

 Audubon MARYLAND-DC**IMPORTANT BIRD AREAS PROGRAM****CRITERIA FOR SITE SELECTION**

(updated January 2011)

Copies available at: <http://mddc.audubon.org/birds-science-education/important-bird-areas>

Category MD-DC 1: Sites important to bird species at risk.

Criterion:

The site *regularly* supports significant breeding or non-breeding numbers of species at risk in Maryland and DC. These include: species listed in the Code of Maryland Regulations (COMAR 08.030.08) as Endangered, Threatened or In Need of Conservation in Maryland; “Red” and “Yellow” Audubon/American Bird Conservancy WatchList (2007) species, species listed by the IBA National Technical Committee as globally or continentally at risk, species included in the Birds of Conservation Concern 2008 list, and other species judged by the Maryland-DC IBA Technical Review Committee to be at risk in Maryland and DC.

A framework of site-level thresholds has been developed (Table 1) based on species at risk categories (see below), dispersion pattern and taxonomic group. Within this framework site-level thresholds for each species (Table 2) have been selected from the appropriate range based on published conservation listings and unpublished information on current trends in population and distribution. Site-level thresholds will be used as guidelines in the site review process at the discretion of the Maryland-DC IBA Technical Review Committee, and will be adjusted accordingly if found to be inappropriate.

Species at risk categories

The following three species at risk categories are based on abundance, distribution, and severity of threats (as measured by population trends and other factors).

Severely at risk: This category includes species with extremely limited distributions and small populations and facing severe threats in Maryland-DC. The goal for these species is to include the great majority of established populations within IBAs.

Highly at risk: This category includes species with limited distributions and small populations and facing distinct threats in Maryland-DC. The goal for these species is to include a moderate to high proportion of their populations within IBAs.

At risk: This category includes species that are more widely distributed and with larger populations in Maryland-DC than other species at risk, and species with limited distributions but facing lower levels of threat than other species at risk. The goal for these species is to include a lower proportion of their populations within IBAs.

Table 1. Ranges of IBA site-level thresholds for species at risk in Maryland and DC. In each cell numbers are: breeding pairs; individuals during winter or migration.

	Severely at Risk	Highly at Risk	At Risk*
Dispersed/Non-pass.	2 pairs; 6-15	3-5 pairs; 9-30	5-20 pairs; 15-60
Dispersed/Passerine	3-5 pairs; 9-15	5-10 pairs; 15-30	10-160 pairs; 30-480
Aggregated	5-20 pairs; 15-60	20-40 pairs; 60-120	40-80 pairs; 120-960

*For some species no longer on the WatchList or BCC list the threshold may match the Continental IBA threshold and thus exceed the range shown.

Table 2. Conservation status and IBA site-level thresholds of bird species at risk in Maryland and DC. Species

Species	At Risk Category ¹ (in MD-DC)	Threshold Breeding Pairs	Threshold Nonbreeding individuals ²	Conservation listing			
				COMAR ³ (MD DNR)	Audubon/ABC WatchList (2007) ⁴	IBA National Tech Cttee ⁵	USFWS ⁶
<i>Severely at risk species</i>							
American Bittern	Severely at risk	2	6	I			BCC Region 5
Northern Goshawk	Severely at risk	2	B	E			
Black Rail	Severely at risk	2	6	E	Red	Global	BCC National, Region 5
Wilson's Plover	Severely at risk	2	6	E	Yellow	Continental	BCC National, Region 5
Piping Plover	Severely at risk	2	6	E	Red	Global	Threatened (ESA)
Upland Sandpiper	Severely at risk	2	30	E		Continental	BCC National, Region 5
Red Knot	Severely at risk	N/A	40		Yellow	Continental	BCC National, Region 5
Gull-billed Tern	Severely at risk	5	30	E	Yellow	Continental	BCC National, Region 5
Royal Tern	Severely at risk	10	B	E			
Black Skimmer	Severely at risk	5	30	E	Yellow	Continental	BCC National, Region 5
Northern Saw-whet Owl	Severely at risk	2	B				
Olive-sided Flycatcher	Severely at risk	3	9	E	Yellow	Global	BCC National, Region 5
Loggerhead Shrike	Severely at risk	3	9	E		Continental	BCC National, Region 5
Bewick's Wren (ssp. <i>altus</i>)	Severely at risk	3	9	E		Continental	BCC National, Region 5
Sedge Wren	Severely at risk	3	9	E		Continental	BCC Region 5
Swainson's Warbler	Severely at risk	3	9	E	Yellow	Continental	BCC National, Region 5
Mourning Warbler	Severely at risk	3	B	E			
Henslow's Sparrow	Severely at risk	5	9	T	Red	Global	BCC National, Region 5
<i>Highly at risk species</i>							
Northern Harrier	Highly at risk	5	15				
Peregrine Falcon	Highly at risk	3	30	I		Continental	BCC National, Region 5
Whimbrel	Highly at risk	N/A	60			Continental	BCC National, Region 5

