts at a glance

Area:	9,826,630 km ²
Population (2008):	303,824,646
Capital:	Washington D.C.
Altitude:	-86–6193 m
Number of IBAs:	217¹
Total IBA area:	24,531,371 ha
IBA coverage of land area:	2.6%
Total number of birds:	957
Globally threatened birds:	36
Globally threatened birds in IBAs:	22
Country endemics:	16

General introduction

The United States of America, which lies across the middle of North America, has a continental area of 9.8 million km² – the third largest country in the world. The main body of the country, comprised of 48 contiguous states, is bordered by Canada to the north, Mexico to the south, the Atlantic Ocean to the east, and the Pacific Ocean to the west. There are two distant states – Alaska, which lies in extreme northwestern North America, is bordered by Canada to the east and is barely separated from Russia to the west – and the Hawaiian archipelago, which lies in the central Pacific Ocean.

The United States is a constitution-based federal republic with three branches of government, legislative, executive and judicial. An elected president heads the executive branch of government. Elected representatives and senators comprise the two branches of the legislative congress, the house and senate. Finally, nine appointed judges constitute the Supreme Court. The country is a union of 50 administrative states, one district, and more than 14 dependencies.

The United States is the second largest country in the Americas by size, with the largest population (over 300 million) in the hemisphere. The population is extremely diverse, with German, Irish, and English constituting the country's largest European ancestral groups (US Census Bureau 2004). Over one third of the population is made up of minority groups, largely Hispanic, Asian, and African Americans. Approximately 1% of the population has indigenous ancestry, and there are 561 federally recognized tribal governments within the United States (US Census Bureau 2008). There are 50 metropolitan areas with more than a million people, and 80% of the population lives in urban areas (US Census Bureau 2000). Population density varies greatly across the country, but the majority of the population lives east of the Mississippi River where the largest population centers are generally coastal. Central and western regions remain relatively lightly populated except for a few large population centers along the west coast.



Agassiz National Wildlife Refuge, Minnesota, an important site for breeding Franklin's Gull (*Larus pipixcan*) and migrating Sandhill Cranes (*Grus canadensis*).
Photo: Rebecca Field

¹ Figures in this table are incomplete given that IBA identification in the United States is still ongoing. An estimated 700-800 global IBAs are expected to be confirmed in the United States. Already more than 350 sites (including the 217 presented here) have been reviewed by the US IBA Technical Committee and BirdLife International and have been confirmed or are pending global IBA status (see IBA overview).

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Due to its east-west orientation across the continent, and the western extension of Alaska's Aleutian Island archipelago, the United States spans almost 130 degrees of longitude, over 8000 km, and six time zones. Given the size and extent of the country, a broad diversity of habitats are encompassed within its borders. This includes hills and low mountains in the east, a vast central plain, and mountains in the west, rugged mountains and broad river valleys in Alaska, and rugged, volcanic topography in Hawaii. To varying degrees these habitats are now fragmented and degraded due to heavy pressures caused by a rapid growth and expansion of the human population over the course of the

last 200 years. The major direct threats of habitat alteration and loss are due largely to natural resource extraction, agricultural intensification, infrastructure development, and urban/suburban sprawl. Habitat alteration due to climate change is an increasingly pressing issue, particularly for species reliant on limited high elevation and high latitude habitat types and species dependent on coastal beaches, marshes and wetlands.

The climate is mostly temperate, but arctic in Alaska, subtropical in Hawaii and Florida, semiarid in the plains west of the Mississippi River, and arid in the deserts of the southwest.

Conservation and protected area system

The United States has one of the largest and most significant protected areas systems of any country in the world – from remnant and relict habitats in small protected areas to vast, expansive landscapes conserved in national parks and wilderness areas. An estimated 10–20% of the land area of the United States falls under protected area status (World Resources Institute 2006, GreenInfo Network 2008). The percentages vary in the absence of an accurate, national standardized protected area inventory, which is currently in development (GreenInfo Network 2008, DellaSala *et al.* 2000). The sites considered under protection are managed by a broad range of federal, state, tribal, and local governments, as well as private entities, with the levels of protection varying widely across the network (World Resources Institute 2006). A large proportion (>40%) of the acreage of the country's federally protected areas lies within the state of Alaska (Alaska Coalition 2008).

The Department of the Interior is the principal land management agency of the federal government, and is responsible for managing over 200 million ha of surface lands (US Department of the Interior 2008). With origins dating back to 1871, the Fish and Wildlife Service, the primary wildlife and habitat conservation division, oversees the National Wildlife Refuge System – over 540 National Wildlife Refuges which support over 700 bird species and encompass almost 39 million ha. The division also has statutory responsibility for enforcing the Endangered Species Act and the Migratory Bird Treaty Act (USFWS 2008a). The National Park Service, formally created in 1916, manages a further 35 million ha of protected lands, including 400 sites of natural, historic, and cultural significance across the country (National Park Service 2008).

Private entities play a significant role in land conservation in the United States. Approximately 15 million ha of land across the country have

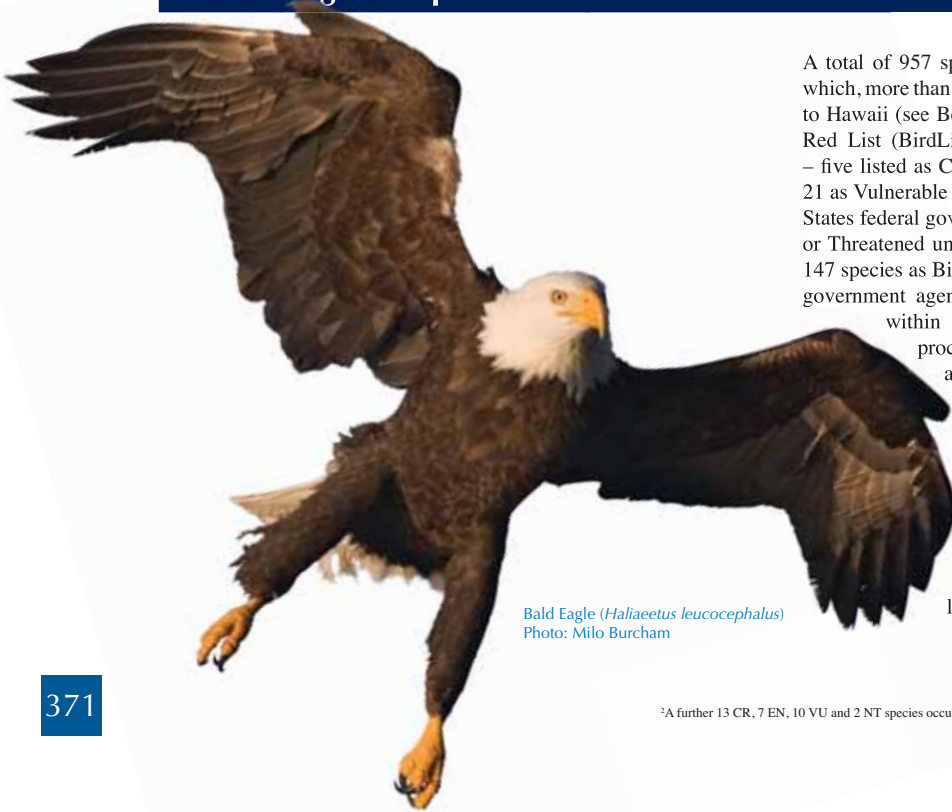
“Private entities play a significant role in conservation in the US, protecting approximately 15 million ha of land.”

