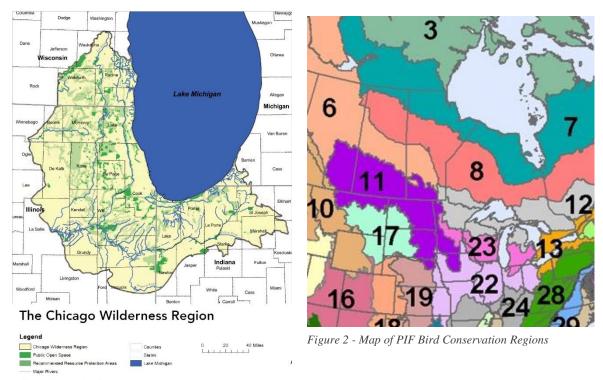
The Birds of Concern in the Chicago Wilderness – Review Process

Bird Conservation Network's Birds of Concern (BOC) brochure is a prioritized list of species in the Chicago Wilderness (CW) region with significant conservation issues according to both national and regional analyses. It is an update of BCN's 2010 BOC list, using the latest information. It is BCN's intent that the region's land managers, researchers and conservation organizations use this list to prioritize species for attention and management.

Sources

The BOC list is based on information from the following sources:

- 1. Partners in Flight (PIF) uses a process to derive the Species Assessment Database (2013). National and regional factors—population size, trend, distribution and threats—are scored. Those scores are combined to establish priorities for needed action. PIF identifies species requiring:
- IM Immediate Management
- MA Management Attention
- PR Planning and Responsibility
 It also designates Common Birds in Steep Decline.
- 2. The Upper Mississippi River & Great Lakes Region Joint Venture's Shorebird Habitat Conservation Strategy (May 2007). Pages 7 and 8 contain priority scores for shorebirds in the Upper Mississippi Valley and Great Lakes Shorebird Planning Region, based on assessments of population size, trend, distribution and threats taken from the National Shorebird Conservation Assessment (Brown et al. 2000). Continental and regional (upper Midwest) priority scores are assigned on a scale from 1 to 5.
- 3. The Upper Mississippi River & Great Lakes Region Joint Venture's Waterfowl Habitat Conservation Strategy (December 2007) and the North American Waterfowl Management Plan 2004 Implementation Framework. Both rank waterfowl species by region. The national plan establishes Waterfowl Conservation Regions (WCRs) having the same boundaries as BCRs. In this paper the term BCR includes both BCRs and WCRs.
- 4. The Upper Mississippi Valley/Great Lakes Waterbird Conservation Plan (March 2010). Page 25 contains continental conservation assessment factor scores and priority rankings for waterbirds regularly occurring in the Upper Mississippi Valley/Great Lakes region. Population size, trend, breeding and non-breeding distribution, and threats are all considered. These scores were taken from the North American Waterbird Conservation Plan (NAWCP). Waterbirds are scored as Highest, High, Moderate and Low Continental Concern, plus Not Currently at Risk, for each BCR.
- 5. Endangered and Threatened species lists from Illinois, Indiana, Wisconsin and Michigan. (We did not consider the Indiana Special Concern category since it had no equivalent in other states.)



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Figure 1 - Map of the Chicago Wilderness Region

Scope

The BOC list describes priorities for the Chicago Wilderness area. Native birds regularly occurring in the Chicago Wilderness area, excluding introduced or extirpated birds, were chosen. Chicago Wilderness refers to the network of natural areas embedded in one of North America's largest metropolitan regions: it stretches from southeastern Wisconsin, through northeastern Illinois, into northwestern Indiana and southwestern Michigan (Figure 1).

Breeding Birds

Landbirds

The CW region straddles two PIF Bird Conservation Regions, BCR 22 and 23 (Figure 2). The dividing line between 22 and 23 runs roughly east-west through northern Lake, McHenry and Boone counties. We referenced PIF scores from both BCR 22 and 23 in order to develop priorities for Chicago Wilderness.

Our general method for developing this list and the 2010 list were similar:

- Equate the PIF Action Levels of Immediate Management and Management Attention with CW Priorities Levels 1 and 2.
- Consider PIF Action Level of Planning and Responsibility, designation of Common Birds in Steep Decline, overall PIF score, plus regional trends and threats to develop the Priority Level 3 list.

- Where warranted, trends from the *BCN Survey's Breeding Bird Population Trends of the Chicago Region (1999-2012)* (Secker et al. 2014) and committee members' knowledge of local threats were used to adjust priority scores for local conditions.
- Where Action Levels differed between BCR 22 and 23, we considered the PIF population estimate, the Regional Density and Regional Threats to Breeding scores, and local distribution and threat information.

