Existing Landbird Conservation Initiatives in BCR 13: Summary of Species and Habitat Priorities
Initiatives and Programs Summarized:

- NHIC Syntheses
- Wild Species 2000
- COSEWIC / Species at Risk
- Big Picture Initiatives
- Great Lakes Conservation Blueprint Project
- Important Bird Areas
- All-Bird Planning Initiatives
- Ontario Shorebird Conservation Plan
- BCR 13 PIF Efforts in Adjacent Jurisdictions
- PIF Efforts in Adjacent BCRs
Relevance to PIF Biological Plan Priorities

• Species (Landbird) Prioritization Efforts
• Identification of Landbird Population Objectives
• Identification of Important Habitats or Habitat Objectives
- Many programs and initiatives of relevance

- NHIC Syntheses: Efforts to compile data on the status and distribution of target species for the Provincial Elements Database.

(An element is defined as a unit of natural biological diversity, representing species, natural communities or other biological entities.)
Species Prioritization

**G-ranks:** global rarity rank based on range-wide status of a species, subspecies or variety

**S-ranks:** sub-national rarity rank based on jurisdictional status of a species, subspecies or variety

Species tracked are generally those with high G-ranks or S-ranks of S1 to S3

### The Provincial Elements Database (Status and Distribution)

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>GRANK</th>
<th>SRANK</th>
<th>COSEWIC</th>
<th>MNR TRACK</th>
<th>FAMILY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquila chrysaetos</td>
<td>Golden Eagle</td>
<td>G3 (1996-11.22)</td>
<td>S1B, SZN (1998-10-22)</td>
<td>NAR</td>
<td>END</td>
<td>Y</td>
</tr>
<tr>
<td>Aythya valisineria</td>
<td>Canvasback</td>
<td>G3 (1996-11.21)</td>
<td>S1B, SZN (1998-10-22)</td>
<td></td>
<td></td>
<td>Y</td>
</tr>
<tr>
<td>Basileutus bicolor</td>
<td>Tufted Titmouse</td>
<td>G3 (1996-12-02)</td>
<td>S2S3 (1999-01-03)</td>
<td></td>
<td></td>
<td>Y</td>
</tr>
<tr>
<td>Bombycilla garrulus</td>
<td>Bohemian Waxwing</td>
<td>G3 (1996-12-03)</td>
<td>S2S3B, SZN (1996-12-05)</td>
<td></td>
<td></td>
<td>Y</td>
</tr>
<tr>
<td>Bufo americanus</td>
<td>Cane Toad</td>
<td>G3 (1996-11.20)</td>
<td>S2B, SZN (1993-03-13)</td>
<td></td>
<td></td>
<td>Y</td>
</tr>
<tr>
<td>Buteo lapponicus</td>
<td>Rough-legged Hawk</td>
<td>G3 (1996-11.22)</td>
<td>S1B, SZN (1998-10-22)</td>
<td>NAR</td>
<td>NIAC</td>
<td>Y</td>
</tr>
</tbody>
</table>
Identification of Important Habitats

Associations within ecological communities have also been ranked.

Key factors include:
- number of occurrences
- total acreage occupied

Mapping to date mostly restricted to significant areas (e.g., ANSIs)
Linkages

- For the most part, species identified by NHIC as “rare” (e.g., high G or S-ranks) are also listed on the PIF priority list.
- PIF defines vulnerability globally (for population size and distribution), which is most in line with G-ranks, whereas S-ranks define vulnerability jurisdictionally.
- Community rankings likely to be incorporated through compiled data sets like the Big Picture Initiatives or Great Lakes Conservation Blueprint.
Accord for the Protection of Species at Risk and Framework for the Conservation of Species at Risk in Canada

Reports anticipated on 5-year intervals
Summary

General status ranks assigned on a province by province basis

Rankings for Ontario generally mirror NHIC S-ranks

Linkages:
- *May* be an opportunity for PIF species assessments to influence future status ranks
COSEWIC / Species at Risk
Recovery Plan Initiatives
Published and Draft Recovery Plans Affecting Landbird Species in BCR 13:
- Barn Owl
- Eastern Loggerhead Shrike
- Acadian Flycatcher
- Hooded Warbler
- Prothonotary Warbler
- Kirtland’s Warbler
- Henslow’s Sparrow

Most plans contain population objectives: methods for setting vary

Most plans identify important habitats or habitat objectives: methods vary

Linkage:
- COSEWIC species also on PIF Priority list
- Consultation with Recovery Team chairs
Big Picture, 2002
Identifying Key Natural Areas and Linkages in Southern Ontario
The Big Picture: Purpose

• Assemble and interpret the best available, digitally mapped data on the biological diversity of southern Ontario

• Identify high-value core natural areas and highest probability linkages

• Generate replicable, rule-based mapping of a landscape-scale natural heritage system for southern Ontario
Methods - Cores

- Data layers registered, edge matched, converted from vector to raster with 25m pixels (ARC/INFO)