been reported to be protected through private entities. These private organizations range from small local land trusts to large national conservation organizations, including The Nature Conservancy, Ducks Unlimited, The Conservation Fund, and the Trust for Public Land (Aldrich & Wyerman 2005). As of 2005, conservation easements, facilitated through the efforts of land trusts and conservation organizations, have saved 2,529,617 ha of habitat (Aldrich & Wyerman 2005).

The United States is signatory to several international biodiversity conventions, including the United Nations World Heritage Convention, the Ramsar Convention on Wetlands, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Convention for the International Council for the Exploration of the Sea, the United Nations Framework Convention on Climate Change, the United Nations Convention to Combat Desertification, and the Convention on the Conservation of Antarctic Marine Living Resources. The United States has also signed bilateral treaties on migratory bird conservation with Canada, Mexico, Japan, and Russia.

In the United States, 47 sites have been designated as Biosphere Reserves, with 30 of these falling within the purview of the National Park Service (UNESCO 2008). A total of 26 Ramsar sites have been designated (US Fish and Wildlife Service 2008b), of these, 17 are associated with at least one Important Bird Area.

Ornithological importance



Bald Eagle (*Haliaeetus leucocephalus*)
Photo: Milo Burcham

A total of 957 species have been recorded in the United States, of which, more than 800 occur regularly. A further 30 species are endemic to Hawaii (see Box 1). Ninety-seven species appearing on the IUCN Red List (BirdLife International 2008) occur in the United States – five listed as Critically Endangered (CR), 14 as Endangered (EN), 21 as Vulnerable (VU), and 27 as Near Threatened (NT)². The United States federal government recognizes 64 avian species as Endangered or Threatened under the Endangered Species Act, and lists a further 147 species as Birds of Conservation Concern (USFWS 2008c). State government agencies also list Endangered and Threatened species within their jurisdiction and under their own legislative processes. Many other species conservation status lists are in circulation, most are specific to geographic subregions or states, and they mostly focus on highlighting species that are considered at risk but not federally listed under the Endangered Species Act. The current Audubon WatchList, compiled in collaboration with the American Bird Conservancy, lists 93 species in the United States as being of global concern – known as the Red list – and 117 as being of national concern – known as the Yellow list (Butcher *et al.* 2007).

²A further 13 CR, 7 EN, 10 VU and 2 NT species occur only on Hawaii and are not included in analyses or IBAs presented in this directory.



Egret colonies were targeted by hunters to supply the millinery trade.
Photo: Charles Mills

Two Endemic Bird Areas (EBAs) have been identified within the continental United States and are shared with neighboring Mexico, while four Secondary Areas are exclusive to the 49 continental states (Stattersfield *et al.* 1998). California (EBA 001) has five restricted-range scrub and forest species, as well as the marsh-dwelling Tricoloured Blackbird (*Agelaius tricolor*). The Northern Sierra Madre Oriental (EBA 010) extends from southern Texas into Mexico and includes the breeding range of the Colima Warbler (*Vermivora crissalis*). Two Secondary Areas have been identified for restricted-range Neotropical migrants—Edwards Plateau (SA 004) for Golden-cheeked Warbler (*Dendroica chrysoparia*) and Michigan Jack Pine Savanna (SA 003) for Kirtland's Warbler (*Dendroica kirtlandii*). In Alaska, two Secondary Areas have also been identified—Eastern Bering Sea Islands (SA 001) for McKay's Bunting (*Plectrophenax hyperboreus*) and Seward Peninsula and Yukon Delta (SA 002) for Bristle-thighed Curlew (*Numenius tahitiensis*).

Bird distribution and abundance varies greatly throughout the US with extreme examples including breeding sites on the Arctic coasts of Alaska, where an estimated 50 million seabirds nest in over 1600 colonies, all the way to the subtropical Everglades, providing critical habitat for large colonies of long-legged wading birds. Additionally, many Neotropical migratory landbirds traveling thousands of kilometers, are highly dependent on stopover habitat in the United States (Box 2). They also rely on breeding destinations in the US such as the Catskill Peaks of New York, recognized for its importance to Bicknell's Thrush (*Catharus bicknelli*), and the Ozark National Forest in Arkansas, recognized for its importance to Cerulean Warbler (*Dendroica cerulea*).

“An estimated 50 million seabirds nest in over 1600 colonies on the Arctic coasts of Alaska.”

The public outcry over mass destruction of waterbird colonies throughout the southeastern US by market hunters at the turn of the century sparked the modern conservation movement in North America; however, many waterbird species still remain at risk in the United States, due to other human activities (Kushlan *et al.* 2002). Many shorebirds are also at risk, with almost half of the 50 shorebird species that breed in the United States having undergone recent and significant population declines (Brown *et al.* 2000). This highlights the importance of IBAs that continue to host spectacular numbers of migrating shorebirds and other waterbirds, such as Bear River Bay in Utah and Bolivar Flats on the Texas coast.

Throughout North America, bird conservation has evolved into a network of partnerships coordinated and advanced through the

“The public outcry over the mass destruction of waterbirds at the turn of the century sparked the modern conservation movement in North America.”

North American Bird Conservation Initiative (NABCI 2002). In the United States, there are hundreds of conservation organizations solely focused on birds, including the National Audubon Society (the US BirdLife partner). There are also many other organizations addressing bird conservation as part of their mission. In addition, federal, state, tribal, and local governments in many cases have a legal mandate to manage or steward bird populations and or their habitats. These self-directed, partnership-based initiatives have produced national and continental conservation plans for birds that assess species status, define monitoring needs and population objectives, and prioritize habitat conservation issues.

Alongside the variety of bird conservation partnerships that come together under NABCI there also exists a network of Joint Ventures. These entities are public-private partnerships, which in the majority of cases are financially supported and coordinated by the federal government. Formed initially to manage waterfowl habitat and populations, these Joint Ventures have grown to take on responsibility for all birds that occur within their geographic, habitat, or species focused purview. Joint Ventures, thanks to broad support and federal financial backing, have proven to be a strong force for the conservation of birds and their habitats throughout North America.

