

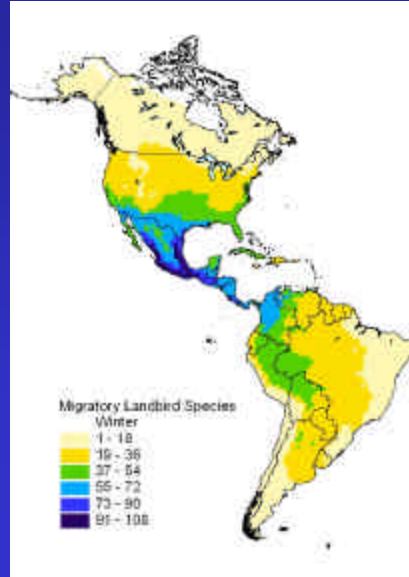
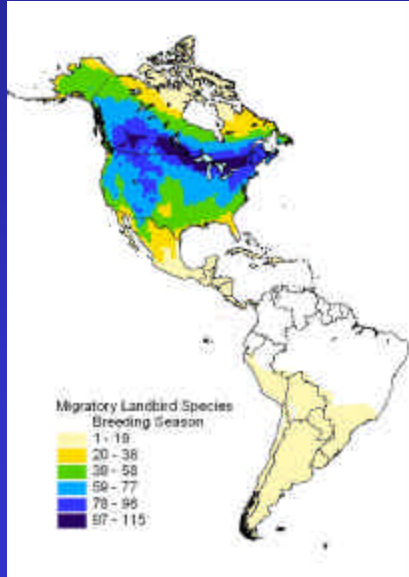
PIF Mission



- Keep common birds common
- Help species at risk
- Voluntary partnerships for birds, habitats and people



Highly Migratory



PIF Planning Approach

- Assess Vulnerability of all landbird species
- Identify species most in need of Conservation Attention
- Set Population Objectives
- Identify Needs and Recommend Actions for Species and Habitats
- Implementation - coordinated among partners, regions & countries



Regardless of scale, the PIF planning approach is the same:

[click] biological assessment of vulnerability

[click] using assessment to identify species in need of attention

[click] setting objectives for species in need of attention

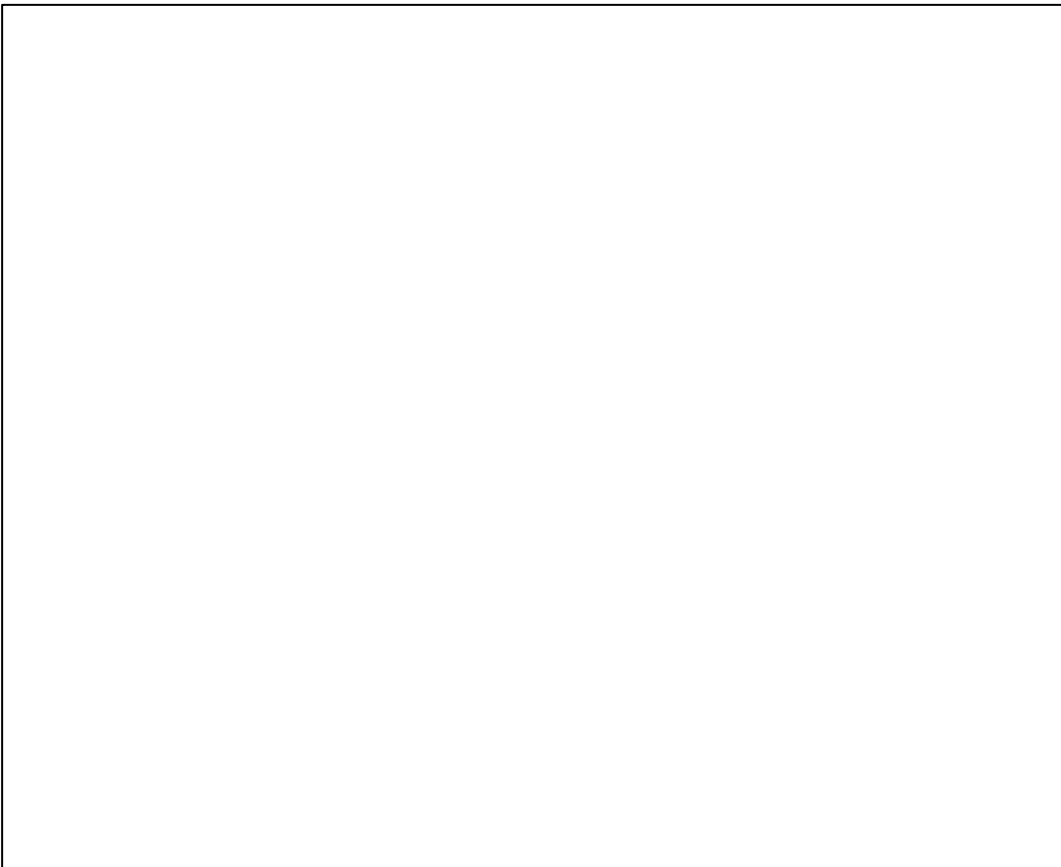
[click] identifying actions to meet objectives

