



**ONTARIO PARTNERS IN FLIGHT
BCR 13 WORKSHOP II
Technical Advisory Committee
SUMMARY NOTES**

**MNR offices, 300 Water Street, Peterborough, ON
15-16 April 2004**

Attendees:

Name	Organization	Role
Rhonda Barkley	Ontario Federation of Anglers and Hunters (OFAH)	TAC
Peter Blancher	Bird Studies Canada (BSC)	OC
Dawn Burke	Ministry of Natural Resources (MNR)	TAC
Bill Crins	MNR	TAC
Brigitte Collins	Canadian Wildlife Service (CWS)	OC
Martin Damus	CWS	TAC
Lyle Friesen	CWS	OC
Audrey Heagy	BSC	OC
Jean Iron	Ontario Field Ornithologists (OFO)	TAC
Dan Kraus	Nature Conservancy of Canada (NCC)	TAC
Kathryn Lindsay	CWS, National Wildlife Research Centre (NWRC)	TAC
Marg McLaren	MNR	TAC
Deb Pella Keen	MNR	TAC
Robert Pineo	OFAH	TAC
Julie Simard	MNR	OC
Mark Stabb	Wildlife Habitat Canada (WHC) – Wetland Habitat Fund	TAC
Don Sutherland	MNR	TAC
Ken Towle	Ganaraska Region Conservation Authority	TAC
Sarah Wren	Canadian Nature Federation (CNF)	TAC

***TAC – technical advisory committee, OC – organizing committee**

Copies of background information and presentations from this workshop are posted on the Ontario Partners in Flight website, <http://www.bsc-eoc.org/PIF/PIFOntario.html>).

1. Welcome and Introductions

Julie Simard welcomed the workshop participants on behalf of the Organizing Committee (OC). The focus of this workshop is to:

- Agree on species and habitat objectives for BCR 13 landbird plan.
- Develop a draft list of conservation actions to help achieve the species and habitat objectives.
- Start a list of research and monitoring needs.

2. Update on Actions Arising from the first Ontario BCR 13 workshop

A summary of the status of the actions arising from the previous workshop was distributed at the workshop.

3. Update on Priority Species and Habitats

Changes in Species Assessment

Pete Blancher reviewed the actions arising from the past workshop and from the completion of the Continental PIF Landbird Plan that have resulted in changes to the priority species list.

Threat Score (TB, TW) Changes

- Northern Bobwhite: Threat score (TB) upgraded to 4 (from 3)
- Long-eared Owl: TB 2 (was 3)
- Barn Owl: TB 3 (was 2)
- Area-sensitive forest birds: TB 3 (for 20 species previously scored as TB 2)

Population Trend (PT) Score Changes

- The addition of species showing declining population trends based on Atlas square data resulted in 11 species with PT scores of 5 (strong declines).
- Two of these 11 species were owls (Long-eared and Northern Saw-whet).
- Not certain if declines are real or due to difference in effort between first atlas and first 3 years of the second atlas.

Relative Density (RD) Score Name Change

- Now using the term Relative Density (RD) instead of Area Importance (AI) because it is more accurate and there is less confusion with other measures of area importance (e.g. % of population).
- No changes to scores.

Changes to Tier Structure

- The Priority Species tier structure has been modified as a result of discussions at the first workshop and changes at the continental level.
- Changing from 5-tier to 3-tier structure by combining some categories (see presentation for comparison of structures).
- Proposed new tier structure is:

<p>Tier I: Continental Importance (NA Plan)</p> <ul style="list-style-type: none">•A – Watch List, Regional Responsibility ($RD \geq 2$)•B – Stewardship Species at Core of Range ($RD \geq 4$) <p>Tier II: Regional Concern ($Score \geq 15, RD \geq 2$)</p> <ul style="list-style-type: none">•A – Regional Concern ($PT + TB/TN \geq 8$)•B – High Responsibility ($RD = 5$ or $\% \text{ Pop'n} \geq 25\%$) <p>Tier III: Additional Species of Management Importance</p> <ul style="list-style-type: none">•A – Federally Listed•B – Province / Territory or State Listed•C – Other Species of Regional Importance, e.g., Declines ($PT=5$) & Threats ($TB/TN \geq 3$)

Changes to Priority Species List

- 7 new species with Strong Declines ($PT=5$) and Elevated Threats ($TB/TN=3$)
 - Northern Saw-whet Owl, Whip-poor-will, Chimney Swift, Brown Thrasher, Eastern Towhee, Vesper Sparrow, Grasshopper Sparrow

- Removal of species without regular presence in BCR 13 within Ontario:
 - Bicknell's Thrush, Worm-eating Warbler
 - Other species for review (RD =1)
 - Bay-breasted Warbler, Prairie Warbler, Rusty Blackbird, Short-eared Owl (breeding), Golden Eagle, Great Gray Owl.
- Proposed changes in Tier Structure:
 - Would remove Long-eared Owl and Veery from priority list (high RDs, low threats).

Priority Species organized by Priority Suites/Guilds

As presented in the March 2004 newsletter and in background material:

<p>FOREST – Mature Closed Veery Wood Thrush Cerulean Warbler Bay-breasted Warbler Red-shouldered Hawk Acadian Flycatcher Northern Saw-whet Owl</p> <p>FOREST – Gaps & Openings Black-billed Cuckoo Northern Flicker Rose-breasted Grosbeak Long-eared Owl Red-headed Woodpecker Hooded Warbler Kirtland's Warbler</p> <p>FOREST – Swamp / Riparian / Ravines Canada Warbler Rusty Blackbird</p> <p>WETLAND – Marsh Swamp Sparrow Northern Harrier Short-eared Owl Post-breeding passerine roosts</p>	<p>GRASSLAND – Native & Low-intensity Agriculture Bobolink Eastern Meadowlark Henslow's Sparrow Short-eared Owl Vesper Sparrow Grasshopper Sparrow Northern Bobwhite Barn Owl Loggerhead Shrike</p> <p>SHRUB- EARLY SUCCESSIONAL Willow Flycatcher Black-billed Cuckoo Blue-winged Warbler Golden-winged Warbler Field Sparrow Brown Thrasher Prairie Warbler Whip-poor-will Eastern Towhee Vesper Sparrow Yellow-breasted Chat</p>	<p>SHORELINE Bank Swallow Belted Kingfisher Baltimore Oriole Bald Eagle Migrant concentration areas</p> <p>AERIAL INSECTIVORES- Species showing declines in s. Ontario Bank Swallow Chimney Swift Whip-poor-will Purple Martin Common Nighthawk</p> <p>WINTERING RAPTORS Short-eared Owl Long-eared Owl Bald Eagle Peregrine Falcon Golden Eagle Great Gray Owl</p>
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Wetland-associated Landbirds

The proposed list of wetland-associated priority landbirds in BCR 13 is shown below. Wetland habitats are important to these birds in BCR 13.

Wetland-associated Priority Landbirds in BCR 13		
Bald Eagle	Acadian Flycatcher	Prothonotary Warbler
Northern Harrier	Willow Flycatcher	Louisiana Waterthrush
Red-shouldered Hawk	Bank Swallow	Canada Warbler
Peregrine Falcon	Veery	Henslow's Sparrow
Long-eared Owl	Blue-winged Warbler	Swamp Sparrow
Short-eared Owl	Golden-winged Warbler	Rusty Blackbird
Belted Kingfisher	Cerulean Warbler	
Wetland habitat is important to these birds in BCR 13. "Wetland" - marsh, swamp, carr, bog, fen, wet meadow, riparian or lakeshore.		

Species Assessment Discussion

Changes to species list for BCR 13 for species with few occurrences:

Species that are at the fringe of their range in BCR 13 and are not characteristic of the BCR should be dropped from the priority species list (but will be addressed in other BCR plans).

- **Action:** Drop Bay-breasted Warbler, Rusty Blackbird, Golden Eagle and Great Gray Owl.

Species that are rare in BCR 13 but might be listed in the future and/or could benefit from this plan should be kept.

- **Action:** Keep Prairie Warbler and breeding Short-eared Owl.

No questions about the changes to threat scores. Some discussion about the multiplicity of lists of forest birds with specific landscape needs and the value of having one comprehensive list.

- *If possible, include a comprehensive list of habitat needs (forest edge/interior, area sensitivity and matrix considerations) in the appendix that could be used by land managers in southern Ontario, e.g., based on Freemark & Collins and other work.*
- **Action:** Incorporate interior/edge, area sensitivity and matrix considerations in the habitat objectives.

Discussion regarding Habitat Guild Assignments for Priority Species

Prior to the discussion, Pete distributed a handout with Species Guild Assignments for all BCR 13 birds based largely on the BBS habitat guild classification (available on website). Pete noted that there are some differences between these groupings and the priority habitat guild lists (e.g. Whip-poor-will is assigned to Woodland guild for BBS & Atlas guild analyses, but is shown in the Shrub/Successional priority guild; Black-billed Cuckoo and Vesper Sparrow are each assigned to 2 priority guilds, but only one is used for BBS & Atlas guild analyses).

A number of concerns about the habitat groupings for the priority species (see table above) were raised.

It was noted that the forest habitat sub-groups were not compatible with available forested land cover categories (deciduous, coniferous, mixed; sparse versus dense) that are based on remote sensing data. Also there were concerns about the difficulty of assigning species to particular forest structures (e.g. gaps & openings). The TAC **recommended** the following:

- *Use a single forest bird guild, i.e., don't break out into closed mature, open and riparian (difficult to accurately assign species) but do cover off the various habitat structure needs of individual priority forest birds in text and/or appendix.*

There was only one priority species that the group thought should definitely be re-assigned:

- **Action:** *Move Kirtland's Warbler – it is a successional species found in jack pine stands and occurs with Eastern Towhee and Brown Thrasher.*

There was some discussion about the implications of the habitat groupings as to their intended use for this Plan and whether they might be used (misused) for other purposes. The priority habitat groupings are used to establish habitat objectives and thus are linked to habitat-specific conservation actions. The species habitat suite assignments (not just priority species) are used to set population trend and distribution objectives for each guild/suite (e.g. forest birds, grassland birds, etc). There is a risk that some managers might interpret the priority guild table as a list of indicator species for certain habitat types, or as suitable indicators for environmental reporting. It was noted that some other BCR plans (e.g. Canadian Great Basin landbird plan) have used a focal species approach and select focal species as representative of the habitat needs and other requirements of a group of priority species. It was also noted that some of the species in the guild groupings were largely restricted to certain habitats and others species preferred one habitat but also used other habitats.

The final **recommendation** was to:

- *Indicate those species that are habitat obligate or have conservative requirements by using boldface in the table.*

During the workshop a small working group (Crins, Sutherland, Towle, Lindsay) reviewed the habitat guild assignments list and indicated which species they felt should be identified as habitat obligates or conservative species.

- **Action:** *Circulate the preliminary list of habitat obligates species to the TAC for review.*

The two non-habitat based guilds were reviewed. The general feeling was that we should:

- *Keep Aerial Insectivores – not a habitat suite, but useful to have it broken out to draw attention to declines.*
- **Action:** *Drop the “Wintering Raptors” category but reflect wintering concentrations within other habitat suites, e.g. Short-eared Owl in grassland, Bald Eagle in ‘shoreline’ habitat.*

The question of whether we could use the Atlas data to validate the habitat grouping was raised. It should be possible to compare the point count data with available land cover mapping or other habitat layers. However, a complete analysis will likely not get done for some time. Pete will look at existing data and see if this approach looks useful.