A number of ornithological societies, academic institutions, and conservation organizations in the United States contribute to our understanding of avian populations and the application of this knowledge to bird conservation. The foundation of our ornithological understanding stems from academic research and publications. However, contributing to this knowledgebase are valuable data from citizen science efforts, including the National Audubon Society's volunteer-based Christmas Bird Count, which has been in existence since 1900. The combined efforts of tens of thousands of volunteers have built an increasingly important bank of information. Another volunteer-based annual survey, the Breeding Bird Survey, established in 1966 by the Patuxent Wildlife Research Center, involves collecting population data along roadside survey routes. These data sets are both heavily relied upon for indications of long term bird population trends in the United States.



Roseate Spoonbill (*Platalea ajaja*)
Photo: Jim Williams

IBA overview



The identification of Important Bird Areas in the United States first began in 1994 (through the efforts of the American Bird Conservancy, as the initial BirdLife partner for the United States), and focused on identification of sites of global and national significance. Shortly thereafter, the National Audubon Society entered into a partnership with American Bird Conservancy, taking a different approach to program implementation, built upon state-based efforts. In 2000, the National Audubon Society assumed leadership of the US IBA Program, becoming the sole BirdLife partner in the United States, with responsibility for building the national network of IBAs. Sites identified through the earlier American Bird Conservancy process (Chipley *et al.* 2003) have informed the current identification and confirmation process of global IBAs³.

The IBA Program is coordinated nationally by Audubon but is highly dependent upon local implementation by staff and partners across the United States. This combined approach to program implementation maximizes the effectiveness of IBA conservation. State-based IBA programs help to assure that the process is grassroots-driven, with engagement of the local communities and partners that are dedicated to caring about the birds and the places on which they depend. At the same time, these local efforts are framed in the context of national and international conservation planning efforts.

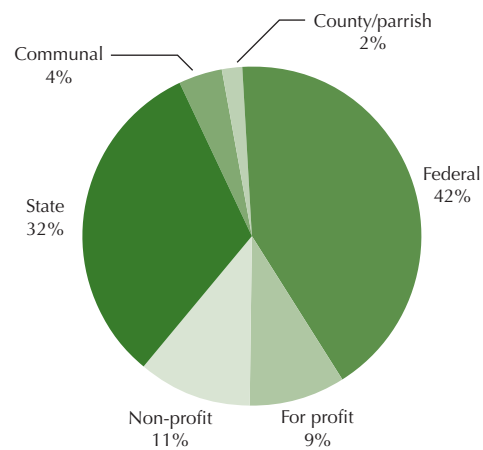
Important Bird Areas are first identified at the state-level, using state specific criteria based on a standardized framework that generally follow the global IBA criteria. This network of state level IBAs is intended to be a focus of state bird conservation efforts, conservation planning, and conservation action. These local efforts are then tied to broader regional, national and international conservation planning, implementation, and evaluation efforts. To facilitate the comparisons and effective conservation planning and implementation at these broader scales, Audubon has developed an IBA criteria hierarchy using BirdLife’s IBA criteria to identify regional (i.e., continental) and global IBAs from the pool of state-level sites. Thresholds for the criteria have been set at the regional (Nearctic) level (see Methods). IBA identification at the regional and global level is advanced through a coordinated process involving review by the US IBA Technical Committee, with assistance from the national IBA staff and BirdLife International. Altogether, this combination of local identification and insertion into broader scale site networks (e.g. the global IBA network) provides the framework for targeting actions at the sites most in need of conservation action.

The IBA Program in the United States is currently in the midst of completing a nation-wide inventory of Important Bird Areas, based on identification of sites at the state-level. The first state IBA Programs were initiated in Pennsylvania and New York, with these states publishing inventories in 1999 and 1998 respectively (Crossley 1999, Wells 1998). From those initial state efforts, the Important Bird Areas Program expanded throughout the eastern and western states, including Alaska, and more recently expanded through the central United States and to Hawaii (Box 1). Important Bird Area inventories have been published or presented online for most states. Although the national inventory is still ongoing, conservation actions have already been implemented at many IBAs, resulting in numerous successes, ranging from outright land protection to policy changes and broad public support for the conservation of birds and biodiversity.

“IBAs are first identified at the state level, using state specific criteria based on a standardized framework.”

To date, over 2300 state-level Important Bird Areas have been identified throughout the United States, encompassing over 140 million ha of habitat. Of these, 217 IBAs have been confirmed as global IBAs (Table 1, Figure 1) and an additional 141 are pending global IBA status, at the time of writing. An estimated 700-800 global IBAs are ultimately expected to be confirmed for the US. Of the global IBAs in the continental United States, confirmed under the A1 criterion, a significant number encompass public lands, with federal and state lands reported at the highest rates (Figure 2). Private ownership, including non-profit and for-profit entities, encompass a smaller percentage of the IBAs. Of the federal ownership categories reported, National Wildlife Refuges, Forest Service Lands, and Bureau of Land Management Lands make up the largest percentages. Many of the State-owned lands fall within Wildlife Management Areas.

Figure 2. Ownership across A1 IBAs. n = 97



Marbled Godwit (*Limosa fedoa*), Little Blue Heron (*Egretta caerulea*), Black-necked Stilt (*Himantopus mexicanus*) and American Avocet (*Recurvirostra americana*) at Bald Knob National Wildlife Refuge, an Important Bird Area in Arkansas.
Photo: Bill Branham

³The selection and confirmation of global IBAs from the suite of state-level IBAs is known as prioritization in the US. This is different to setting priorities among global IBAs, which represents another aspect of the IBA program.



Important Bird Areas in Hawaii

Box 1

To date, 17 global IBAs have been identified in Hawaii, encompassing over 36 million ha. All of these IBAs support populations of globally threatened species. Overall, the network of sites identified in Hawaii support 21 species of conservation concern, of which 18 are endemic.

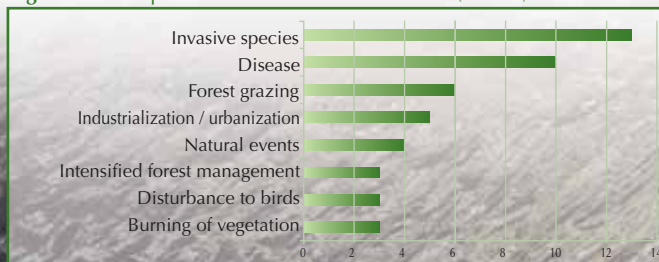
As a volcanic island chain, Hawaii supports a unique assemblage of birds, many of which are found nowhere else in the world. It is known to have supported at least 113 endemic species prior to human settlement. Extant range-restricted birds have led to the identification of three EBAs and one Secondary Area in the archipelago. Of the endemic species currently still in existence, 31 are federally listed, and the population status of 10 of these species is completely unknown (Leonard 2008). In addition, over 30 bird species in Hawaii have been categorized as globally threatened (BirdLife International 2008), in-

cluding 13 Critically Endangered, seven Endangered and 10 Vulnerable. They are also on Audubon's Red WatchList.

