

## Ohio Hills – Area 22

### Priority Species Pool

From among the breeding avifauna, a pool of species may be derived that represents priorities for conservation action within the physiographic area. Note that a species may be considered a priority for several reasons, including global threats to the species, high concern for regional or local populations, or responsibility for conserving large or important populations of the species. The different reasons for priority status are represented by categories or tiers in the table below. Our primary means of identifying priority species is through the PIF species assessment process (Hunter et al. 1993, Carter et al. 2000) using scores generated by the Rocky Mountain Bird Observatory. This system assesses species on the basis of seven measures of conservation vulnerability. These include four global measures (i.e., they do not change from area to area), as well as threats to breeding populations (TB), area importance (AI), and population trend (PT), which are specific to each physiographic area. Categories of priority status are determined by examining combinations of parameter scores, as well as the total rank score, which is a measure of overall conservation priority. This process of species assessment has been standardized across all physiographic areas of North America. Parameter scores for breeding birds in all physiographic areas may be found at: <http://www.rmbo.org/pif/pifdb.html>.

**Note:** The parameter scores for all physiographic areas in the Northeast were updated in August 2003 to reflect and be consistent with methods used in the *PIF North American Landbird Conservation Plan* (Rich et al. 2004). The priority species pool presented below reflects these updated scores and a revised set of entry levels (i.e., Tiers). If you note changes in the priority species pool or individual scores from a previous version of this plan or those found at <http://www.rmbo.org/pif/pifdb.html>, they are likely due to the process of updating scores and entry levels to reflect the North American Plan.

There are six entry levels into the priority species pool, as follows:

Tier I. *High Continental Priority.* -- Species on the *PIF Continental Watch List* (as published in the PIF North American Landbird Conservation Plan [Rich et al. 2004]), or species of equivalent watch list ranking from other taxonomic groups, which are typically of conservation concern throughout their range. These are species showing high vulnerability in a number of factors, expressed as any combination of high global parameter scores, with AI  $\geq 2$  (so that species without manageable populations in the region are omitted). High level of conservation attention warranted.

Tier IA. *High Continental Concern + High Regional Responsibility.* Species for which this region shares in major conservation responsibility; i.e., conservation in this region is critical to the overall health of this species. These species are on the *PIF Continental Watch List* with AI of 3 – 5 for this region, or a high percent population (above threshold in IIB).

Tier IB. *High Continental Concern + Low Regional Responsibility.* Species for which this region can contribute to rangewide conservation objectives where the species occurs. Species on the *PIF Continental Watch List* with AI of 2 for this region.

Tier II. *High Regional Priority.* Species that are of moderate continental priority (not on *Continental Watch List*), but are important to consider for conservation within a region because of various combinations of high parameter scores, as defined below; total of 7 parameter scores =  $\geq 19$ .

Tier IIA. *High Regional Concern.* Species that are experiencing declines in the core of their range and that require immediate conservation action to reverse or stabilize trends. These are species with a combination of high area importance and declining (or unknown) population trend; total of 7 parameters  $\geq 19$ , with AI + PT  $\geq 8$ .

Tier IIB. *High Regional Responsibility.* Species for which this region shares in the responsibility for long-term conservation, even if they are not currently declining or threatened. These are species of moderate overall priority with a disproportionately high percentage of their total

population in the region; total of 7 parameters  $\geq 19$ , with AI = 5 or % population > threshold (see Appendix 3).

Tier IIC. *High Regional Threats*. Species of moderate overall priority that are uncommon in a region and whose remaining populations are threatened, usually because of extreme threats to sensitive habitats. These are species with high breeding threats scores within the region (or in combination with high nonbreeding threats outside the region); total of 7 parameters  $\geq 19$  with TB + TN > 6, or local TB or TN = 5.

Tier III. *Additional Federally Listed*. Species protected under federal endangered species laws receive conservation attention wherever they occur.

Tier IV. *Additional State Listed*. - Species on state or provincial endangered, threatened, or special concern lists that did not meet any of above criteria. These often represent locally rare or peripheral populations.