[click] and working with partners to implement them

Partners In Flight 

*North American
Landbird Conservation Plan*

Terrell D. Rich • USFWS
Carol J. Beardmore • USFWS
Humberto Berlanga • CONABIO
Peter J. Blancher • BSC
Michael S. W. Bradstreet • BSC
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Arvind Panjabi • RMBO
David N. Pashley • ABC
Kenneth V. Rosenberg • Cornell
Christopher Rustay • PLJV
Steve Wendt • CWS
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Species conservation assessment: six measures of vulnerability (1-5)

- Population Size (PS)
- Breeding Distribution (BD)
- Non-breeding Distribution (ND)
- Threats Breeding (TB)
- Threats Non-breeding (TN)
- Population Trend (PT)



Combined Score = $PS + \max(BD, ND) + \max(TB, TN) + PT$

6 measures were used to assess vulnerability of each species, all on a scale of 1 – least vulnerable, to 5 – most vulnerable:

[click] estimated GLOBAL Population Size or PS

[click] size of GLOBAL Breeding Distribution and [click] Non-breeding Distribution

[click] perceived future Threats to the species on the Breeding Ground, and [click] during the Non-breeding season

[click] and range-wide Population Trend, measured over the past 30-35 years

[click] These scores were combined as shown here to assess overall vulnerability – Many other ways of combining scores are possible, but there has been no empirical testing of which combination has most predictive power

PIF Species of Continental Importance



PIF Watch List (100 species)

- High Vulnerability - Combination of small population, narrow distribution, high threats and declining trend

Species	PS	BD	ND	TB	TN	PT	Score
Bicknell's Thrush	5	5	5	3	5	3	18
Wood Thrush	2	2	4	3	4	4	14
Hermit Thrush	1	1	2	2	2	1	6

The PIF Plan identified 2 kinds of Species of Continental Importance

[click] first, a PIF Watch list for species showing high vulnerability / high assessment scores

[click] 3 closely-related thrushes illustrate the scoring:

Bicknell's Thrush exhibits high vulnerability according to all measures, and is place on the Watch List;