Species	At Risk Category (in MD-DC) ¹	Threshold Breeding Pairs	Threshold Nonbreeding individuals ²	Conservation listing			
				COMAR ³ (MD DNR)	Audubon/ABC WatchList (2007) ⁴	IBA National Tech Cttee ⁵	USFWS ⁶
Common Tern	Highly at risk	30	60				
Least Tern	Highly at risk	20	60	T	Red	Continental	BCC National, Region 5
Short-eared Owl	Highly at risk	3	15	E	Yellow	Continental	BCC National, Region 5
Alder Flycatcher	Highly at risk	5	B	I			
Golden-winged Warbler	Highly at risk	5	15		Red	Global	BCC National, Region 5
Nashville Warbler	Highly at risk	5	B	I			
Blackburnian Warbler	Highly at risk	10	B	T			
Cerulean Warbler	Highly at risk	10	15		Yellow	Global	BCC National, Region 5
Canada Warbler	Highly at risk	10	30		Yellow	Continental	BCC National, Region 5
Nelson's Sparrow	Highly at risk	N/A	15		Yellow	Continental	BCC National, Region 5
Saltmarsh Sparrow	Highly at risk	10	15		Red	Global	BCC National, Region 5
Swamp Sparrow (Coastal Plain ssp. <i>nigrescens</i>)	Highly at risk	10	30	I			
Dickcissel	Highly at risk	5	30			Continental	BCC National
Rusty Blackbird	Highly at risk	N/A	60		Yellow	Global	BCC National, Region 5
<i>At-risk species</i>							
Pied-billed Grebe	At risk	10	B				BCC Region 5
Least Bittern	At risk	5	B	I			BCC Region 5
American Black Duck	At risk	20	240				<i>Not eligible</i>
Bald Eagle	At risk	10	60	T		Continental	BCC National, Region 5
Northern Bobwhite	At risk	10	60			Global	<i>Not eligible</i>
Clapper Rail	At risk	40	120		Yellow	Continental	<i>Not eligible</i>
King Rail	At risk	5	B		Yellow		<i>Not eligible</i>
Sora	At risk	5	B				<i>Not eligible</i>
Common Moorhen	At risk	10	B	I			<i>Not eligible</i>
American Golden Plover	At risk	N/A	60		Yellow	Continental	
American Oystercatcher	At risk	5	15			Continental	BCC National, Region 5
Solitary Sandpiper	At risk	N/A	60			Continental	BCC National, Region 5
Lesser Yellowlegs	At risk	N/A	360			Continental	BCC National, Region 5
Sanderling	At risk	N/A	720		Yellow	Continental	
Semipalmated Sandpiper	At risk	N/A	720		Yellow	Continental	BCC National, Region 5
Western Sandpiper	At risk	N/A	720		Yellow	Continental	
White-rumped Sandpiper	At risk	N/A	480		Yellow	Continental	