Many Hawaiian species are highly specialized and, therefore, sensitive to ecological disruption. A number of non-native species were brought to the islands by humans, and some of the original unique habitat types were destroyed. Introductions of rabbits and goats caused changes in plant assemblages, destroying habitat and threatening many birds, and non-native predators continue to consume many bird eggs and destroy nests. Given these and other threats, many of Hawaii's birds face significant conservation challenges (Figure 6).

Extensive efforts are underway to protect and enhance habitat and also to re-establish and expand declining bird populations.

Figure 6. Principal threats across IBAs in Hawaii (n = 13)



Red-footed Booby (*Sula sula*) at Lehua Islet, an Important Bird Area in Hawaii. Photo: Eric VanderWerf

Table 1. Important Bird Areas in the United States⁴

IBA code	IBA name	Adm unit	Area (ha)	A1				A2	A3	A4					
				CR	EN	VU	NT			A4i	A4ii	A4iii	A4iv		
1	Attu Island	Alaska	88,900	1								X			
2	Agattu Island	Alaska	22,100	1								X			
3	Semichi Islands	Alaska	2,750			1						X			
4	Buldir Island	Alaska	13,650			1						X	X		
5	Kiska Island	Alaska	34,000											X	
6	Segula-Davidof Islands	Alaska	3,650											X	
7	Gareloi Island	Alaska	19,700												X
8	Kuluk Bay	Alaska	5,860			1						X			
9	Koniuji Island	Alaska	12,400											X	
10	Chagulak Island	Alaska	850												X
11	St. George Island	Alaska	109,500									X	X		
12	St. Paul Island	Alaska	266,100									X	X		
13	St. Matthew Island	Alaska	310,000			1						X			
14	St. Lawrence Island	Alaska	1,687,000												X
15	Little Diomed Island & Fairway Rock	Alaska	17,638									X	X		
16	Bogoslof Island and Fire Island	Alaska	4,500												
17	Baby Islands and Akutan Pass	Alaska	373,000			1						X	X		
18	Aiktak Island	Alaska	58,800												X
19	Kaligagan Island	Alaska	9,300												X

⁴Temporary IBA codes have been used in Table 1 and Figure 1.

Important Bird Areas AMERICAS

IBA code	IBA name	Adm unit	Area (ha)	A1				A2	A3	A4				
				CR	EN	VU	NT			A4i	A4ii	A4iii	A4iv	
20	Bechevin Bay	Alaska	79,500				1				X			
21	Amak Island	Alaska	1,200								X			
22	Izembek and Moffet Lagoons	Alaska	240,100				1				X			
23	Nelson Lagoon-Mud Bay	Alaska	94,700				1				X			
24	Port Moller-Herendeen Bay	Alaska	148,200				1				X			
25	Outer Shumagin Islands	Alaska	84,110										X	
26	Cape Senyavin	Alaska	66,200								X			
27	Seal Islands	Alaska	86,000				1				X			
28	Port Heiden	Alaska	107,200				1				X			
29	Cinder River and Hook Lagoon	Alaska	74,200				1				X			
30	Ugashik Bay	Alaska	72,400				1				X			
31	Upper Naknek River	Alaska	3,590								X			
32	Kvichak Bay	Alaska	179,800				1				X			
33	Egegik Bay	Alaska	28,400				1				X			
34	Nushagak Bay	Alaska	140,900				1				X			
35	Walrus Islands	Alaska	64,600								X		X	
36	Cape Peirce	Alaska	6,400				1				X		X	
37	Nanvak Bay	Alaska	4,100				1				X			
38	Cape Newenham	Alaska	18,700								X			
39	Chagvan Bay	Alaska	7,800				1				X			
40	Goodnews Bay	Alaska	27,800				1				X			
41	Carter Bay	Alaska	16,500				1				X			
42	Kuskokwim River Delta	Alaska	1,309,700				1				X			
43	Central Yukon-Kuskokwim	Alaska	2,035,700				1				X			
44	Andreafsky Wilderness	Alaska	1,053,100			1					X			
45	Iditarod River Lowlands	Alaska	279,650			1					X			
46	Central Seward Peninsula	Alaska	518,000								X			
47	Cape Thompson	Alaska	6,447			1							X	
48	Cape Lisburne	Alaska	13,065										X	
49	Kasegaluk Lagoon	Alaska	873,202								X			
50	Teshkepkuk Lake and East Dease Inlet	Alaska	802,807								X			
51	Eastern Beaufort Sea Lagoons & Barrier Islands	Alaska	243,000								X			
52	Uganik Bay and Viekoda Bay	Alaska	46,897	1	1									
53	Chiniak Bay	Alaska	7,700				1				X			
54	Barren Islands	Alaska	4,900										X	
55	Kachemak Bay (South Shore)	Alaska	36,288	1									X	
56	Homer Spit	Alaska	16,630								X			
57	Fox River Flats	Alaska	5,408								X			
58	Tuxedni Bay	Alaska	9,200								X			
59	Redoubt Bay	Alaska	74,832								X			
60	Trading Bay	Alaska	68,093								X			
61	Susitna Flats	Alaska	124,188								X			
62	Kahiltna Flats-Petersville Road	Alaska	125,629								X			
63	Harriman Fjord	Alaska	5,180	1	1									
64	Northern Montague Island	Alaska	3,300								X			
65	Copper River Delta	Alaska	399,000								X			
66	Upper Tanana River Valley	Alaska	2,459,850								X			
67	Icy Bay	Alaska	567,120	1	1									
68	Blacksand Spit	Alaska	780								X			
69	Mendenhall Wetlands	Alaska	1,820								X			
70	Port Snettisham	Alaska	6,922			1								
71	Stikine River Delta	Alaska	39,419								X			
72	Sheldon National Wildlife Refuge	Nevada	232,694				1							
73	Bilk Creek and Montana Mountains	Nevada	201,242				1							
74	High Rock Resource Area	Nevada	152,283				1							
75	Wellington-Pine Grove Hills	Nevada	60,191				1							
76	Channel Islands (Northern)	California	139,828	1	1	3					X		X	
77	Santa Clara River Valley	California	27,390	1	2	2								
78	Terminal Island Tern Colony	California	6				1				X			
79	Orange Coast Wetlands	California	3,237								X			
80	Santa Ana River Valley	California	4,196		1		1							
81	Camp Pendleton	California	68,375				1				X			
82	San Luis Rey River	California	3,209				1							
83	San Pasqual Valley	California	6,194		1		1							
84	San Diego Bay	California	3,266				2				X			
85	San Diego National Wildlife Refuge-Eastern	California	5,650				1							
86	Baldwin Lake	California	528											
87	Anza-Borrego Riparian	California	1,147			1	1							
88	Imperial Valley	California	252,618								X			
89	Salton Sea	California	95,447			1					X			