Tier V. *Additional Stewardship Responsibility*. Representative or characteristic species for which the region supports a disproportionately high percentage of the world population (see Appendix), but which did not meet any of the above criteria. Includes moderate- and low-scoring species for which the region has long-term stewardship responsibility, even if these species are not of immediate conservation concern. These species are not included in the table below, but they can be found by reviewing the “% of population” numbers available at <<http://www.rmbo.org/pif/pifdb.html>>.

Tier VI. *Local concern* - species of justifiable local concern or interest. May represent a geographically variable population or be representative of a specific habitat or conservation concern.

**Priority breeding-species pool for Ohio Hills, Area 22.** PIF regional and global scores from the PIF Species Assessment Database housed at Rocky Mountain Bird Observatory (Carter et al., 2000). Unless otherwise stated, percent of population calculated from percent of range area, weighted by BBS relative abundance (see Rosenberg and Wells 2000). See text for definition and interpretation of entry levels. AI = Area Importance; PT = Population Trend. Species with AI = 1 are not included in this table as such a score indicates a peripheral population without manageable numbers in this area. Local status categories include species with breeding populations only (B) or species with at least part of the population found in the area year-round (R). Species that are federally or state listed are noted on the Priority Species Pool by country and/or state using the following codes: E = Endangered, T = Threatened, SC = Special Concern.

Entry Level	Species	Combined Score	% of pop.	AI	PT	Local Status
<i>IA. High Continental Concern + High Regional Responsibility</i>						
	Cerulean Warbler	28	43.7	5	5	B
	Henslow's Sparrow	26	6.3	4	2	B
	Swainson's Warbler	26	2.5	3	3	B
	Prairie Warbler	25	6.0	5	5	B
	Kentucky Warbler	25	8.4	5	4	B
	Worm-eating Warbler	24	8.2	4	3	B
	Blue-winged Warbler	23	25.0	5	2	B
	American Woodcock	23	1.6	3	5	R
	Wood Thrush	21	8.6	5	2	B
	Short-eared Owl (PA-E)	21	< 1	3	3	R
	Willow Flycatcher	18	< 1	3	3	B

IB. High Continental Concern + Low Regional Responsibility

Golden-winged Warbler (OH-E)	26	1.3	2	5	B
Prothonotary Warbler	22	< 1	2	3	B
Upland Sandpiper (PA-T)	21	< 1	2	3	B
King Rail (PA,OH-E)	21	< 1	2	3	B
American Black Duck	20	< 1	2	3	R
Red-headed Woodpecker	19	< 1	2	3	R

IIA. High Regional Concern

Louisiana Waterthrush	25	10.7	5	4	B
Acadian Flycatcher	23	14.7	5	4	B
Bewick's Wren	23	< 1	4	5	R
Field Sparrow	21	4.6	5	5	R
Yellow-breasted Chat	20	3.5	4	5	B
Black-billed Cuckoo	20	1.9	4	4	B
Eastern Towhee	20	4.5	5	4	R
Indigo Bunting	19	3.9	5	4	B

IIB. High Regional Responsibility

Scarlet Tanager	21	10.2	5	2	B
Yellow-throated Vireo	20	7.7	5	2	B
Hooded Warbler	20	5.6	4	2	B
Yellow-throated Warbler	19	10.8	4	1	B
Chimney Swift	19	3.6	5	2	B

IIC. High Regional Threats

Sedge Wren (PA-T)	20	< 1	2	3	B
Grasshopper Sparrow	19	< 1	2	5	B

IV. Additional State Listed

Northern Bobwhite (PA-SC)	19	< 1	2	5	R
American Bittern (PA-E)	18	< 1	2	3	B
Least Bittern (PA,OH-E)	18	< 1	2	3	B
Northern Harrier (OH-E; PA-SC)	17	< 1	2	3	R
Barn Owl (PA-SC)	16	< 1	2	3	R
Lark Sparrow (OH-E)	16	< 1	2	3	B
Yellow-bellied Sapsucker (OH-E)	15	< 1	2	3	R
Osprey (OH-E; PA-T)	15	< 1	3	3	B