Species	At Risk Category (in MD-DC) ¹	Threshold Breeding Pairs	Threshold Nonbreeding individuals ²	Conservation listing			
				COMAR ³ (MD DNR)	Audubon/ABC WatchList (2007) ⁴	IBA National Tech Cttee ⁵	USFWS ⁶
Purple Sandpiper	At risk	N/A	240			Continental	BCC National, Region 5
Dunlin	At risk	N/A	960			Continental	
Stilt Sandpiper	At risk	N/A	480		Yellow	Continental	National
Buff-breasted Sandpiper	At risk	N/A	30		Red	Global	BCC National, Region 5
Short-billed Dowitcher	At risk	N/A	240			Continental	BCC National, Region 5
American Woodcock	At risk	10	45				<i>Not eligible</i>
Common Nighthawk	At risk	5	B				
Whip-poor-will	At risk	10	30				BCC Region 5
Red-headed Woodpecker	At risk	10	30		Yellow	Global	BCC National, Region 5
Willow Flycatcher	At risk	20	60		Yellow	Continental	BCC National
Bank Swallow	At risk	40	B				
Brown-headed Nuthatch	At risk	30	120			Continental	BCC National
Wood Thrush	At risk	160	480		Yellow	Continental	BCC National, Region 5
Blue-winged Warbler	At risk	15	30		Yellow	Continental	BCC National, Region 5
Prairie Warbler	At risk	30	60		Yellow	Continental	BCC National, Region 5
Prothonotary Warbler	At risk	30	60		Yellow	Continental	BCC National
Worm-eating Warbler	At risk	30	60			Continental	BCC National, Region 5
Northern Waterthrush	At risk	10	B				
Kentucky Warbler	At risk	20	60		Yellow	Continental	BCC National, Region 5
Seaside Sparrow	At risk	40	120		Red		BCC National, Region 5

¹Species were allocated to at-risk categories (“severely at-risk”, highly at-risk”, “at-risk”) by the Maryland-DC IBA Technical Review Committee.

²B = At-risk status applies to breeding populations only.

³Listed in the Code of Maryland Regulations (COMAR 08.030.08) as E = Endangered, T = Threatened, I = In Need of Conservation. See website:

<http://www.dnr.Maryland.gov/wildlife/rteanimals.asp>

⁴See website: <http://web1.audubon.org/science/species/watchlist/>

⁵The IBA National Technical Committee (NTC), convened by the National Audubon Society, lists bird species considered at risk at the global and continental scales (A1 and B1 species respectively). This list includes Federally listed species and subspecies, National Birds of Conservation Concern (U.S. Fish and Wildlife Service), and “Red” and “Yellow” ABC/Audubon WatchList species. In September 2009 this list was updated to reflect revisions to the WatchList (2007) and the BCC list (2008).

⁶The US Fish and Wildlife Service lists Threatened and Endangered Species (see website: <http://www.fws.gov/endangered/wildlife.html>) under the Endangered Species Act, and Birds of Conservation Concern (USFWS, 2008), which lists nongame bird species at national and regional scales; see website: <http://www.fws.gov/migratorybirds/NewsPublicationsReports.html>. Game bird species are not included on the BCC list and are thus labeled *not eligible* in this column. USFWS Region 5 includes 12 states in the northeastern US from Virginia north and east.

Category MD-DC 2: Sites important to bird species assemblages dependent upon a particular habitat type.

This category is intended to cover relatively large areas that support the most diverse assemblages of species with very particular habitat requirements (see lists below). Small remnants of an exceptional habitat type may be included. Selection of sites will be based on avian assemblages present in the habitat type, not on the habitat type alone. Therefore, whenever possible, the species of birds that are characteristic of the habitat type should be identified and quantified.

Criterion:

The site contains a highly diverse assemblage of bird species characteristic of a particular habitat type within the state or region. Avian assemblages at a site will be evaluated relative to the suite of potential species within the state or the appropriate Bird Conservation Region (BCR; NABCI 2000) in the lists below, using data from the 2002-06 Maryland-DC Breeding Bird Atlas project (Ellison 2010), and other sources. For widespread habitat types, species richness of the assemblage, per Breeding Bird Atlas (BBA) block, should typically be within that of the top 15% of BBA blocks across the state or within the region of analysis. For the forest assemblage, BCR 28 is further subdivided into Physiographic Regions because of significant differences in this assemblage between these regions.

Characteristic bird species of major habitat types in Maryland and DC

The lists below include bird species assemblages of habitat specialists (species largely dependent on the habitat in question) for the major habitat types in Maryland-DC. Species assemblages are limited to breeding species. Some species can be dependent on multiple similar habitats so will appear in more than one list.

Forest Includes all species on Maryland DNR's list of Forest Interior Dwelling Species (FIDS).