- *If further analyses of habitat use show we have incorrectly grouped species, we will modify groupings accordingly.*

Discussion regarding the Wetland-associated Landbirds table

The value of including the wetland-associated table of priority landbirds was discussed. The consensus was that this type of table is useful for accessing wetland-specific funding sources and more generally provides a link to other habitat-based initiatives. If the list requires updating frequently then may be better to present it as a “living list” on the website rather than in the plan.

Related **actions items** include:

- *Keep the Wetland-associated priority species table. It will need updating so decide how it will be presented (in appendix or on website, not in body of the plan).*
- *Assign birds to wetland habitat types (marsh, swamp, etc.) and use boldface for wetland obligate species.*
- *Consider similar tables for other non-wetland species as well.*
- *Change wording in table to post-breeding passerine concentrations (rather than roosts)*

4. BCR 13 Landbird Plan Goals and Objectives

Pete Blancher gave a brief presentation on the first draft of the goals and objectives of the BCR 13 Landbird Plan (some of this was included in the material circulated prior to the meeting).

Overall Conservation Goal

- *Sustain the distribution, diversity, and abundance of native landbird populations and their habitats in Ontario's portion of Bird Conservation Region (BCR) 13.*

There are additional goals related to building partnerships and networks.

Objectives of the BCR 13 Plan

- *Present a Species Assessment for Landbirds*
- *Identify Priority Species and Habitats*
- *Present measurable Population and Habitat Objectives*
- *Set out recommended Actions to achieve Objectives*
- *Indicate where Conservation Actions are most useful*
- *Give Monitoring Objectives & Key Research Needs*
- *Set Timeframe & Mechanism for Evaluation*
- *Communicate Landbird Conservation Needs & Recommended Actions*

High-Level Conservation Objectives

- *Reverse Declines of most Priority Species*
- *Stop Declines of Priority Grassland Species & Guild*
- *Recover Endangered and Threatened Species*
- *Maintain Distribution of Priority Species in BCR 13*
- *Ensure Habitat of sufficient Quality and Quantity to meet Population and Distribution Objectives*
- *Monitor Trends and Distribution of all Landbirds, and their Habitats*
- *Research reasons for Declines, Landbird Needs, Impacts and Success of Actions*

Specific Population Objectives

Population Trend and Size Objective

Pete reviewed the specific population objectives material that had been distributed prior to the workshop, using the Forest Birds suite as an example. Specific objectives will be set for each priority species except for listed species where population objectives are established in the recovery strategy.

The TAC was generally comfortable with the trend objective and BBS Index objective but expressed concerns about the Population Targets. The main point raised here (see also discussion below) was that the population targets were presented without any confidence intervals (could be presented as a range). Pete pointed out the three objectives are derived from same data (BBS data set) and are simply different ways of presenting the same objective. If the actual population target is off due to the data it doesn't change the underlying objective (e.g. reversing decline, maintaining population).

Question: Is the BBS route coverage in this BCR adequate (number of routes, habitats sampled)? *Response:* Pete had compared population estimates based on Breeding Bird Atlas data with the BBS population estimates and found good agreement (see graph in presentation).

- *In general, it appears that many/most landbirds in the ON portion of BCR 13 are well sampled by the BBS. Action: If better trend or population estimates are available (i.e. Species at Risk) then we will use those (send to Pete).*

Question: Do we want to use only the Trend and Index objectives and not include a Population target?

Response: Funders have requested that population targets be included in plan *if reasonable*. Other plans have included population estimates and targets. Continental PIF plan and Great Basin plan included accuracy and precision rating with each population estimates, in an appendix.

General recommendation:

- *Include accuracy and precisions ratings with population estimates and targets.*

Guild Objectives

Pete presented the approach used to develop guild objectives for the habitat guilds. The guild objectives are based on trend of the BBS stop index for each guild. The stop index is the sum of the number of BBS stops for each species in the habitat suite (e.g. all woodland birds) averaged per route. It is a measure of frequency rather than abundance (so that abundant species do not overwhelm less common species).

Distribution Objectives

Pete presented distribution objectives based on changes in species distribution between the 1981-85 Atlas and the current Atlas (2001-2003 data). Pete noted that overall more negative trends, possibly due to lower coverage to date (3 years compared to 5 years of coverage).

To assess the distribution across the BCR, Pete had divided BCR 13 into four sub-regions using Atlas administrative region boundaries. The land cover in the four sub-regions varies, particularly in the amount of cropland versus forest cover.

The TAC felt that the sub-regions were useful but boundaries should be re-aligned to mesh with other initiatives. This can be done fairly easily by re-assigning each atlas square to a particular sub-region.

- **Action:** Adjust the four sub-region boundaries to coincide with MNR Eco-region/Eco-district boundaries as much as possible. That way, the Plan will be more compatible with other initiatives (e.g. Conservation Blueprint, the Big Picture).
- **Action:** Get map/GIS layer with eco-district boundaries [done] and re-assign atlas squares to new sub-region boundaries.