The baseline to start this assessment is the 2010 list of CW Species of Concern. We compared the rankings on that list with the new Action Levels recommended in the 2012 PIF Species Assessment. For species where a change was indicated, we further considered whether conditions in our region warranted that change.

Some examples:

- Two birds that were moved to a lower PIF action level are Willow Flycatcher and Blue-winged Warbler. Due to local decreases and threats, neither species was lowered on the BOC priority list.
- The Action Level was removed from Orchard Oriole in the new PIF report; BCN also removed it from the CW priority list because the local population trends indicate increasing numbers.
- Short-eared Owl was removed from the BOC list as a breeding species because it has not bred here since the 1980s. It is included, however, as a migrant species of concern because it met the criteria for migrant or wintering species (see below).
- Veery rates an Action Level of Management Attention in PIF 23 but not in 22. Veeries have a small breeding population, mostly in the northern part of the CW region. Since this population is in BCR 23, we considered a CW priority level of 2; however this population is at the southernmost edge of its range, and ranges often fluctuate. For this reason, we assigned a CW priority level of 3 rather than 2.

Next we considered species that received an Action Level designation for the first time on the PIF 2012 list. We again used the rating method described above. One example:

 Eastern Wood-Pewee rated an Action Level of Management Attention in PIF 22 (Eastern Tallgrass Prairie) but not in 23 (Prairie Hardwood Transition). The CW region has a good amount of woodland and the local trend for the Pewee is stable throughout the CW area according to the BCN Survey trends, thus we adopted the BCR 23 recommendation that it is not a current priority.

Birds from Endangered and Threatened Species lists of the four states in the CW region were considered if the species in the listing state included an important population in the Chicago Wilderness region. If it did, we added it to the list. For example, the Hooded Warbler has a significant population in the Kettle Moraine area of Wisconsin, although the tiny breeding population in the Illinois portion of CW (where it is not listed) is not of conservation importance. For that reason, we included it as Wisconsin Threatened (WI-T) only.

The BOC list includes some species such as Bobolink and Henslow's Sparrow that are clearly increasing in Chicago Wilderness, but have national declines. The BOC list includes some species that are stable or increasing in Chicago Wilderness and are common in the right habitat such as Field Sparrow, Bobolink and Henslow's Sparrow. These species have experienced significant national declines and we are in the heart of their territory. Therefore they are an important management priority for our region and we should strive to continue our success in maintaining their populations.

Shorebirds

The process for adding breeding shorebirds to the list followed the principles set out above. We considered those shorebirds that already had a CW priority level, and whether conditions had improved or deteriorated to the point that a change in the code was warranted. We checked the Upper Mississippi River and Great Lakes Region Joint Venture's Shorebird Habitat Conservation Strategy Continental and regional (upper Midwest) priority scores. We equated the top three priorities to CW priorities 1, 2, and 3. We then considered local factors. For example, killdeer is assigned a priority 3 for the Upper Midwest in the *Conservation Strategy*; however it is not on BCN's list of species of concern since it is common in disturbed habitats in the Chicago Wilderness Region. Shorebirds not prioritized in the *Conservation Plan* but that appear on state lists were added to the list if a state has a breeding population in the Chicago Wilderness area.

Waterfowl

No waterfowl species of concern as breeding populations in the CW region were identified. See the discussion below in the migrants section for further explanation.

Waterbirds

We first considered whether a change from the priority level found on the 2010 BOC list was warranted and made changes accordingly. To identify species new to the list, the committee consulted the Upper Mississippi Valley/Great Lakes Waterbird Conservation Plan (March 2010). We reviewed continental conservation assessment factor scores and priority rankings for waterbirds that regularly breed in the Chicago Wilderness Region. Waterbirds are characterized as Highest, High, Moderate and Low Continental Concern, and Not Currently at Risk for each BCR. We again equated the top three categories to CW priority levels 1, 2 and 3. Where codes differed for the two regions, we used much the same procedure as described in the section for breeding landbirds above. In some cases, local factors led us to modify scores. For example, the Plan assigned a conservation priority of High (our level 2) for Sora; however, since they are easy to find in every suitable habitat in the CW Region, we lowered the score to a level 3. Waterbirds not prioritized in the Conservation Plan but which appear on state lists were added to the list if a state has a breeding population in the Chicago Wilderness area.