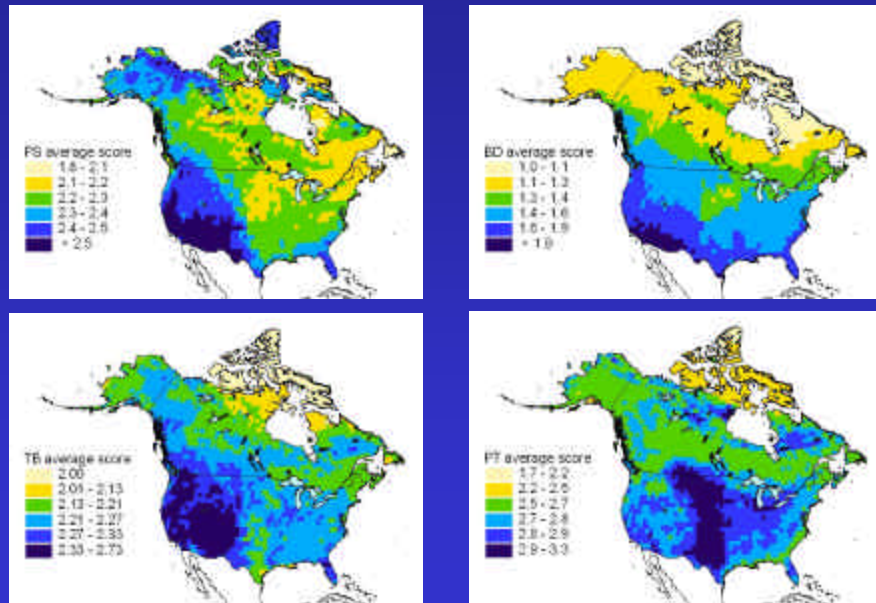
Wood Thrush is not particularly vulnerable based on population size (PS) or size of breeding range (BD), but just makes it onto the Watch List because of declining trend, high threats and small non-breeding range;

Hermit Thrush is not particularly vulnerable according to any of the criteria, and is not on the Watch List

Species	PS	BD	ND	TB	TN	PT	Combined Score
Moderately abundant or widespread with declines or high threats							
Swainson's Hawk	4	2	3	3	4	3	14
Greater Sage-Grouse	4	3	3	4	4	5	16
Blue Grouse	3	3	3	3	3	5	14
Short-eared Owl	3	1	1	3	4	5	13
White-throated Swift	4	2	3	2	2	5	14
Rufous Hummingbird	2	3	5	2	2	5	14
Red-headed Woodpecker	3	2	2	3	3	5	13
Olive-sided Flycatcher	3	1	2	3	4	5	14
Willow Flycatcher	3	1	4	3	2	4	14
Wood Thrush	2	2	4	3	4	4	14
Sprague's Pipit	3	4	3	4	4	5	16
Prairie Warbler	3	3	4	3	2	4	14
Bay-breasted Warbler	3	3	4	3	3	4	14
Cerulean Warbler	3	4	4	4	4	5	16
Prothonotary Warbler	3	3	4	3	4	4	15
Canada Warbler	3	2	3	3	4	4	14
Brewer's Sparrow	2	3	3	3	2	5	13
Baird's Sparrow	3	4	5	4	4	5	17
Harris's Sparrow	3	4	4	2	2	5	14
Dickcissel	2	2	4	3	4	4	14
Rusty Blackbird	3	1	2	2	3	5	13

and many species are on the Watch List primarily because of population declines

Breeding Season Vulnerability



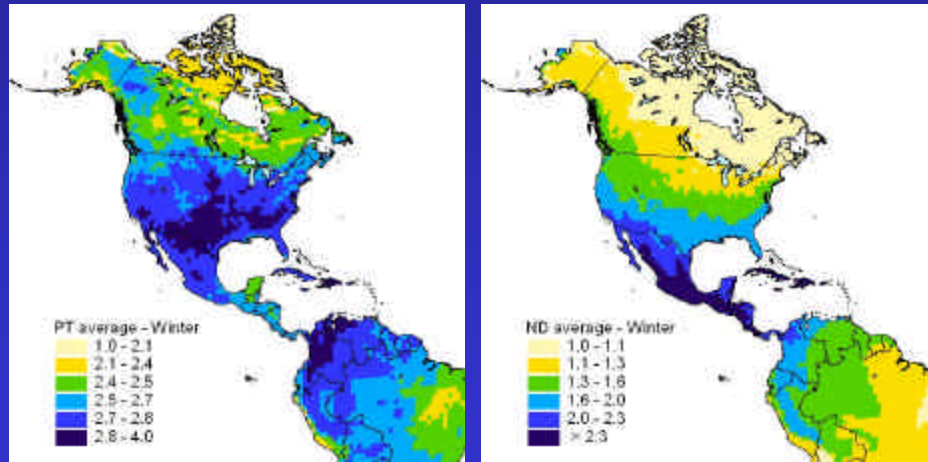
Smallest global population sizes for landbirds (highest PS scores) are mainly in the Southwest U.S.