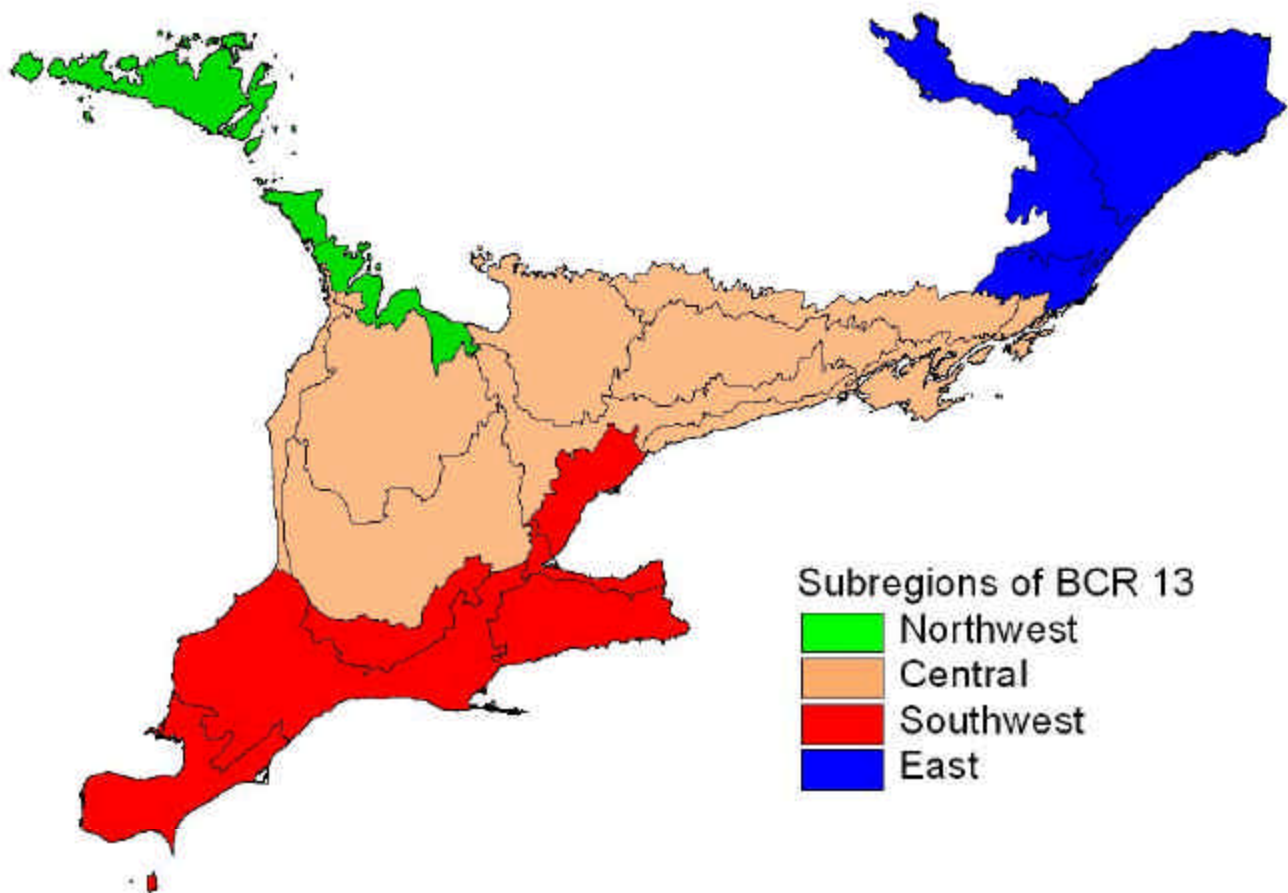
New Sub-region Boundaries for ON BCR 13 (see also map)

Southwest Sub-region encompasses the Carolinian Eco-region 7E, including: Eco-districts 7E-1 Chatham, 7E-2 St. Thomas, 7E-3 Grimsby, 7E-4 Whitby, 7E-5 Niagara, and 7E-6 Stratford South

Northwest Sub-region covers Manitoulin Island and Bruce Peninsula, including: Eco-districts 6E-4 Meaford, 6E-14 Tobermory, and 6E-17 Gore Bay

Central Sub-region includes: Eco-districts 6E-1 Stratford, 6E-2 Kincardine, 6E-5 Mount Forest, 6E-6 Barrie, 6E-7 Uxbridge, 6E-8 Peterborough, 6E-9 Madoc, 6E-13 Oshawa-Cobourg, and 6E-15 Picton

East Sub-region includes: Eco-districts 6E-10 Westport, 6E-11 Smith's Falls, 6E-12 Kemptville, and 6E-16 Renfrew



Question: Why isn't Cockburn Island (west of Manitoulin, tentatively included in NW region on sub-region map) included in this BCR (13)? *Response:* BCR maps, including continental level mapping, show Cockburn Island in BCR 12.

- *Action:* Pete to follow up as to whether to change BCR boundary to include Cockburn Island [also St. Joseph Island].

Pete also presented distribution objectives for each guild, based on total number of species. *Comment:* Instead of using number of species in the guild analysis could look at similarity in composition from past to present. For forest birds, the numbers tend to be relatively stable even if composition changes. *Response:* This is intended to be a coarse filter to capture what is happening with entire guild.

Habitat Objectives

Pete reviewed the various options for setting habitat objectives. Options for setting objectives for the amount of habitat include change relative to present, total area needed to meet population objective, and % of land needed to ensure species richness. Other habitat objectives could be to establish patch size objectives and objectives for buffer width and appropriate land uses in buffers. Also could set objectives as to where to locate core habitats.

Pete noted that the objectives in the material he had circulated were intended as “straw dogs”, taken from the literature but not comprehensive. TAC members pointed out the value of tying our habitat objectives in with other conservation initiatives (e.g. the Big Picture, the Great Lakes Blueprint).

Recommendations were to:

- *Get more information on existing habitat layers (e.g. look at Blueprint ecosystem layer).*
- *Tie habitat information to other, existing initiatives to enhance linkages.*

5. Examples of Conservation Actions

Species at Risk and Recovery Plans

Before giving his presentation Lyle mentioned two recent books he thought were interesting and relevant to this BCR plan:

- Robert A. Askins, 2002. *Restoring North America's Birds: Lessons from Landscape Ecology*, 2nd edition. Yale University Press
- John Faaborg. 2002. *Saving Migrant Birds: Developing Strategies for the Future*. University of Texas Press, Austin.