Forest Interior Dwelling Species	Appalachian Mountains (BCR 28)		Piedmont (BCR 29)	Coastal Plain (BCR 30)
	Allegheny plateau	Ridge & valley		
Sharp-shinned Hawk	x	x	x	
Northern Goshawk	x			
Red-shouldered Hawk	x	x	x	x
Broad-winged Hawk	x	x	x	x
Black-billed Cuckoo	x	x	x	x
Barred Owl	x	x	x	x
Whip-poor-will	x	x	x	x
Hairy Woodpecker	x	x	x	x
Pileated Woodpecker	x	x	x	x
Acadian Flycatcher	x	x	x	x
Common Raven	x	x	x	
Brown Creeper	x	x	x	x
Winter Wren	x			
Veery	x	x	x	

Hermit Thrush	x			
Wood Thrush	x	x	x	x
Blue-headed Vireo	x	x		
Yellow-throated Vireo	x	x	x	x
Red-eyed Vireo	x	x	x	x
Northern Parula	x	x	x	x
Magnolia Warbler	x			
Black-throated Blue Warbler	x			
Black-throated Green Warbler (subsp <i>waynei</i>)*				x
Blackburnian Warbler	x			
Cerulean Warbler	x	x	x	
Black-and-white Warbler	x	x	x	x
American Redstart	x	x	x	x
Prothonotary Warbler	x	x	x	x
Worm-eating Warbler	x	x	x	x
Swainson's Warbler*				x
Ovenbird	x	x	x	x
Louisiana Waterthrush	x	x	x	x
Northern Waterthrush	x			
Kentucky Warbler	x	x	x	x
Hooded Warbler	x	x	x	x
Canada Warbler	x			
Summer Tanager			x	x
Scarlet Tanager	x	x	x	x
Total species in assemblage	35	27	27	25
Species richness of 85 th percentile of Breeding Bird Atlas blocks (2002-06)	25	19	17	16

* Denotes species breeding irregularly or at only one or two sites in Maryland-DC.

Mountain Peatland Occurs only in BCR 28.

Mountain Peatland species	Appalachian Mountains (BCR 28)
Northern Saw-whet Owl*	x
Alder Flycatcher	x
Nashville Warbler	x
Northern Waterthrush	x
Canada Warbler	x
Swamp Sparrow	x
Total species in assemblage	6

* Denotes species breeding irregularly or at only one or two sites in Maryland-DC.

Shrubland and Early Successional Habitats

Shrubland and Early Successional species	Appalachian Mountains (BCR 28)	Piedmont (BCR 29)	Coastal Plain (BCR 30)
Northern Bobwhite	X	X	X
American Woodcock	X	X	X
Willow Flycatcher	X	X	
Brown Thrasher	X	X	X
White-eyed Vireo	X	X	X
Blue-winged Warbler	X	X	
Golden-winged Warbler	X		
Chestnut-sided Warbler	X		
Prairie Warbler	X	X	X
Mourning Warbler*	X		
Yellow-breasted Chat	X	X	X
Eastern Towhee	X	X	X
Field Sparrow	X	X	X
Total species in assemblage	13	10	8
Species richness of 85 th percentile of Breeding Bird Atlas blocks (2002-06)	7	8	7

* Denotes species breeding irregularly or at only one or two sites in Maryland-DC.

Grassland

Grassland species	Appalachian Mountains (BCR 28)	Piedmont (BCR 29)	Coastal Plain (BCR 30)
Northern Harrier	X		X
American Kestrel	X	X	X
Upland Sandpiper*	X		
Barn Owl	X	X	X
Short-eared Owl*	X		
Sedge Wren	X		X
Loggerhead Shrike*	X	X	
Dickcissel		X	X
Vesper Sparrow	X	X	X
Savannah Sparrow	X	X	
Grasshopper Sparrow	X	X	X
Henslow's Sparrow	X		
Bobolink	X	X	
Eastern Meadowlark	X	X	X
Total species in assemblage	13	9	8
Species richness of 85 th percentile of Breeding Bird Atlas blocks (2002-06)	5	4	3

* Denotes species breeding irregularly or at only one or two sites in Maryland-DC.

Freshwater Marsh

Freshwater Marsh species	Appalachian Mountains (BCR 28)	Piedmont (BCR 29)	Coastal Plain (BCR 30)
Pied-billed Grebe		x	x
American Bittern			x
Least Bittern		x	x
American Black Duck	x	x	x
Black Rail			x
King Rail		x	x
Virginia Rail	x	x	x
Common Moorhen		x	x
Sora	x	x	x
Sedge Wren	x		x
Marsh Wren			x
Coastal Plain Swamp Sparrow			x
Total species in assemblage	4	7	12

Salt Marsh Occurs only in BCR 30.