[click] as are smallest range sizes (highest BD)

[click] and greatest breeding threats (TB)

[click] in contrast, population trends highlight the central grasslands as an area of concern

Vulnerability in winter



In winter, the distribution of vulnerability differs among vulnerability factors, with Threats estimated to be greatest in Central and South America and the West Indies,

[click] – smallest winter range sizes further north into Mexico,

[click] – whereas trend scores again highlight the United States (many short-distance migrants showing declines) as well as West Indies and northern South America

PIF Species of Continental Importance

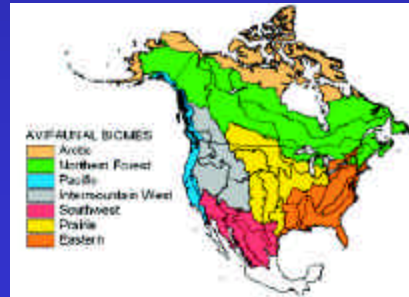


PIF Watch List (100 species)

- High Vulnerability - Combination of small population, narrow distribution, high threats and declining trend

Stewardship Species (95 additional species)

- High Responsibility - High % of global population within single biome
- 62 Watch List species are also on PIF Stewardship List

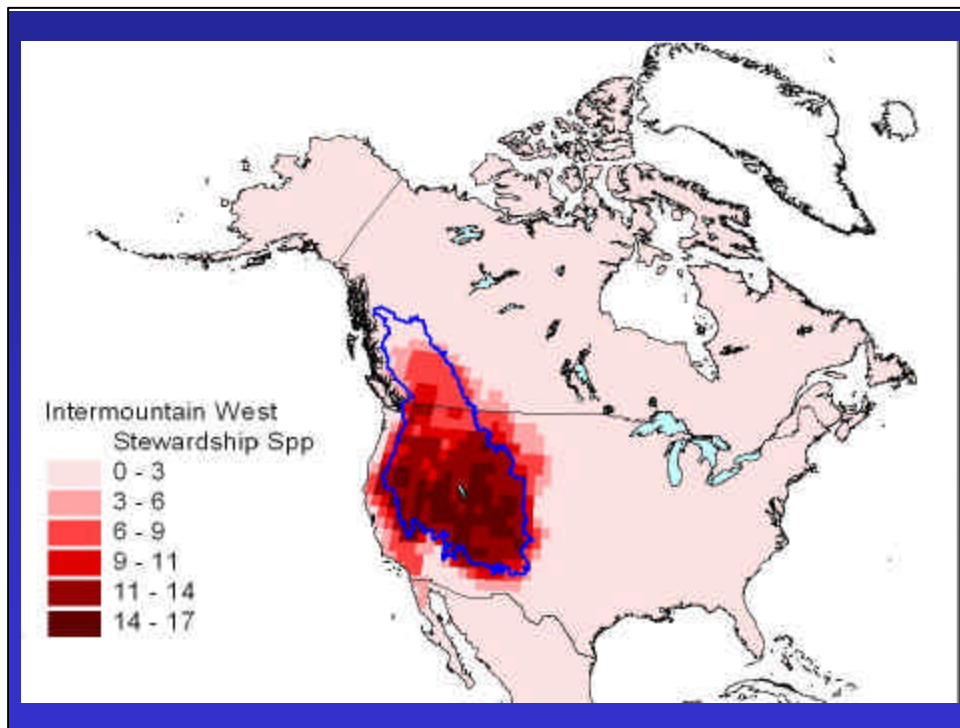


PIF has added a second type of Important Species to help keep common birds common,