Lyle Friesen (CWS) gave a presentation that focused on working towards the recovery of multiple species in a site or region. Main points included:

- Acadian Flycatcher/Hooded Warbler Recovery Plan was one of first recovery plans to deal with more than one species.
- One of difficulties associated with recovery planning is that priority species may have different and conflicting habitat needs.
- Have identified “core areas” for various SAR species in this BCR including Loggerhead Shrike (also important for other grassland species), Acadian Flycatcher/Hooded Warbler, and Prothonotary Warbler. These core areas provide a focus for conservation efforts.

- Need to maximize use of local partners and programs for implementing recovery actions.
- Habitat Stewardship Program funds available for on-the-ground work, especially in targeted ecosystems (wetlands, Carolinian forests, grasslands).
- Recovery Team important link for sharing information.
- Need to increase representation from farming and forestry communities.

Conservation Blueprint Update and Application in BCR 13

Dan Kraus (NCC) presented an overview of the Conservation Blueprint (posted on Ontario PIF website). His presentation focused on the Blueprint outputs rather than the process. The Blueprint (to be finished by end of 2004) identifies the highest-priority core biodiversity areas within the natural heritage system of natural-cover core and corridors identified by the Big Picture project (completed in 2003). Stratified by eco-districts. Existing protected areas are overlain on the core biodiversity areas to identify gaps. Software used to identify additional ecosystems need to develop most efficient portfolio of land that includes needs of all targeted species and communities at risk.

Key points relevant to BCR 13 landbird plans include:

- Blueprint covers the Great Lakes Eco-region in Ontario.
- Uses the MNR Eco-region/Eco-districts as sub-region units.
- 42 ecosystems mapped (includes only areas of natural cover).
- Communication plan (funded by Trillium) will include biodiversity summary for each Eco-district.
- Includes protected area GIS layer.
- Could provide baseline for measuring change in habitat for BCR planning.
- Could be used to test habitat guidelines for priority species.

6. Workshop Session I: Population and Habitat Objectives

Objective: Agreement on Objectives for BCR 13 Landbird Plan

Discussion of Overall Conservation Goals and Objectives of the Plan

There was limited discussion about the overall conservation goals and objectives of the Plan as the TAC was generally in agreement with draft wording. The main comments requiring **action** were:

- *“Ensuring sufficient habitat” is an action rather than an objective.*
- *Last 2 points are for evaluating degree to which objectives are being met (rather than being objectives).*
- *Need to change wording to say “reverse and recover to target level”.*
- *Need to have a time frame as part of the objective, e.g., use 20 years as the target?*
- *Need to identify short-term measures as well as long-term objective.*

Discussion of Population Objectives

Species Population Objectives

The TAC agreed that the trend objective and use of BBS data for determining long-term trends were fine. They were also comfortable with the use of a BBS Index objective but noted that this is difficult to apply at the local or site-level. *Comment:* Could monitor surrogate species or focal species at local level to evaluate impact of actions.

Question: Can we use BBS to look at achieving objectives at sub-region level? *Response:* Pete will check sample sizes once sub-region boundaries are revised.

There was additional discussion regarding the use of population estimates and targets. Several people commented that they liked having the population estimates or targets included in the plan (or appendix) because they were interesting, easy to grasp, and could be applied at any level. Also noted that it is important to consider not only how to measure and evaluate objectives, but also ask if the objectives are useful in communicating to user groups, information on where we are and where we want to be.

Additional concerns and comments were raised regarding the specific population target objectives including:

- Should use different word than “target” because this is a minimum population rather than optimal level.
- If giving population target as a range, then most managers will use the low end of range as the target.
- Need for accuracy rating or confidence intervals re-iterated.
- Could follow continental plan and include population estimates, rather than targets, in table of objectives or in an appendix.
- Could present as % change in population to give idea of current population.
- Would be useful to link ON BCR 13 targets to continental target so can get a sense of importance of this region to global population.

Agreement on the following **actions:**

- *Change wording from “population target” to an “estimate of current OR target population” (appropriate figure to be determined).*
- *Include % change in population in table in the plan to communicate change between past and present (or present and target).*
- *Include population estimate (either current or target) in body of plan to show magnitude of change.*
- *Include accuracy and precision ratings related to population estimates in an appendix.*

Guild Trends Objectives

The group was generally comfortable with using the guild trend approach but had concerns about how it would be applied and presented in the plan. In particular, there was considerable discussion about the increasing trend shown by the forest guild.

The main points of this discussion were:

- Ok with the guild trend approach but general concern about not having a species composition objective to go with it.
- There was specific concern about showing a strongly increasing trend for the forest bird guild that may not be true for forest obligate species.

- Ken Towle mentioned how difficult it would be for him, as a land manager, to argue for the conservation of more forests if trends showed that forest birds were already doing extremely well. Therefore, is a need to determine whether the increase applies broadly to all forest birds, or affects the more generalist species but not the obligates.
- Prefer if set objectives for obligate/sensitive bird rather than entire guild including more generalist/facultative species. It may be desirable to present trends for obligates alone, or to show both trends (obligates, all forest birds) on one graph.

The ensuing **action items** are:

- *Pete to check to see if forest bird BBS stop index is block-weighted.*
- *For forest guild in particular, look at trends for sub-set that are area-sensitive and obligate forest species. Also, could re-consider if using the first decade of BBS (1968-1977) as the base is reasonable.*

Depending on the results of these new analyses, options are to consider include dropping the guild analyses, changing how it is presented, or looking at trends by sub-region (if adequate sample size).

Discussion of Distribution Objectives

Pete presented distribution objectives for priority species and guilds based on changes in bird distribution between the first (1981-85) and second (2001-03) atlas data sets. These objectives were based on:

- Reverse losses of priority species in each sub-region.
- Maintain distribution of those priority species whose distribution had not decreased.
- Maintain distribution of forest bird guild in each sub-region.