State Lists vs. BCR Lists

Species identified by the State Endangered and Threatened Species lists have very small or declining numbers in the state; PIF lists identify birds that have declining populations and/or significant threats nationally and that have a significant presence in a given region. Many of the birds identified by the national and regional BCR lists named in sources 1, 2, 3 and 4 above are also designated as E/T species by many or all of the four states in the CW region. Other birds are included on state E/T lists but not on BCR lists. There are a number of reasons why birds might be on a state list but not on the BCR lists. Some may have robust national populations but poor regional ones: examples are Osprey and Little Blue Heron. Other state listed birds may have declining national populations but local populations may be small and discontinuous and therefore not fit the criteria for a BCR list, which focuses on populations that have a significant presence in the region; e.g., Swainson's Hawk in Illinois. Species recently removed from state threatened lists, such as Sandhill Crane and Bald Eagle, are not included on our priority list when national trends are positive, even if breeding populations in the CW region are small.

Migrants

This is the first time that a list of migrants has been included in the list of CW Birds of Concern. The CW Region plays a vital role for many neotropical migrants that breed farther north. Migrants face many threats during migration, some causing mortality, others affecting their level of fitness when they arrive at their breeding ground, or the timing of their arrival. Recognition of the importance of migrants, especially landbird migrants, as conservation targets for the CW region is growing. Local land managers and landscapers are beginning to take advantage of opportunities for providing dense understory cover, a strong insect base, and a diversity of woody plant species, especially along river corridors to provide habitat for migrants.

Many sites in the Chicago region (lakefront and city parks, urban green spaces—cemeteries for example—small grassland sites, and many wooded forest preserves) have no breeding bird species of concern, but are heavily used by migrants. Migrant species of concern are important conservation targets for many of these sites. Even in sites occupied by breeding birds of concern, the different temporal pattern of migrants as well as the different suite of resources used by migrants may have important implications for management.

The list of landbird migrants of concern was created by evaluating PIF scores in regions north of the CW area—BCRs 6, 7, 8, 11, 12 and 23—those regions where our landbird migrants breed. The committee considered those species that have PIF codes on their breeding grounds when it is known that significant numbers migrate through, or winter in, the CW Region. Any species with an Action Level of MA or IM in any of the northern BCRs listed above was added to the list. Species that have an Action Level of PR, a score of 14 or higher, or are identified as a Common Bird in Steep Decline in any of those BCRs were also considered for the list. The importance of various CW Region habitats to these migrants—both now and in the future—were considered. For example, Smith's Longspur, although not commonly found here during migration, have had a greater presence in recent years reflecting changes in agricultural practices elsewhere in the Midwest improved management of grasslands in CW, and perhaps changing climate. We anticipate the CW region will become more important as a wintering location for this bird.

The conservation plans we consulted for migrant waterbirds and shorebirds had rankings for migrants; we adopted these rankings as described above for breeding waterbirds and shorebirds.

Our approach to waterfowl was influenced by a number of factors. The Illinois Important Bird Areas (IBA) program identifies places that are important for breeding and migratory birds based on scientific criteria. There are no IBAs for dabbling ducks in the CW area. In the Midwest, waterfowl numbers are maintained largely through hunting regulations and management in national wildlife refuges. The U.S. Fish and Wildlife Service Birds of Conservation Concern list does not include hunted species. Although we have one nascent National Wildlife Refuge, Hackmatack, in the region, the development of habitat is in the beginning stages. Our region is not important for waterfowl—other than for some species of diving ducks. Lake Michigan hosts large concentrations of diving ducks and is an Important Bird Area. We consulted with the Waterfowl Habitat Conservation Strategy and the North American Waterfowl Management Plan 2004 Implementation Framework. The guidance for our region's Joint Venture NAWCA grants, which is no longer available online, also significantly affected our decisions.

We did not attempt to assign different priority levels to migrant birds because the scores across the various BCRs were so different.

Some birds breed here and also migrate through. If they use the same habitat in the same ways in both cases and breed here regularly, we included the bird on the BOC list of breeding birds. Birds such as Common Nighthawk (which uses different habitat in migration) and Chimney Swift and Northern Harrier (which use the same habitat for both but are much more numerous during migration or winter) were included on the list of migrants of concern.

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Acknowledgments

This list was developed by a committee consisting of BCN members Roberta Asher, Bob Fisher, Judy Pollock, Eric Secker, and Nancy Tikalsky and BCN partner Doug Stotz, Senior Conservation Ecologist of The Field Museum.