IBA code	IBA name	Adm unit	Area (ha)	A1				A2	A3	A4				
				CR	EN	VU	NT			A4i	A4ii	A4iii	A4iv	
90	East Mojave Peaks	California	79,089											
91	Mission Bay	California	1,189			1							X	
92	Owyhee Uplands	Idaho	359,977				1							
93	South Hills	Idaho	251,116				1							
94	Minidoka National Wildlife Refuge	Idaho	8,385										X	
95	Raft River and Curlew Valley	Idaho	197,398				1							
96	American Falls Reservoir	Idaho	31,080										X	
97	Idaho National Laboratory	Idaho	230,776				1							
98	Blackfoot Reservoir	Idaho	7,770										X	
99	Bear Lake National Wildlife Refuge	Idaho	7,284										X	
100	Gunnison Bay/North Arm	Utah	9,330										X	
101	Bear River Bay	Utah	57,576										X	
102	Deseret Land and Livestock Ranch	Utah	89,034				1							
103	Ogden Bay	Utah	25,556										X	
104	Gilbert Bay/South Arm	Utah	239,374										X	
105	Farmington Bay	Utah	49,184										X	
106	Upper Strawberry Watershed	Utah	50,943				1							
107	Parker Mountain	Utah	239,744				1							
108	Zion National Park	Utah	59,908	1			1							
109	San Juan County - Gunnison Sage-Grouse	Utah	4,411		1									
110	Marble Canyon	Arizona	5,090	1										
111	Hebgen Lake	Montana	6,475										X	
112	Little Beaver Creek	Montana	10,280											
113	North Valley Grasslands	Montana	388,917			1	1							
114	Westby Prairie-Wetland Complex	Montana	1,295			1	2							
115	Gunnison Basin	Colorado	133,551		1	1								
116	Pawnee National Grassland	Colorado	78,131											
117	Comanche National Grassland	Colorado	8,903			1								
118	North Platte River Valley	Nebraska	14,450			1	1							
119	Rowe Sanctuary	Nebraska	586		1								X	
120	Missouri National Recreational River	Nebraska	13,678				1							
121	Kirtland's Warbler Management Units & Guide's Rest	Michigan	120,000				1							
122	Coastal Saginaw Bay (Nayanquing Point to Wildfowl Bay)	Michigan	unknown										X	
123	Sleeping Bear Dunes National Lakeshore (including North Manitou Island)	Michigan	unknown				1							
124	White River (Manistee National Forest)	Michigan	unknown											
125	Allegan State Game Area & Kalamazoo River (Galesburg to Saugatuck)	Michigan	20,235			1	1							
126	Barry State Game Area, Yankee Springs Recreation Area and Perry Trust	Michigan	8,094			1								
127	Fort Custer Training Center and Recreation Area	Michigan	4,047											
128	Waterloo Recreation Area	Michigan	unknown			1								
129	Lower Detroit River	Michigan	unknown			1							X	
130	Niagara River Corridor	New York	39,661										X	
131	Braddock Bay	New York	2,145											
132	Montezuma Wetlands Complex	New York	28,329										X	
133	Adirondack High Peaks Forest Tract	New York	142,859											
134	Catskills Peaks Area	New York	125,457			1								
135	Great Gull Island	New York	1,497			1							X	
136	Jamaica Bay	New York	8,499				1							
137	High Elevation Spruce-Fir	New Hampshire	101,150											
138	Great Bay	New Hampshire	3,345			1								
139	Hampton/Seabrook Marsh and Dune	New Hampshire	2,538			1								
140	Hammonasset Beach State Park	Connecticut	405			1								
141	Barn Island Wildlife Management Area	Connecticut	405			1								
142	Mississippi Palisades State Park	Illinois	1,032			1								
143	Castle Rock State Park and Lowden-Miller State Forest	Illinois	1,720			1								
144	Pratt's Wayne and Phillip State Park Grassland Complex	Illinois	1,389			1	1							
145	Goose Lake Prairie State Park	Illinois	1,012				1							
146	Midewin National Tallgrass Prairie	Illinois	6,071				1							
147	Iroquois County State Conservation Area	Illinois	809				1							
148	Prairie Ridge State Natural Area - Jasper and Marion Units	Illinois	971				1							
149	Pyramid State Park	Illinois	6,475			1	1							
150	Pomona Nongame Bird Management Area	Illinois	1,416											
151	Cache River State Natural Area	Illinois	5,247			1	1							
152	Cypress Creek National Wildlife Refuge	Illinois	24,281				1							
153	Cowles Bog (Indiana Dunes National Lakeshore)	Indiana	240											
154	Kankakee River Fish and Wildlife Area	Indiana	4,095		1	1								
155	Jasper-Pulaski Fish and Wildlife Area and surrounding areas	Indiana	12,141			1							X	