[click] referred to as Stewardship Species. These are species that have a very high proportion of global population in a single North American biome, i.e. they are characteristic species of that biome, regardless of current population vulnerability

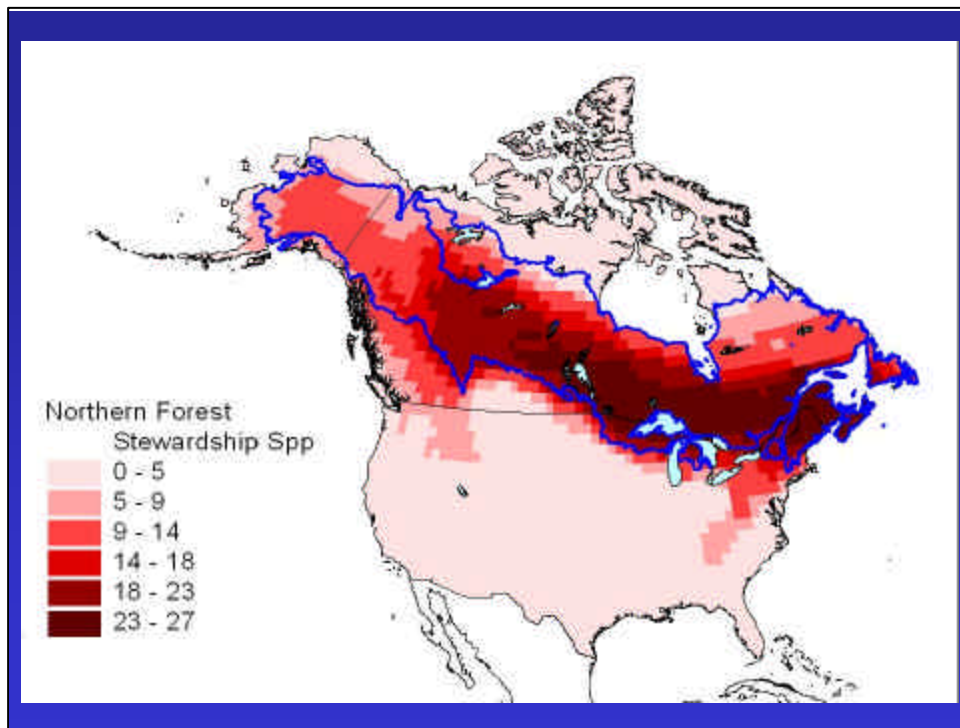
[click] Map shows 7 avifaunal biomes used by PIF to define Stewardship Species; biomes were combinations of BCRs with similar landbird species composition

The assumption is that by paying attention to the status and needs of these Stewardship Species, PIF will be more proactive in maintaining abundance and diversity of birds across the continent



Example 2: [can skip]

18 Stewardship Species with 75-100% of breeding population in the Intermountain West



Example 1:

30 species were classed as Stewardship Species in the Northern Forest biome, where each has an estimate 90-100% of breeding population.

Map shows an overlay of breeding range for these 30 characteristic species

Conservation Objectives

Overall: Reverse Population Declines of Priority Species

Based on Population Trend since late 1960s

PT Score	30-yr Pop'n Change	Objective
5	$\geq 50\%$ Decline	Double Pop'n
4	15 - 50% Decline	Increase by 50%
3	Uncertain Trend	Maintain/Increase
1 or 2	Stable or Increase	Maintain Pop'n