- Positive conservation scores:
  - any natural cover +5
  - Carolinian Canada Sites +15
  - parks and protected areas +15
  - ANSIs +5 to +15
  - forest interior +2
  - older growth woodlands (6E, 7E) +15
  - rare species and vegetation community concentrations +1 to +10
  - coastal natural areas +15
  - Niagara Escarpment Natural +15
  - other OLL sites +1 to +3
  - woodlands > 200 ha +15
  - forest concentrations 0 to +4
  - watercourses plus 30 m buffer +5
  - wetlands +3 to +15

- Scores summed for each pixel to form grid
Great Lakes Conservation Blueprint Project

- A GIS based effort to characterize and prioritize on an ecoregion-basis, aquatic and terrestrial areas for conservation within the Great Lakes Region.
- Primary difference between this initiative and the “Big Picture” is the additional effort directed at prioritizing areas using specific rule-based species and ecosystem targets.
Linkages: Big Picture / Conservation Blueprint

• Assess networks to determine degree to which their “conservation” would achieve various habitat objectives as identified through PIF

• Weighting algorithms in subsequent versions could be modified to more fully incorporate PIF species and habitat priorities
Important Bird Areas Program Goal

To identify and protect a global network of sites critical to the conservation of the world’s bird populations
Canadian IBA Program 1997-2003

Highlights:

• 1200 sites evaluated
• 597 IBAs approved
• 144 conservation plans
• Community Action Fund
• IBA Directory online
• IBA Checklist online
• IBA Web Portal
Linkages to PIF Effort:
- Assess IBA network to determine how its “conservation would contribute to achievement of PIF objectives
- Use PIF results to identify sites under biome category

To date, most sites identified in BCR 13 have been under the congregatory species category or threatened species category.
North American Bird Conservation Initiative
(“All Bird” Planning)

All Bird Planning Meetings:
- Alexandria Bay (April 2001)
- Montreal (November 2001)
Priority Species Tiered Approach

- Each bird group worked independently to identify priority species
- Priority species from the different groups were combined to create a BCR list

“A” List – BCR Level based on:
  - Continental/Regional Priorities – National/Regional Plans
  - Rare/Declining spp
  - Significant Threats
  - Area Importance

“B” List – Jurisdictional Level
  - Importance to Jurisdictions
  - Representative of Habitat Suites

“C” List – Management Concern
  - Abundance
  - Nuisance

**Priority species - working lists by initiative**

<table>
<thead>
<tr>
<th>Species Group</th>
<th>“A” List</th>
<th>“B” List</th>
<th>Total</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterfowl</td>
<td>15</td>
<td>4</td>
<td>21</td>
<td>Also “C” List, BMW</td>
</tr>
<tr>
<td>Landbirds</td>
<td>29</td>
<td></td>
<td>29</td>
<td>By habitat types, also concentrations</td>
</tr>
<tr>
<td>Shorebirds</td>
<td>3</td>
<td>12</td>
<td>15</td>
<td>3 Breeding 12 migrant</td>
</tr>
<tr>
<td>Waterbirds</td>
<td>9</td>
<td>12</td>
<td>24</td>
<td>Also 3 “C” list spp.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56</strong></td>
<td><strong>28</strong></td>
<td><strong>89</strong></td>
<td></td>
</tr>
</tbody>
</table>
Priority Habitats

- As with priority species, each group worked independently to prioritize habitats
- Habitats compared among the groups and a common set of priority habitats identified

**Key Habitat Types - Examples**

- Landbirds
  - Grasslands
  - Shrub/early successional
  - Deciduous Forest
  - Mixed (northern hardwood/coniferous) Forest
  - Marsh Wetlands
  - Riverine Wetlands and Lakeshore
  - Other

**Key habitat types**

<table>
<thead>
<tr>
<th>Species Group</th>
<th># Habitat Types</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterfowl</td>
<td>7</td>
<td>General types</td>
</tr>
<tr>
<td>Landbirds</td>
<td>7</td>
<td>PIF types</td>
</tr>
<tr>
<td>Shorebirds</td>
<td>8</td>
<td>3 specific types for breeding 5 for migrants</td>
</tr>
<tr>
<td>Waterbirds</td>
<td>7</td>
<td>Mix of general and specific</td>
</tr>
</tbody>
</table>
LOWER GREAT LAKES/St. LAWRENCE PLAIN BIRD CONSERVATION REGION

Waterbird Focus Areas - Preliminary

U.S. and Canada

Lake Huron
Lake Ontario
Lake Erie

Atlantic Northern Forest Bird Conservation Region
LOWER GREAT LAKES/St. LAWRENCE PLAIN BIRD CONSERVATION REGION

Landbird Focus Areas - Preliminary

U.S. and Canada
Species Prioritization
-National level scheme ranks from 1 (species not at risk) to 5 (species highly imperiled)
-Regional level scheme split between northern and southern Ontario; species rated as High, Medium, or Low
-Species of interest to PIF effort:
  American Woodcock
  Upland Sandpiper
  Killdeer

Habits
-Preferred habitat types identified for breeding shorebirds, and main habitat types for migrants

Linkages
-Will be implemented in a coordinated fashion through Joint Ventures and other partnerships with interested organizations
BCR 13 Efforts in Adjacent Jurisdictions
Partners in Flight
Bird Conservation Plan
for
The St. Lawrence Plain
(Physiographic Area 18)
St. Lawrence Plain: Priority Bird Populations and Habitats

Grasslands

- **Henslow's Sparrow** Important regional population in St. Lawrence Valley of New York.
- **Upland Sandpiper** Largest population in Northeast; area sensitive.
- **Bobolink** Perhaps a higher density here than anywhere else in its range; population trend is stable overall since 1966, but has shown 2-3% declines since 1980.