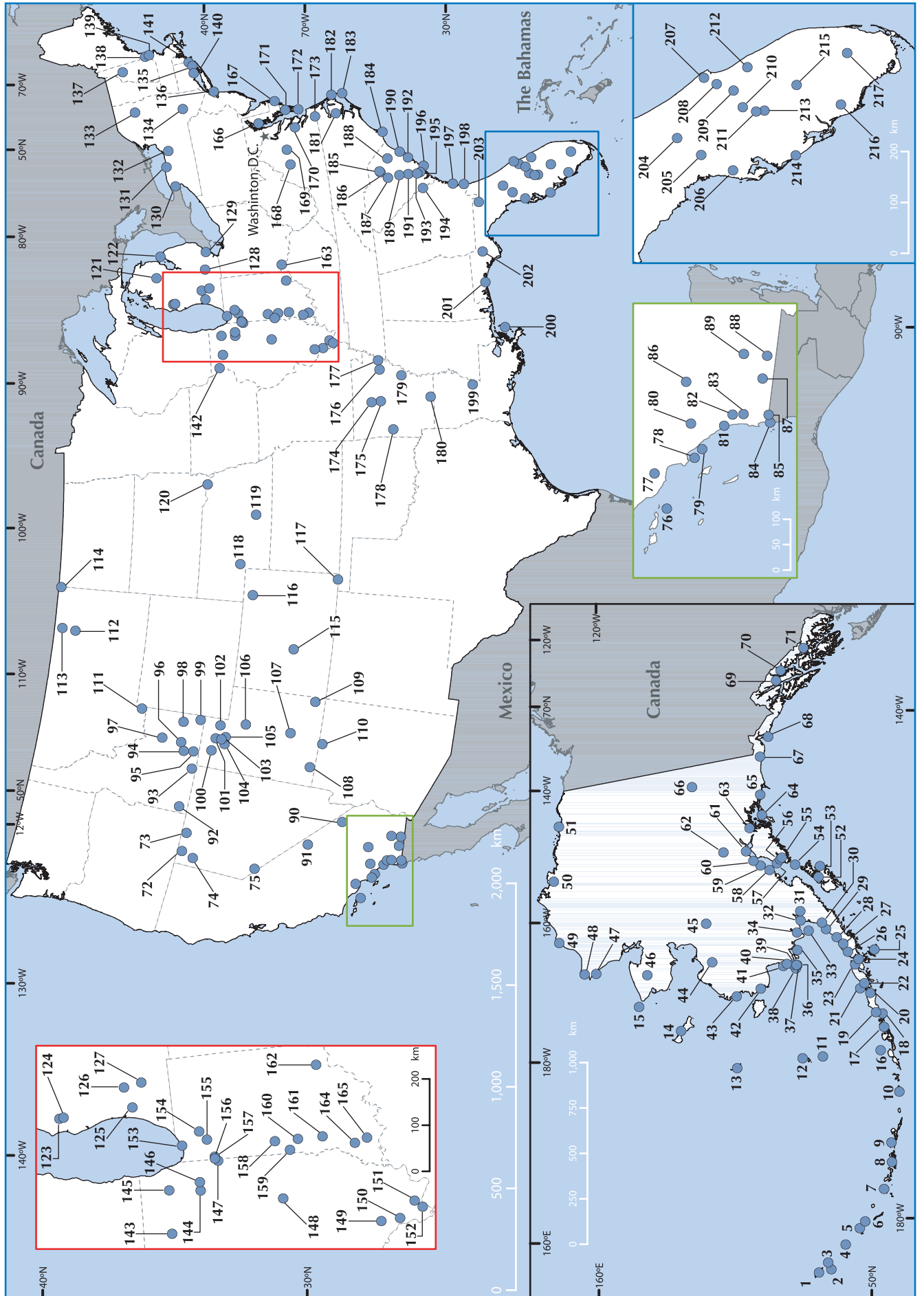
Important Bird Areas **AMERICAS**

IBA code	IBA name	Adm unit	Area (ha)	A1				A2	A3	A4				
				CR	EN	VU	NT			A4i	A4ii	A4iii	A4iv	
156	Willow Slough Fish and Wildlife Area	Indiana	4,030											
157	Kankakee Sands Project and surrounding natural areas	Indiana	3,504			1	1							
158	Sugar Creek Valley	Indiana	11,000											
159	Universal Mine	Indiana	2,630			1	1							
160	Chinook Fish and Wildlife Area and Chinook Mine	Indiana	2,000				2							
161	Goose Pond/Beehunter Marsh Fish and Wildlife Area	Indiana	3,238				1							
162	Big Oaks National Wildlife Refuge	Indiana	20,240				1							
163	Monroe Lake	Indiana	9,693			1								
164	Patoka River National Wildlife Refuge	Indiana	8,903			1								
165	Lynnville-Squaw Creek Mine Complex	Indiana	2,830			1	3							
166	Eastern Neck National Wildlife Refuge	Maryland	858									X		
167	Assateague Island	Maryland	4,179				1							
168	Upper Blue Ridge Mountains	Virginia	182,110											
169	Lower Rappahannock River	Virginia	50,931			1	1							
170	Pamunkey and Mattaponi Rivers	Virginia	55,931			1								
171	Delmarva Bayside Marshes	Virginia	9,174			1								
172	Barrier Island and Lagoon System	Virginia	105,249			1	1					X		
173	Great Dismal Swamp	Virginia	44,500											
174	Ozark National Forest	Arkansas	427,653			1								
175	Holla Bend National Wildlife Refuge	Arkansas	2,853			1								
176	Fort Chaffee	Arkansas	26,396			1	2							
177	Wapanocca National Wildlife Refuge	Arkansas	2,219											
178	Shortleaf Pine-Bluestem Grass Ecosystem Management Area	Arkansas	62,727			1	1							
179	Cache and Lower White Rivers	Arkansas	81,342									X		
180	Shugart/Felsenthal Red-cockaded Woodpecker	Arkansas	524,475											
181	Pocosin Lakes/ Pungo National Wildlife Refuge	North Carolina	144,573			1						X		
182	Pea Island National Wildlife Refuge	North Carolina	1,803									X		
183	Cape Hatteras National Seashore	North Carolina	125									X		
184	Battery Island Audubon Sanctuary	North Carolina	40									X		
185	Sand Hills State Forest (South Carolina Forest Commission)	South Carolina	17,402											
186	Carolina Sandhills National Wildlife Refuge	South Carolina	18,625			1								
187	Fort Jackson Military Reservation	South Carolina	2,844			1								
188	Francis Marion National Forest	South Carolina	101,250			1								
189	Santee National Wildlife Refuge	South Carolina	6,150			1	1							
190	Hobcaw Barony	South Carolina	7,082											
191	Brosnan Forest	South Carolina	6,475			1								
192	Medway Plantation	South Carolina	2,752			1								
193	Donnelly Wildlife Management Area	South Carolina	3,240			1								
194	Webb Wildlife Management Area	South Carolina	unknown			1								
195	Bear Island Wildlife Management Area	South Carolina	4,685			1	1							
196	ACE Basin National Wildlife Refuge (Edisto Unit)	South Carolina	2,633				1							
197	Altamaha River Delta	Georgia	12,146				1					X		
198	Cumberland Island National Seashore	Georgia	14,737				1					X		
199	Catahoula, Dewey Wills, and Three Rivers	Louisiana	382,347									X		
200	Chandeleur Islands (Breton National Wildlife Refuge)	Louisiana	145,444									X		
201	Eglin Air Force Base	Florida	187,557											
202	Apalachicola River and Forests	Florida	311,010			1								
203	Osceola National Forest-Okefenokee Swamp	Florida	100,670			1								
204	Ocala National Forest-Lake George	Florida	171,366			1								
205	Withlacoochee-Panasoffkee-Big Scrub	Florida	40,893			2								
206	Central Pasco	Florida	21,402			1								
207	Cape Canaveral and Merritt Island	Florida	85,899			1								
208	Brevard Scrub Ecosystem	Florida	13,752			1								
209	Osceola Flatwoods and Prairies	Florida	87,695			1								
210	Kissimmee Prairie Preserve and State Park	Florida	21,853			1	1							
211	Lake Wales Ridge	Florida	28,448											
212	St. Sebastian River State Buffer Preserve	Florida	8,750			1								
213	Avon Park Air Force Range (Bombing Range Ridge)	Florida	58,775			2								
214	Oscar Scherer State Park	Florida	560			2								
215	Fisheating Creek Watershed	Florida	71,534			1								
216	Corkscrew Swamp Watershed	Florida	29,325			1						X		
217	Northern Everglades	Florida	445,393									X		



For information on trigger species at each IBA, see individual site accounts at Audubon's Online IBA Database: <http://iba.audubon.org/iba/siteSearch.do>

Figure 1. Location of Important Bird Areas in the United States⁵



⁵IBA identification in the United States is still ongoing, with an estimated 700-800 global IBAs expected to be confirmed across the country. As of July 2009, 358 global IBAs, 15 regional IBAs, and 1927 state IBAs had been identified. An analysis of IBA protection status is yet to be completed.