Priority Species Distribution

The TAC agreed that there was value in setting distribution objectives for priority species but questioned whether the approach presented (using atlas data) is the best approach. Concerns raised included:

- For very widespread species, how far from 100% is acceptable?
- How do we know/evaluate distribution objective between atlas periods? 20-year atlas windows are our long-term method of evaluating success. We need short-term measures as well.
- *Question:* Is this objective being set to conserve birds only or birds at indicators of biodiversity and habitat? *Response:* Bird objectives are for birds; habitat objectives are for most than just birds.

Recommendations were to:

- *Continue the species distribution analysis as long-term objective but measurable short-term objective should use trend data by sub-region, e.g. BBS trends and/or other survey trends.*
- *Compare frequency at BBS stops versus % of atlas point counts — good agreement would boost confidence in using BBS frequency within sub-regions as a short-term surrogate for atlas distribution.*

Guild Distribution

For the guild analysis Pete noted that the guild compositions would be changing. The main **recommendation** again was to focus on the sub-regions rather than atlas squares and:

- *Include guild distribution analysis in plan but focus on trend in abundance by sub-region rather than distribution.*

Discussion of Habitat Objectives

Options for Habitat Objectives

Pete presented the following as options for setting habitat objectives:

- Amount of habitat
 - Change in land cover relative to current situation over some specified time period.
 - Total amount needed to meet population objectives.
 - Proportion of land needed to ensure species richness.
- Patch size
 - Core areas.
 - Other satellite habitats.
- Buffer sizes
 - Width of buffer around important habitats.
 - Types of appropriate land uses in buffers.
- Where to locate core habitats

The TAC made the following **suggestions** as to what habitat variables should be considered:

- *Need to include consideration of configuration and matrix (instead of buffer).*
- *Define Patch Proximity as separate than Patch Size.*

Dan Kraus noted that the Conservation Blueprint will provide a patch size breakdown (by habitat type) for each eco-unit that could provide a baseline for setting targets and for identifying where to locate core habitats.

Amount of habitat

Of the three options for setting objectives for the amount of habitat needed the TAC preferred using the proportion of land needed. Problems with some or all methods included:

- Not clear how well we can determine how much habitat needed by each priority species.
- Not clear on amount of overlap between species with similar habitat needs.
- How deal with conflicting habitat needs of different priority species (e.g. forest vs. grassland)?
- Habitat quality may be limiting factor rather than quantity.
- Need to balance setting objectives high enough to achieve population objectives but not be so unrealistic as to not be achievable.

Main **recommendations** were to:

- *Use same sub-regions as for other objectives.*
- *Set objective as proportion of land we need to conserve overall and scale it over time (link time interval to habitat monitoring frequency).*
- *Set the objective based on species needs even if unrealistic to achieve in the short-term (i.e. 30% forest cover in SW sub-region), but may need to set interim goals that are more realistic and achievable to motivate action.*

For forest habitats, the TAC made the following **recommendations** :

- *30% forest cover as minimum threshold for each sub-region (enough to cover off needs of most species, mitigates/negates most fragmentation effects for birds). Only need to highlight 30% if below threshold (i.e. in SW sub-region).*
- *For areas where less than 30% forest cover then provide additional objectives on patch size, proximity, surrounding land use, etc.)*

The TAC was not able to provide specific minimum thresholds for other habitat types.

Where in BCR 13?

Pete presented various maps showing the distribution of priority species by habitat suite using the atlas data. The ensuing discussion about where in BCR 13 the key habitats were located identified the lack of information on the habitat needs of priority species in BCR 13 and habitat availability as a problem.

Available information includes:

- Core areas for various SAR species identified in recovery strategies.
- Landbird priority areas identified at the all-birds BCR 13 workshop session.

Overall **recommendations** were:

- *Additional analyses are needed to model habitat needs of priority species in BCR 13. If additional more detailed habitat layers exist, then could look at which habitats are most closely associated with priority species (e.g. using atlas point count data). Results of this analysis would enable us to better define habitat needs, identify areas of current importance, and improve knowledge for those wishing to create habitat for priority species. It is not known whether suitable habitat layers are presently available or how long this habitat analysis will take to complete. Depending on timing, the results could be included in this Plan or as a follow-up action (as in Great Basin and Prairie plans).*
- *Need to understand why certain Atlas squares (especially along northeastern edge of BCR 13) stand out re number of priority shrubland, grassland, and/or wetland species. Suggestion: produce map of all the priority score squares for all the different priority guilds so can determine best squares for combination of guilds.*
- *Grassland and shrubland/successional habitat strategies need to be linked. In some areas, low-intensity land use may be the key factor for the abundance of grassland and shrub guilds rather than amount of habitat.*

Ontario Wetland Habitat Fund Program

Mark Stabb, Program Manager of the Ontario Wetland Habitat Fund (OWHF), made a brief presentation on the OWHF program. Highlights of his presentation were:

- The Wetland Habitat Fund was established in 1997.
- The focus of the Wetland Habitat Fund has been on private land stewardship and incentive programs that support the conservation of wetland and associated upland habitat.
- This is an important program for implementation and delivery of the Eastern Habitat Joint Venture in Ontario (North American Waterfowl Management Plan).
- Starting in 2004, the fund is being expanded beyond wetlands in an *all birds - all habitats initiative* related to NABCI. Multiple funding partners are on board for this initiative.
- Main elements of the wetland funding model remain the same:
 - Private landowner driven.

- Habitat plan required.
- 10-year agreement required.
- 50/50 cost sharing.
- Current program is working with 700 landowners. Field extension staff is in place across southern Ontario. Wetland Fund model has proven effective in improving wetland habitats for wildlife.
- Website: <http://www.wetlandfund.com>

7. Monitoring Objectives

Pete Blancher presented the four draft monitoring objectives:

- Population Trends
- Species Distribution
- Demographic Monitoring
- Habitat Monitoring

Pete posed the following question: *Do we need to develop additional monitoring programs, or just maintain/expand existing programs?*

Population Trends

Proposed objectives are:

For all breeding species with RD = 2 in ON BCR 13:

- Able to detect 50% decline in 20 years in ON BCR 13
- Able to detect 50% decline in 20 years range-wide and less precise trend available in ON BCR 13.

