

LANDBIRD CONSERVATION OBJECTIVES FOR BCR 13 IN ONTARIO

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

Elements of the Overall Conservation Objective for BCR 13 Ontario:

- Reverse Declines of Priority Species in Forest, Shrubland & Wetland Habitats
- Stop Declines of Priority Species in Grassland Habitat
- Stop Decline of Grassland Guild Overall
- Recover Endangered and Threatened Species
- Maintain Distribution of Priority Species across the Region
- Ensure Sufficient Quality Habitat for Priority Species and Guilds
- Monitor Trends and Distribution of all Landbird Species, and their Habitats
- Research Reasons for Declines and Assess Success of Conservation Actions
- Establish Links to Wintering Grounds & Conservation Actions there
- Publish BCR 13 Plan setting Specific Objectives
- Evaluate Progress towards Objectives

Specific Population Objective Types:

Population Trend & Size Measures:

- BBS population trends of priority species (long-term (decades) success)
- annual BBS indices for Ontario BCR 13 (short-term (annual) progress)
- Population size targets (linked to BBS annual indices)
- Recovery Team measures for listed species

Guild Trends:

- BBS trends for guilds of bird species sharing habitat/habits (long-term success)
- annual BBS indices for guilds Ontario BCR 13 (short-term progress)

Population Distribution Objectives:

- Proportion of Breeding Bird Atlas squares with breeding evidence for priority species (in squares with similar effort - long-term success)
- Proportion of Atlas squares with breeding evidence in each subregion of BCR 13
- Number of Species per square, by guild and subregion
- Recovery Team measures for listed species

FOREST BIRDS HABITAT SUITE

Priority Landbird Species in BCR 13:

<u>Mature Closed Forest</u>	<u>Gaps and Openings</u>	<u>Swamp / Riparian / Ravine</u>
Red-shouldered Hawk	Black-billed Cuckoo	Acadian Flycatcher
Northern Saw-whet Owl	Long-eared Owl	Prothonotary Warbler
Acadian Flycatcher	Red-headed Woodpecker	Louisiana Waterthrush
Veery	Northern Flicker	Canada Warbler
Wood Thrush	Kirtland's Warbler	Rusty Blackbird
Bay-breasted Warbler	Hooded Warbler	
Cerulean Warbler	Rose-breasted Grosbeak	

Population Trend & Size Objectives:

- Meet recovery plan objectives for listed Species at Risk (Acadian Flycatcher, Kirtland's Warbler, Hooded Warbler, Prothonotary Warbler)
- Reverse declines of priority forest birds in bcr 13 portion of Ontario (BbCu, RhWo, NoFl)
- Maintain or increase populations of continental Watch List species (WoTh, CaWa)
- Maintain populations of other priority species with trend data (Veer, RbGr)
- Determine trends where lacking and relative density in Ontario ≥ 2 (LeOw, CerW, LoWa)

Evaluation Measures:

- 1967-2014 BBS trends for priority forest species stable or increasing (long-term success)
- Annual BBS indices at or above objective (table below), or increasing (short-term progress)
- Recovery Plan measures for listed species

Species	Trend Objective	BBS Index Objective	Pop'n Target
Black-billed Cuckoo	Reverse Decline	1.4	63,000
Red-headed Woodpecker	Reverse Decline	0.63	24,000
Northern Flicker	Reverse Decline	6.5	240,000
Wood Thrush	Maintain / Increase	2.4	150,000
Canada Warbler	Maintain / Increase	0.11	3,500
Veery	Maintain	3.3	180,000
Rose-breasted Grosbeak	Maintain	4.8	140,000
Long-eared Owl	Establish Trend		
Cerulean Warbler	Establish Trend		
Louisiana Waterthrush	Establish Trend		

Forest Guild Trend Objective:

- Maintain forest bird guild abundance overall, in bcr 13 portion of Ontario

Evaluation Measures:

- 1967-2014 BBS trend (stop data) for Ontario BCR 13 is stable or increasing (long-term)
- Annual BBS stop index at or above objective (short-term)

Guild	Trend Objective	BBS Index Objective
Forest Birds	Maintain	39.7 (1968-77 avg)

Distribution Objectives:

- Reverse losses of priority forest species in each subregion of BCR 13
- Maintain distribution of priority species that have not shown losses
- Maintain distribution of forest bird guild overall, in each subregion

Evaluation Measures:

- Proportion of atlas squares with breeding evidence in 3rd atlas \geq proportion in 1st atlas, for each priority species in each subregion (long-term success)
- Average number of forest bird species per atlas square in 3rd Atlas \geq average number in 1st atlas, in each subregion (long-term success)
- Priority species and forest bird richness maintained across bird survey sites (FBMP, BBS) in each subregion (short-term progress)

Species	Targets for % Atlas Squares with Breeding Evidence				
	BCR 13	SWest	Central	East	NWest
Northern Flicker	99.5%	100%	99.7%	99.5%	97%
Rose-breasted Grosbeak	96%	93%	99%	99%	90%
Wood Thrush	92%	94%	93%	96%	56%
Veery	89%	82%	91%	92%	100%
Black-billed Cuckoo	75%	71%	74%	85%	64%
Red-headed Woodpecker	71%	91%	76%	40%	59%
Canada Warbler	32%	22%	38%	28%	58%
Red-shouldered Hawk	22%	8%	26%	32%	32%
Northern Saw-whet Owl	22%	5%	17%	51%	24%
Long-eared Owl	16%	9%	13%	33%	5%
Cerulean Warbler	9%	11%	9%	6%	3%
Louisiana Waterthrush	4%	8%	3%	0.5%	
Bay-breasted Warbler	0.9%	0.4%	0.3%	0.5%	8%
Rusty Blackbird	0.8%		1%	1%	3%

- targets percents are from 1981-85 Atlas, squares with \geq 20 hours effort

Guild	Target number of species per Atlas square				
	BCR 13	SWest	Central	East	NWest
Forest Birds	28.1	24.1	28.9	30.2	35.2

- based on 1981-85 Atlas, squares with \geq 20 hours effort

GRASSLAND BIRDS HABITAT SUITE

Priority Landbird Species in BCR 13:

<u>Grassland Priority Species</u>		
Northern Bobwhite	Loggerhead Shrike	Henslow's Sparrow
Barn Owl	Vesper Sparrow	Bobolink
Short-eared Owl	Grasshopper Sparrow	Eastern Meadowlark

Population Trend & Size Objectives:

- Meet recovery plan objectives for listed Species at Risk (Northern Bobwhite, Barn Owl, Loggerhead Shrike, Henslow's Sparrow)
- Stop declines of priority grassland birds within 10 years (VeSp, GrSp, Bobo, EaMe)

Evaluation Measures:

- 2004-2014 BBS trends for priority grassland species stable or increasing (long-term success)
- Annual BBS indices and population size at or above 2001-02 level (short-term progress)
- Recovery Plan measures for listed species

Species	Trend Objective	BBS Index Objective	Pop'n Target
Vesper Sparrow	No Further Decline	2.4	100,000
Grasshopper Sparrow	No Further Decline	0.9	32,000
Bobolink	No Further Decline	27.9	1,100,000
Eastern Meadowlark	No Further Decline	14.3	130,000

Grassland Guild Trend Objective:

- Stop decline in grassland bird populations overall, in bcr 13 portion of Ontario

Evaluation Measures:

- 2004-2014 BBS trend (stop data) for grassland guild stable or increasing (long-term)
- Annual BBS stop index at or above 2001-02 level (short-term)

Guild	Trend Objective	BBS Index Objective
Grassland Birds	Stop Decline	45.2 (2001-02 avg)

Distribution Objectives:

- Stop loss of priority grassland species in each subregion of BCR 13
- Maintain distribution of grassland bird guild overall, in each subregion

Evaluation Measures:

- Proportion of atlas squares with breeding evidence in 3rd atlas \geq proportion in 2nd atlas, for each priority species in each subregion (long-term success)
- Average number of grassland bird species per atlas square in 3rd Atlas \geq average number in 2nd atlas, in each subregion (long-term success)
- Priority species and grassland bird richness maintained across bird survey sites (BBS) in each subregion (short-term progress)