**Objective:** Roughly 775,000 ha of suitable grassland habitat is required to support the entire habitat-species suite (e.g., 680,000 pairs of Bobolinks), with 100,000 ha maintained in large enough patches to support 7,600 pairs of Upland Sandpipers, and 1,000 ha intensively managed to support 500 pairs of Henslow's Sparrows in New York.

Shrub-early succession

- **Golden-winged Warbler** Still expanding in the area in abandoned agricultural land; as abandonment halts and existing habitat becomes forest, however, populations are bound to decline.
- **American Woodcock** Shows steep population declines; requires combination of forest clearings, second-growth hardwoods, and moist soils for foraging.

**Objective:** Roughly 50,000 ha of shrub habitats need to be maintained to support 20,000 pairs of Golden-winged Warblers and other species in this habitat suite.

Riparian deciduous forest

- **Cerulean Warbler** (A=7, P=3, T=3) The St. Lawrence Plain population of this Watch List Species is apparently expanding in forest fragments, but is not sufficiently detected in the Breeding Bird Survey.

**Objective:** Population and acreage objectives for Cerulean Warbler in this area not yet determined.
## Lower Great Lakes Plain: Priority Bird Populations and Habitats

### Grasslands/agricultural

<table>
<thead>
<tr>
<th>Species</th>
<th>Status and Habits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Henslow’s Sparrow</td>
<td>Endangered status in Canada; steeply declining in New York; requires dense, unmowed pastureland.</td>
</tr>
<tr>
<td>Bobolink</td>
<td>Abundant, yet declining; sensitive to early mowing of pastures and conversion to cropland.</td>
</tr>
<tr>
<td>Upland Sandpiper</td>
<td>Area sensitive; Threatened status in New York.</td>
</tr>
</tbody>
</table>

**Objective:** Roughly 160,000 ha of grassland habitat is required to support entire habitat-species suite (e.g. 140,000 pairs of Bobolinks); of this 8,000 ha should be maintained in patches large enough to support 600 pairs of Upland Sandpipers, and 1,000 ha should be managed specifically to support 500 pairs of Henslow’s Sparrows.

### Scrub-shrub

<table>
<thead>
<tr>
<th>Species</th>
<th>Status and Habits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden-winged Warbler</td>
<td>Declining precipitously due to expanding Blue-winged Warblers and forest regeneration.</td>
</tr>
<tr>
<td>American woodcock</td>
<td>Shows steep population declines; requires combination of forest clearings, second-growth hardwoods, and moist soils for foraging.</td>
</tr>
</tbody>
</table>

**Objective:** Roughly 12,000 ha of shrub habitats are required to maintain entire habitat-species suite, including 2,000 pairs of Golden-winged Warblers.

### Hardwood forest

<table>
<thead>
<tr>
<th>Species</th>
<th>Status and Habits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cerulean Warbler</td>
<td>Small but regionally important population, especially in Canada.</td>
</tr>
<tr>
<td>Red-headed Woodpecker</td>
<td>Declining nearly throughout its range; this is one of the few areas where this species persists in the Northeast.</td>
</tr>
</tbody>
</table>

**Objective:** Roughly 350,000 ha of deciduous forest is required to support entire habitat-species suite (e.g. 100,000 Wood Thrush pairs); at least 1,500 ha should be protected or managed to support 1,500 pairs of Cerulean Warblers.
Adjacent Bird Conservation Regions

BCR 8  Boreal Softwood Shield
BCR 12  Boreal Hardwood
BCR 13  Great Lakes/St. Lawrence
Review of Ontario PIF Tasks and Role of Technical Advisory Committee

Key Tasks:

- Identify priority landbird species and habitats
- Identify important (priority) habitats for landbirds
- Identify population and habitat objectives
Committee Roles:

- Evaluate and agree on methods and scores for biological assessment of landbirds, selection of priority species, focal species and habitats
- Evaluate, discuss and agree on methods for defining population objectives for landbirds in Ontario, and for determining habitat (or other) targets;
- Organize and lead technical aspects of workshops designed to generate broader input from other interested parties;
- Review draft BCR biological plans, and any reviews of these plans, and reach consensus on underlying assumptions, presentation of technical material, strategies and recommendations for action;
- Link PIF landbird planning to other relevant conservation plans and initiatives in Ontario and neighbouring jurisdictions;
- Advise on communications materials for PIF Ontario, on partnership-building and fund-raising in support of the program, and on opportunities/strategies for implementation of landbird plans in the context of joint ventures and other initiatives.
National Recovery Plan
for the

ACADIAN FLYCATCHER
(Empidonax virescens)
and
HOODED WARBLER
(Wilsonia citrina)