For priority breeding species with RD=1

- Species-specific monitoring for species of high management concern/interest

Contribute to continental monitoring priorities:

- Monitor migrant species inadequately surveyed on northern breeding grounds
 - Migration monitoring
 - Christmas Bird Count

Of 110 species with RD = 2, 64 are adequately monitored by BBS in ON BCR 13, 31 monitoring range-wide with some trend data in BCR 13, 15 not monitored. Imprecise BBS trends available for 5 species: Ruffed Grouse, Osprey, Wild Turkey, Blue-headed Vireo, and Black-throated Green Warbler. Other gaps are Henslow's Sparrow, Louisiana Waterthrush, Saw-whet Owl, Long-eared Owl, Screech-owl, Goshawk, Merlin, Cooper's Hawk, Brown Creeper and Cerulean Warbler. Of these 15 species, some are covered by migration monitoring program, some by SAR monitoring, some by nocturnal owl surveys (for eastern part of BCR only), but still some gaps (e.g. LEOW).

Distribution Trends

Draft distribution objective is:

- Able to detect 15% change in range size over 20 years within each sub-region.

Pete hasn't evaluated yet but Atlas is likely adequate for detecting 15% change over time.

Demographic Objective

Productivity/survival not currently being monitored (except for site- and/or species-specific studies) but several possible programs exist (MAPS, BBIRD, Nestwatch etc). Is a general program needed or just focus on those species and areas of management interest?

Habitat Monitoring Objective

Need to regularly measure and report on land cover & land use at 5 years (more frequent not feasible).

Discussion of Monitoring Objectives

Population Trends

During this discussion it was pointed out that it is not necessary to wait for 20 years of data to evaluate this objective; it is possible to evaluate data from shorter time series. *Comment:* Target of 50% in 20 years is very severe decline. *Response:* Agree, but this is the best that is achievable with current level of monitoring effort and is consistent with continental level monitoring objective. *Question:* How much effort would be required to set more ambitious target?

Suggestions arising from the discussion were:

- *Could look at how many additional BBS routes are needed to increase power.*
- *Could consider other surveys to fill gaps.*

Distribution Trends

TAC was comfortable with the proposed approach using atlas data.

Demographic Objective

Various existing schemes were discussed. It was noted that many are very labour-intensive (but yield valuable information), expensive, and ideally should be of a long-term duration. Project Nestwatch/Ontario Nest Records Scheme is of limited use since not many nests with more than one site visit.

General **recommendations and suggestions** were to:

- *Use/expand existing schemes.*
- *Could use Baillie Fund or IBA Community Action Fund to direct activities to provide a specific focus (potential action.)*
- *Pull together information on what everyone is presently doing (do this or at least include in the plan as an action).*
- *Could monitor demographics of surrogate or focal species to monitor status of broader group of species.*

Habitat Monitoring

Discussion as to what habitat information is available and is it being updated on a regular basis.

SOLRIS program to complete Ecological Land Classification (ELC) mapping for southern Ontario is way behind schedule. What is the cycle for updating the Land Cover mapping (interpretation of remote sensing data), and will we be able to compare land cover over time?

Recommendations:

- *Need to explore what habitat information is available.*

Possible contacts include:

- Bruce Pond at MNR looking at Land Use Planning evaluation.
- Richard Mussakowski at NHIC.
- Some municipalities and Conservation Authorities may have local mapping, inventories.

Main **recommendation** is:

- *Leave as general objective with idea of having one habitat layer that is updated every 5 years, and can be compared with previous results.*

Other comments included:

- Could consider using a sampling scheme rather than a comprehensive map.
- Could use different approach in different sub-regions.

8. Workshop Session 2: Conservation Actions

*Objectives: Develop draft list of actions needed to meet objectives.
Identify possible actions needing further review or more analysis.*

For the brainstorming session, all workshop participants were asked to list conservation actions for achieving the plan's objectives. These actions were listed on flip chart notes under one of the following headers:

- a. Research & Evaluation
- b. Monitoring
- c. Policy & Legislation
- d. Outreach & Education
- e. Habitat Mangement (including securement, enhancement, management, etc).
- f. Other (actions which don't fit into any of the above categories)

The transcribed notes were compiled into a spreadsheet using the same headings (separate tabbed worksheet for each category). This spreadsheet is available for download from the PIF Ontario website. In organizing the notes, a preliminary attempt was made to group the actions into various themes, and to identify if the action was directed as a particular target, objective, audience, etc.

Following the brainstorming session, a spokesperson presented a summary of the conservation actions identified by each breakout group as follows.

Summary of Conservation Actions Brain-storming Session

Research & Evaluation

1. Compile an inventory of what we have in the way of information, what studies are going on in Ontario and elsewhere.
2. Make use of existing research to develop a better understanding of the ecology, demography, etc of non-priority species that could act as potential surrogates for priority species.
3. Identify priority areas for research:
 - a. Species/suites/guilds or habitats to focus effort.
 - b. Identify reasons for decline/increase of priority species.
 - c. Identify how patterns of occurrence and demographics are affected by landscape variables, land-use activities and management.
 - d. Encourage long-term studies.
4. Promote funding for research priorities.
5. Support research on our general understanding of birds and impact.

Discussion

In many cases we can take USGS habitat management documents and then see if they apply in ON BCR 13. There is also a PIF summary of research and monitoring needs extracted from U.S. landbird plans (<http://www.partnersinflight.org/pifneeds/searchform.cfm>). Examples of detailed species accounts, including several BCR 13 priority species, are available at (<http://www.partnersinflight.org/birdacct.htm>).