Salt Marsh species	Coastal Plain (BCR 30)
American Bittern	x
Least Bittern	x
Northern Harrier	x
American Black Duck	x
Black Rail	x
Clapper Rail	x
King Rail	x
Virginia Rail	x
Common Moorhen	x
Willet	x
Barn Owl	x
Sedge Wren	x
Marsh Wren	x
Saltmarsh Sparrow	x
Seaside Sparrow	x
Coastal Plain Swamp Sparrow	x
Total species in assemblage	16

Coastal Beach and Dune Occurs only in BCR 30.

Coastal Beach and Dune species	Coastal Plain (BCR 30)
Piping Plover	X
Wilson’s Plover*	X
American Oystercatcher	X
Gull-billed Tern*	X
Royal Tern*	X
Sandwich Tern*	X
Least Tern	X
Black Skimmer	X
Total species in assemblage	8

* Denotes species breeding irregularly or at only one or two sites in Maryland-DC.

Category MD-DC 3: Sites where native species of birds regularly concentrate in significant numbers when breeding, in winter, or during migration.

This category is meant to cover sites of importance for dense populations of breeding birds (such as a heronry), high concentrations of waterfowl or shorebirds in any season, and migratory “bottlenecks” where geographical features (such as ridges) concentrate large numbers of migratory birds. Human-made food sources for gulls (landfills, dumpsites, sewage treatment plants or outflows, etc.) or man-made structures (dams, bridges, buildings, etc.) will not be considered as IBAs. Exceptions will be considered for sites important for species that utilize only man-made items (such as very large chimney swift roosts) and habitat restoration projects (such as dredge-spoil islands) due to their relative permanence and resemblance to natural habitats. Consideration will normally not be given to species that are considered nuisance species, i.e. harmful or economically destructive species. The numerical thresholds in 1a – 1e are guidelines only, and the Technical Review Committee may consider other factors (quality and location of habitat, distribution and importance of species, etc.).

Criteria:

(3a) The site *regularly* supports at least 7,000 waterfowl (at one time) during some part of the year. The designation “waterfowl” includes such birds as loons, grebes, cormorants, swans, geese, ducks, coots, and moorhens. Totals should not include Mute Swans, resident Canada Geese, or resident Mallards. *The threshold for migratory Canada Geese is currently under review by the Technical Review Committee.*

(3b) The site *regularly* supports at least 400 seabirds and/or terns (at one time) or 10,000 gulls (at one time) during some part of the year. The designation “seabird” includes such birds as shearwaters, storm-petrels, fulmars, gannets, jaegers, alcids, and pelicans.

(3c) The site *regularly* supports at least 300 shorebirds or rails (at one time) if an inland site, or 1000 shorebirds or rails (at one time) if coastal, during some part of the year. The designation “shorebirds” includes such birds as plovers, sandpipers, snipe, and phalaropes.

(3d) The site *regularly* supports at least 200 non-breeding wading birds or 500 breeding pairs of wading birds during some part of the year. The designation “wading birds” includes such birds as bitterns, herons, egrets, and ibises.

(3e) The site is *regularly* an important stopover site, “bottleneck,” or migratory corridor for at least 8,000 raptors (seasonal total) during spring or fall migration.

(3f) The site is *regularly* an important migratory stopover or seasonal concentration site for migratory landbirds. Sites may qualify on the basis of exceptionally high numbers of birds during migration, i.e. “migrant traps”, wintering flocks, or high densities of breeding species as shown from point counts or other surveys. No absolute thresholds have been set due to the scarcity of quantitative data. Sites should be clearly unique from other sites in the local area. Consideration may also be given to areas with consistently high overall species diversity or exceptional diversity within a particular group (e.g., warblers).

(3g) The site *regularly* supports a significant concentration of a single native species, but supports a smaller total number of birds than any of the criteria above (1a – 1f). Ideally, the site should be known or thought to hold more than 5% of the state population of a species. In practice, however, it will be difficult to estimate state population sizes for most species. This criterion might be applied to any species that congregates, including those which nest in colonies, forage in flocks, or roost communally.

Literature Cited

Ellison, W. G. 2010. Second atlas of the breeding birds of Maryland and the District of Columbia. Johns Hopkins University Press.

U. S. NABCI Committee. 2000. North American Bird Conservation Regions: Bird Conservation Region descriptions. North America Bird Conservation Initiative, U.S. Fish and Wildlife Service, Arlington, VA. [Online version available at <http://www.nabci-us.org/bcrs.html>].