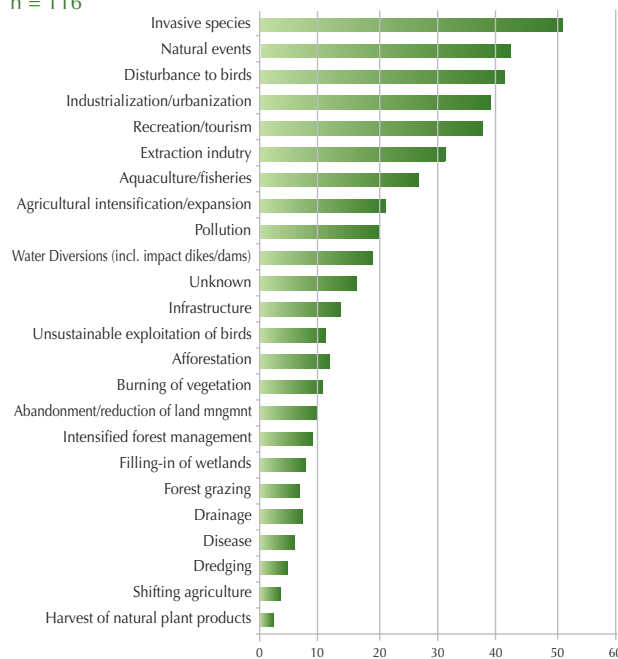
Important Bird Areas AMERICAS

Prominent threats across the Important Bird Areas recognized for globally threatened species include invasive species, natural events, disturbance to birds, industrialization/urbanization, and recreation/tourism (Figure 3).

Habitats reported most often across the A1 IBAs confirmed to date include those categorized generally as forested uplands, wetlands, water, and shrubland (Figure 4). At a finer scale, about half of the sites reporting forested upland habitats reported deciduous forests, with the other half consisting of mostly evergreen forests and some mixed forests. The IBAs reporting wetland habitats categorized these as emergent herbaceous wetlands and woody wetlands specifically.

Of the land uses reported at A1 IBAs, tourism/recreation, nature

Figure 3. Number of IBAs reporting specific threats across A1 IBAs. n = 116



conservation and research, and hunting categories were reported most often, with each of these categories making up approximately a fifth (18-22%) of the total reports. These were followed by forestry, agriculture, aquaculture, and water management, each of which were reported at similar rates (~10%; Figure 5).

These descriptive statistics represent a snapshot of the overall Important Bird Areas network in the United States. It is important to note that these IBAs are largely publicly-owned lands and are managed with a conservation focus. Conservationists in the United States have expended tremendous effort to date on the conservation of many globally imperiled species. Therefore, the global IBAs selected using A1 criteria are likely to be the most protected sites. As progress continues to confirm IBAs at global level in the United States the picture is likely to change.

Figure 4. Habitats across A1 IBAs. n = 124

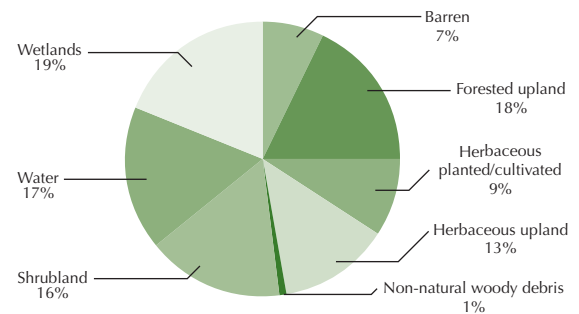
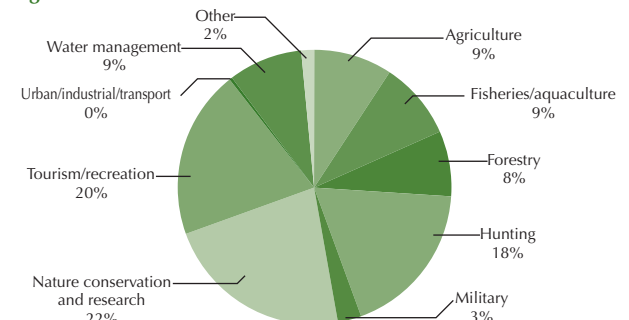


Figure 5. Land use across A1 IBAs. n = 124



Opportunities

IBA identification is only the first of several activities involved in the site conservation process. Additional activities include assessment, planning and implementing. These activities individually and taken together allow for appropriate actions to be identified, implemented and evaluated to determine their efficacy in conserving species and habitats and abating threats. Central to this process is the engagement of volunteers, communities, and partners in determining and implementing these activities and measuring progress towards conservation success. Aside from conservation activities such as restoration and enhancement and monitoring efforts, other necessary actions may involve influencing changes in policy or negotiations with land owners and partners to secure protection or proper management of habitat. In combination, identification, prioritization, assessment, planning and implementation are effective activities that focus the efforts of stakeholders into taking measurable actions to protect birds and their habitats.

While the identification and prioritization process is still underway in the United States, conservation successes have already been realized

“IBA identification is only the first of several activities involved in the site conservation process.”

at many IBAs. Work on policy and advocacy has led to the halting of imminent developments in areas adjacent to or encompassed by some IBAs, as in the case of the Clark Fork-Grass Valley state-level IBA in Montana. At this site, a local Audubon chapter led efforts to identify an IBA, they reached out to landowners and a local land trust, and ultimately presented a case for the sites’ significance for a regionally threatened species. In some states, the IBA process and IBAs have been incorporated in policies at local and state scales and formally used to inform land management practices. In New York, for example, the IBA process has served as a model for identifying state lands important for birds, through the New York State Bird Conservation Areas (BCA) Program (see p24). Habitat restoration projects at IBAs have engaged hundreds of volunteers and have helped develop productive partnerships.

Trumpeter Swan (*Cygnus buccinator*)
Photo: Milo Burcham



In some cases, projects have already led to measurable increases in target species, such as the creation of the world's first restored colonies of Atlantic Puffins (*Fratercula arctica*) at IBAs in Maine (Box 3).

Continued efforts by trained volunteers and local groups to survey birds at some IBAs have yielded an increased understanding of how sites are being used, and improve information for land management. In North Carolina, a partnership with the Division of Parks and Recreation, has resulted in the training of over 200 volunteers involved in activities at over 20 IBAs across the state. Outreach efforts and coordination with land owners and partners has resulted in agreements, conservation easements, or land acquisitions, increasing protection for priority species at these sites. In California, negotiations such as these, with a local farmer, have resulted in the protection of a large colony of the globally threatened Tricoloured Blackbird (*Agelaius tricolor*; Box 4). Many but not all of these activities, efforts, and projects have been initiated, implemented, and sustained as a result of IBA Adoption Groups (or Local Conservation Groups). To date, there are over 213 IBA Adoption groups involved in activities at over 232 state-level, continental or global IBAs across the United States.