Monitoring

1. Maintain/strengthen existing monitoring programs (BBS, Atlas, migration monitoring, FBMP, MMP, etc).
2. Identify gaps in existing programs, priority monitoring needs within BCR 13 and potential programs to address these gaps and needs (in-atlas owl surveys, checklist program for breeding, migration and winter seasons, hunter surveys).
3. Develop/expand programs to provide information to evaluate demographic objectives (various options).
4. Develop/expand programs to provide information on habitat and land use trends and links to birds (e.g. remote monitoring of land use and natural cover, trends in low-intensity agricultural land use, impact of removal of exotics/invasive species on birds).
5. Maintain and develop Citizen Science volunteer corps.

Policy & Legislation

1. Summarize and evaluate existing policy tools' contribution to PIF Ontario objectives and identify gaps:
 - a. Managed growth (provincial)
 - b. Municipal smart growth policies
 - c. Provincial Parks Act
2. Incentive programs
 - a. Develop more
 - b. Better implementation (avoid disincentives)
 - c. Better coordination
3. Update/revise Provincial Policy Statement under Planning Act (Natural Heritage Policy) to reflect value of bird habitat based on new information.
4. Specific recommendations around the following topics:
 - a. MBCA incidental take
 - b. Tree cutting bylaws
 - c. Fish & wildlife Conservation Act (re unoccupied raptor nests)
 - d. Innovative use of Drainage Act (wetland restoration)
 - e. Update Provincial Parks Act
 - f. Influencing municipal policies e.g. Managed Growth Initiative, Smart growth policies, GTA greenbelt (outreach action?)
5. Future policy formulation should incorporate all-bird values.

Outreach & Education

1. Key audiences include:
 - a. Funders
 - b. Private landowners
 - c. Public land managers
 - d. Various levels of government especially municipal government.
 - e. Future volunteer monitors (youth, naturalists community)
 - f. General public
2. Key communication message/information needs:
 - a. Keeping common birds common strategy.
 - b. Need for better *quality* habitat.
 - c. Best management practices.
 - d. Links between breeding and wintering areas.
 - e. Land use messages eg. smart urban growth strategies.
3. Education materials and programs:
 - a. Develop/expand bird education initiatives attached to existing programs.
 - b. Inventory and assess existing PIF educational materials and build on this base.
4. Develop new communication tools such as:
 - a. Electronic newsletter.
 - b. Website (especially so can easily update information).
 - c. Fact sheets.
 - d. Look at PIF resource list and research needs database on US PIF website.
 - e. Could develop Hinterland Who's Who topic focused on PIF.
5. Look at all of Ontario not just BCR 13 specifically.

Habitat Management

1. Strategic Directions:
 - a. Link Canadian and US BCR 13 priorities
 - b. Coordinate with SAR Recovery Plans
 - i. Implement habitat actions of SAR Recovery Plans and integrate these actions with PIF priority species habitat conservation needs in each sub-region
 - c. Use GIS to identify management & restoration priorities
 - d. Identify securement priorities by habitat type
2. Landscape Management:
 - a. Consider the landscape matrix and its management
 - b. Allow natural forms of disturbance where possible,
 - c. Use existing protected areas as "source habitats"
 - d. Take into consideration existing or potential natural heritage systems at local & regional scale.
3. Grassland/Shrubland Management:
 - a. Restore native tallgrass & alvar habitats
 - b. Manage hydro corridors for grassland and shrubland species
 - c. Manage public lands for grassland birds

- d. Control woody growth in grasslands
- e. Adjust timing of haying
- f. Reduce chemical pesticides

4. Forest Habitat Management:

- a. Identify, map and maintain areas of old growth forest and core forests
- b. Increase forest size and improve shape where possible:
 - i. Prevent fragmentation of existing forests
 - ii. Join wooded areas to create larger forests; increase connectivity.
- c. Forestry practices... "the good ones"
 - i. Preserve tallest trees, encourage maturing of canopy
 - ii. Retain large trees & snags
 - iii. Manage to maintain cavity trees
 - iv. Control exotic species
 - v. Control human activities that damage sensitive ground vegetation
 - vi. Discourage cattle grazing in woodlands
 - vii. Work to regenerate disturbed habitats
 - viii. Control access of ATVs to public lands

5. Wetland Habitat Management:

- a. Implement wetland drain restoration program to restore flooded swamp habitat.
- b. Adapt existing wetland securement/enhancement/management programs/practices to benefit priority wetland landbirds.

Discussion

- Wetland Drain Restoration Program: Piloted in Norfolk County to address water supply issues following prolonged drought period. Innovative use of the provincial Drainage Act. Work with local farmers/landowners, Stewardship Council, MNR, OMAF, and the Drainage Superintendents to plug drains and create/improve swamp forest habitat. Both hydrological benefit (retention, recharge) and wetland bird habitat restoration benefit. Costs are for the hydrological study and control structures. A "how-to" manual is available from the Norfolk Stewardship Council.
- Peregrine Falcon: still need to recover the cliff-nesting populations, not just birds limited to urban landscape.

9. Next Steps in the Ontario BCR Planning Process

- *Targeting a September workshop for BCRs 12 & 8 (combining the workshops but will prepare two separate plans.)*
- *Keep present TAC members in the loop regarding developing other BCR plans even if not active participants in the workshop.*
- *TAC will be involved in review of the draft plan for BCR 13.*
- *Organizing group will be meeting with GIS folks to discuss linking habitat information and bird point count information.*
- *Need to expand TAC and review team membership for northern BCRs.*
 - *ON Crop and Soil Improvement Association has agreed to review plan.*
 - *MNR may be able to facilitate First Nation involvement.*
- *Will update PIF Ontario website with information from this workshop including presentations.*
- *Will also post links to completed or draft plans for other BCRs (i.e. BC/YK Great Basin plan) on this website.*