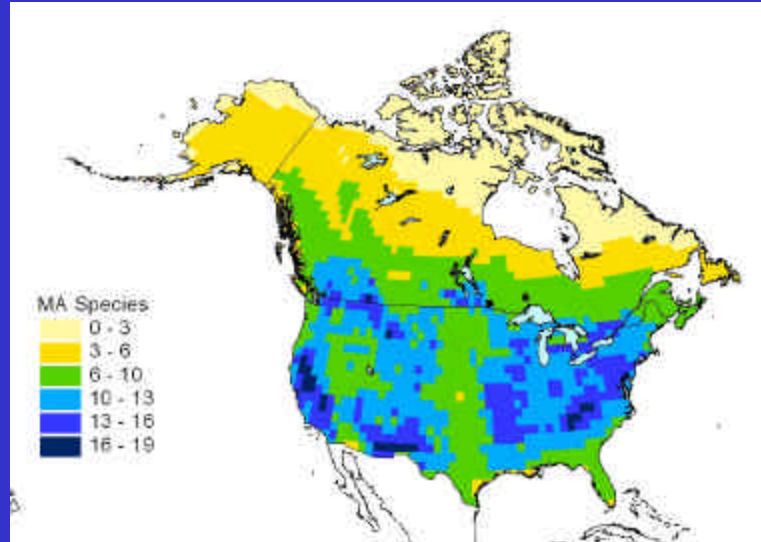
Setting of Continental objectives is in its infancy for landbirds.

[click] In this Plan, the overall objective was to reverse population declines of priority species seen in the last 30-35 years, and maintain populations of priority species that have not declined.

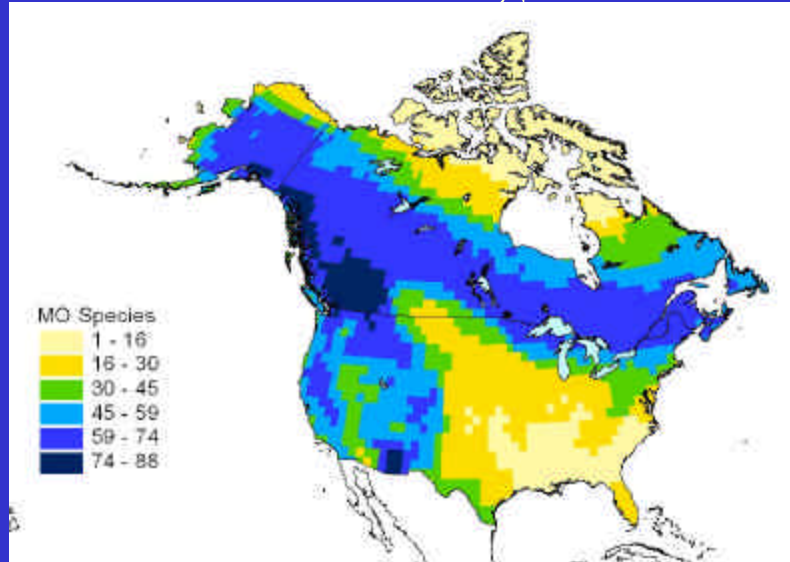
[click] This overall objective was translated into measurable objectives on the basis of declines observed in BBS or other range-wide surveys, as measured by the PT (population trend) score