At the national level, efforts in site prioritization, coordination, national level analyses, and the development of tools and resources help in providing broader context and a framework for the multitude of activities happening across the network of IBAs. Through the process of prioritization, state identified IBAs are compared using global and continental criteria, to determine where to collectively focus limited resources to better protect the birds and places most in need. This

“Recognizing a site’s significance among a global or continental network of sites also serves as additional leverage for why it should be better managed or protected.”

determination of high priority IBAs, which is still underway, can inform state and regional planning efforts, with these sites serving as conservation targets. Recognizing a site’s significance among a global or continental network of sites also serves as additional leverage for why it should be better managed or protected. National coordination has allowed for the centralized storage and management of IBA data in Audubon’s Important Bird Areas database (available at www.audubon.org/bird/iba). Thanks to this tool, data are widely available to the public and conservation partners and are serving as the basis for regional and national analyses.

By reviewing the status of Important Bird Areas at state, regional and national levels opportunities to report on the IBA network begin to emerge that were never available previously. The development of outreach and educational activities and materials at both local and national levels, including press releases, publications, and formal site recognition events, have resulted in an increased public awareness of the IBA Program and greater understanding of the value of IBAs to birds, biodiversity and people. Altogether, with this combination of state implementation and

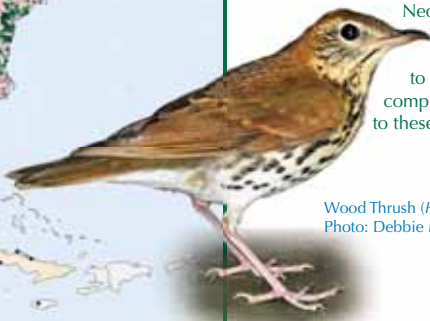
Linking local IBA efforts range-wide for effective conservation strategies

Box 2

Figure 7. IBAs for Wood Thrush (*Hylocichla mustelina*)



Through the support of a US Fish and Wildlife Service Neotropical Migratory Bird Conservation Act (NMBCA) grant, the US IBA Program is documenting the occurrence of particular Neotropical migrants of conservation concern and prioritizing (i.e. ranking IBAs as state, continental or global level) these sites for conservation actions, based on US IBA data. These important sites for Neotropical migrants in the US can be linked to other IBAs identified throughout the Americas to provide a better understanding of sites to focus conservation efforts on, and for a more comprehensive and effective approach to abating threats to these species throughout their ranges (Figure 7).



Wood Thrush (*Hylocichla mustelina*)
Photo: Debbie McKenzie

Data on migratory birds such as Bobolink (*Dolichonyx oryzivorus*), Yellow Warbler (*Dendroica petechia*) and Tennessee Warbler (*Vermivora peregrina*) were documented as part of this project.



Photo: Jim Williams



Photo: Rebecca Field



Photo: Jim Williams

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national coordination of the IBA Program in the United States, the network of stakeholders and partners is strengthened and broadened, ultimately resulting in increased conservation successes.

As the IBA Program works to complete the national inventory and conservation activities are implemented across the country, efforts are now underway to implement a consistent method for measuring the outcomes of these conservation actions. This IBA assessment process,

modeled after the BirdLife International global IBA monitoring framework, is in the early stages of implementation, but is designed to track changes in bird populations, habitat quality, and imminent threats, as well as the impact of conservation actions at Important Bird Areas. Ultimately, IBA assessment will integrate with more detailed conservation planning activities and engage an increasing number of volunteers leading to informed, effective, and adaptive management across the entire IBA network.

Box 3

Since the early 1970s, Audubon's Seabird Restoration Program has been managing and protecting a network of seabird colonies, which include several IBAs that have been identified in Maine. This program has led the way in pioneering the technique of social attraction to restore populations of seabirds to self-sustaining levels. Efforts have resulted in the creation of the world's first restored colonies of Atlantic Puffins (*Fratercula arctica*), Razorbills (*Alca torda*), Arctic, Common, and Roseate Terns (*Sterna paradi-*

Seabird restoration efforts at IBAs re-establishes seabird populations

saea, *Sterna hirundo*, *Sterna dougallii*), and Leach's Storm-Petrel (*Oceanodroma leucorhoa*). Restoration efforts have influenced the identification of these sites as IBAs. However, the recognition of these managed islands as IBAs has strengthened their importance, placing them in a broader context and increasing the level of awareness. Not only do these islands support most of the rare seabirds in Maine, but they are also part of a global and regional network of sites key to sustaining populations of these seabirds.



Populations of Atlantic Puffin (*Fratercula arctica*) faced serious declines as a result of hunting by early settlers. Restoration efforts since the 1970s have helped re-establish colonies at historic nesting sites.
Photo: Steve Kress

Seal Island National Wildlife Refuge, Outer Penobscot Bay IBA, Maine
Photo: Steve Kress

Further information

Data sources

Information used in this review was taken from Audubon's Important Bird Areas Database.

US Important Bird Areas:

<http://www.audubon.org/bird/iba>

Online Search of the US IBA Inventory:

<http://iba.audubon.org/iba/siteSearch.do>

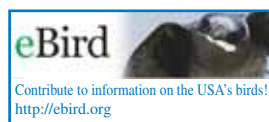
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Landowner engagement crucial to protection of red list species

Since 1994, Audubon California and state or federal wildlife agencies have entered into a number of cooperative agreements with local farmers to protect some of the largest Tricoloured Blackbird (*Agelaius tricolor*) colonies in California where this species has begun to regularly nest in agricultural crops. These agreements call for delaying harvest in fields where colonies have formed to allow sufficient time for young to fledge. With a small global population and concentrated breeding colonies, occurring mostly in California, this Endangered species has experienced a dramatic decline in population due to the loss of native wetland breeding habitat over the last century. Through outreach and engagement of farmers by Audubon California, the US Fish and Wildlife Service and others, breeding success of large colonies can be facilitated. More than eight large colonies in agricultural fields, representing over 300,000 Tricoloured Blackbird nests, have been spared by farmers as a result of these actions in the last 15 years.



Tricoloured Blackbird (*Agelaius tricolor*)
Photo: Dave Menke/USFWS

Washington; Lincoln Fishpool, BirdLife International; Geoff Geupel, Point Reyes Bird Observatory; Walker Golder, Audubon North Carolina; Brian Harrington, Manomet Center for Conservation Sciences; Steve Hoffman, Montana Audubon; Dan Niven, National Audubon Society; Terry Rich, US Fish and Wildlife Service; and Scott Yaich, Ducks Unlimited, Inc.

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Western Sandpiper (*Calidris mauri*) at the Copper River Delta Important Bird Area in Alaska
Photo: Milo Burcham