## Priority Habitats and Suites of Species

**Priority habitat-species suites for Area 22.** TB (threats breeding), AI (area importance), PT (population trend), and Combined Score from RMBO prioritization database (Carter et al. 2000), as updated for the Northeast (see note above for priority species pool). The focal species for each habitat are in bold type. Species are sorted within habitat types according to action level and then combined score. Scale of Concern indicates whether a species is of continental (C) or regional (R) concern. State-listed species are not included in this analysis because they may not be of concern in all states within a region.

Habitat	Common Name	Scale of Concern	Action Level <sup>a</sup>	Combined Score	TB	AI	PT
<u>Mature deciduous-riparian forest</u>							
	<b>Cerulean Warbler</b>	C	MA, MO	28	3	5	5
	Kentucky Warbler	C	MA	25	3	5	4
	<b>Louisiana Waterthrush</b>	R	MA	25	3	5	4
	<b>Worm-eating Warbler</b>	C	MA	24	3	4	3
	Red-headed Woodpecker	C	MA, MO	19	4	2	3
	Swainson's Warbler	C	PR, MO	26	3	3	3
	Acadian Flycatcher	R	PR	23	2	5	4
	Prothonotary Warbler	C	PR, MO	22	3	2	3
	<b>Wood Thrush</b>	C	PR	21	2	5	2
	Scarlet Tanager	R	PR	21	2	5	2
	Black-billed Cuckoo	R	PR	20	2	4	4
	Yellow-throated Vireo	R	PR	20	2	5	2
	Hooded Warbler	R	PR	20	2	4	2
	Yellow-throated Warbler	R	PR	19	3	4	1
	Chimney Swift	R	PR, MO	19	3	5	2
<u>Shrub-early successional</u>							
	<b>Golden-winged Warbler</b>	C	IM, MO	26	4	2	5
	<b>Bewick's Wren</b>	R	IM, MO	23	5	4	5
	<b>Prairie Warbler</b>	C	MA	25	3	5	5
	American Woodcock	C	MA	23	3	3	5
	<b>Field Sparrow</b>	R	MA	21	3	5	5
	Yellow-breasted Chat	R	MA	20	3	4	5
	Eastern Towhee	R	MA	20	3	5	4
	Willow Flycatcher	C	MA	18	2	3	3
	Blue-winged Warbler	C	PR	23	2	5	2
	Indigo Bunting	R	PR	19	2	5	4
<u>Riparian/bottomland forest</u>							
	<b>Cerulean Warbler</b>	C	MA, MO	28	3	5	5
	<b>Louisiana Waterthrush</b>	R	MA	25	3	5	4
	Acadian Flycatcher	R	PR	23	2	5	4
	Prothonotary Warbler	C	PR, MO	22	3	2	3
	Yellow-throated Warbler	R	PR	19	3	4	1
<u>Grassland</u>							
	<b>Henslow's Sparrow</b>	C	IM, MO	26	4	4	2
	Short-eared Owl	C	MA, MO	21	4	3	3
	<b>Upland Sandpiper</b>	C	MA, MO	21	4	2	3
	Sedge Wren	R	MA, MO	20	4	2	3
	Grasshopper Sparrow	R	MA	19	4	2	5
<u>Freshwater marsh</u>							
	<b>King Rail</b>	C	MA, MO	21	4	2	3
	<b>American Black Duck</b>	C	PR	20	3	2	3

<sup>a</sup> Action levels: IM = immediate management or policy needed to prevent regional extirpation; MA = management or other actions needed to reverse or stabilize declining populations or reduce threats (TB +

PT  $\geq$  7 or =6 if continental action level=MA); PR = long-term planning to ensure stable populations (TB + PT < 7); MO = additional monitoring needed to better understand status or population trends.

### **Literature Cited**

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