These objectives are not dependent on estimates of actual population size

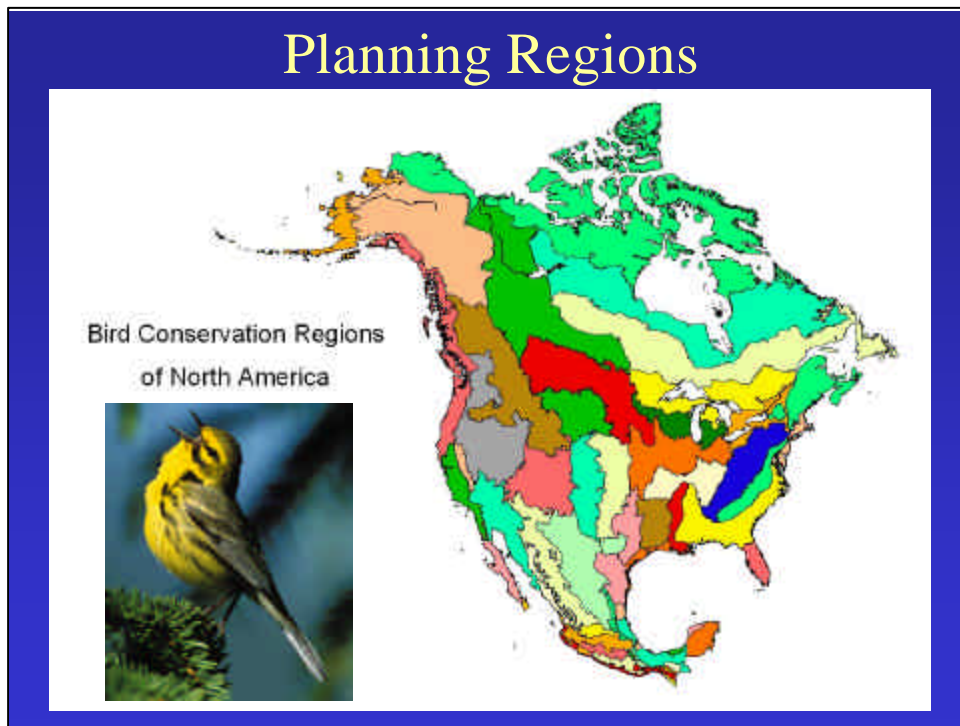
Species in need of Management to reverse declines



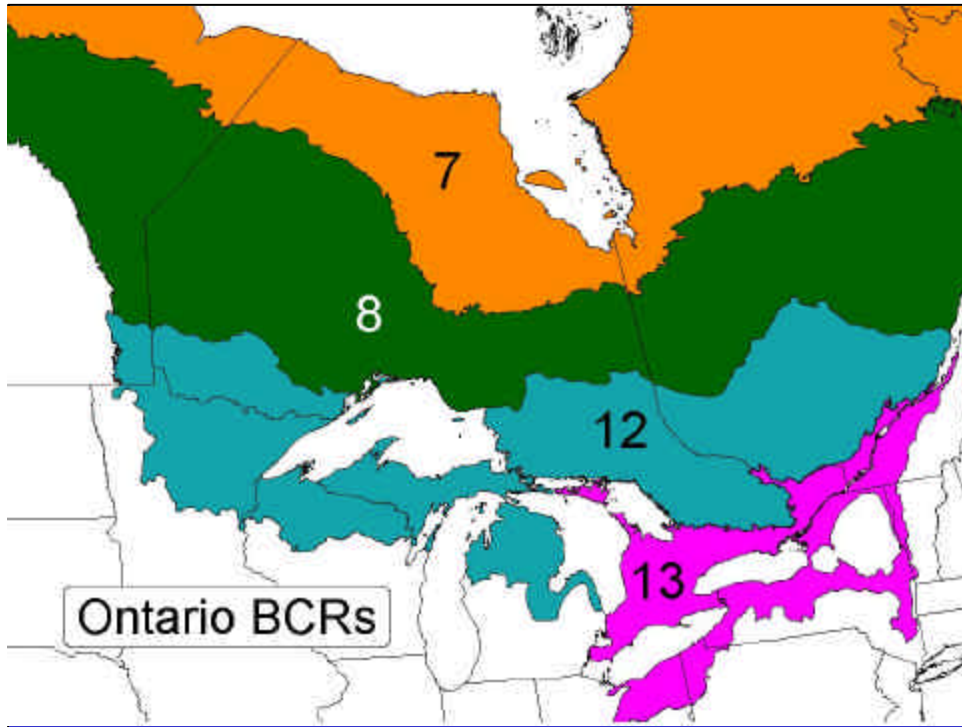
Species in need of Additional Monitoring



Planning Regions



Bird conservation planning in North America is now tending to take place at 2 scales, all of North America (Canada, U.S.A., Mexico) and by Bird Conservation Region (shown here) or slight variations of these regions.



PIF Priority Species & Habitats Regional Approach

- Continental Species Assessment
- Identify Priority Species & Species Suites in Region
- Set Population Objectives for Priority Species
- Set Habitat Goals for Priority Species
- Identify Approaches & Places to meet Goals