Species	Targets for % Atlas Squares with Breeding Evidence				
	BCR 13	SWest	Central	East	NWest
Bobolink	93%	90%	95%	97%	83%
Eastern Meadowlark	92%	86%	95%	97%	80%
Vesper Sparrow	70%	75%	71%	64%	54%
Grasshopper Sparrow	38%	22%	48%	42%	27%
Short-eared Owl	5%		5%	12%	
- based on 2001-03 Atlas data, squares with \geq 20 hours effort					

Guild	Target number of species per Atlas square				
	BCR 13	SWest	Central	East	NWest
Grassland Birds	6.1	5.5	6.4	6.7	5.1
- based on 2001-03 Atlas data, squares with \geq 20 hours effort					

SHRUB / SUCCESSIONAL HABITAT SUITE***Priority Landbird Species in BCR 13:***

<u>Shrub / Successional Priority Birds</u>		
Willow Flycatcher	Blue-winged Warbler	Yellow-breasted Chat
Whip-poor-will	Golden-winged Warbler	Eastern Towhee
Brown Thrasher	Prairie Warbler	Field Sparrow
also in other guilds:	Black-billed Cuckoo	Vesper Sparrow

Population Trend & Size Objectives:

- Reverse declines of priority birds of shrub / successional habitats (Whip, BrTh, EaTo, FiSp)
- Maintain or increase populations of continental Watch List species (WiFl, BwWa, GwWa)

Evaluation Measures:

- 1967-2014 BBS trends for priority shrub / successional species stable or increasing (long-term success)
- for Blue-winged & Golden-winged Warblers, 2004-2014 BBS trends stable or increasing
- Annual BBS indices at or above objective, or increasing (short-term progress)

Species	Trend Objective	BBS Index Objective	Pop'n Target
Whip-poor-will	Reverse Decline	0.18	23,000
Brown Thrasher	Reverse Decline	5.8	200,000
Eastern Towhee	Reverse Decline	0.94	32,000
Field Sparrow	Reverse Decline	2.9	79,000
Willow Flycatcher	Maintain / Increase	0.85	25,000
Blue-winged Warbler	Maintain / Increase	0.07	2,100
Golden-winged Warbler	Maintain / Increase	0.14	5,200

Shrub / Successional Guild Trend Objective:

- Maintain shrub / successional bird populations overall, in bcr 13 portion of Ontario

Evaluation Measures:

- 1967-2014 BBS trend (stop data) for Ontario BCR 13 stable or increasing (long-term)
- Annual BBS stop index at or above objective (short-term)

Guild	Trend Objective	BBS Index Objective
Shrub / Successional	Maintain	76.5 (1968-77 avg)

Distribution Objectives:

- Reverse losses of priority shrub / successional species in each subregion of BCR 13
- Maintain distribution of priority species that have not shown losses
- Maintain distribution of shrub / successional bird guild overall, in each subregion

Evaluation Measures:

- Proportion of atlas squares with breeding evidence in 3rd atlas \geq proportion in 1st atlas, for each priority species in each subregion (long-term success)
- Average number of shrub / successional bird species per atlas square in 3rd Atlas \geq average number in 1st atlas, in each subregion (long-term success)
- Priority species and shrub / successional bird richness maintained across bird survey sites (FBMP, BBS) in each subregion (short-term progress)

Species	Targets for % Atlas Squares with Breeding Evidence				
	BCR 13	SWest	Central	East	NWest
Brown Thrasher	98%	99.6%	99.7%	99%	81%
Field Sparrow	84%	92%	86%	83%	34%
Willow Flycatcher	69%	90%	66%	62%	15%
Eastern Towhee	67%	78%	69%	61%	31%
Whip-poor-will	42%	19%	43%	60%	78%
Golden-winged Warbler	22%	22%	27%	12%	27%
Blue-winged Warbler	14%	30%	11%	2%	2%
Yellow-breasted Chat	5%	10%	4%	1%	
Prairie Warbler	1%	3%	1%	1%	

- based on 1981-85 Atlas, squares with \geq 20 hours effort

Guild	Target number of species per Atlas square				
	BCR 13	SWest	Central	East	NWest
Shrub / Successional	15.5	15.6	15.9	15.5	13.6

- based on 1981-85 Atlas, squares with \geq 20 hours effort

WETLAND BIRD HABITAT SUITE

Priority Landbird Species in BCR 13:

<u>Wetland Priority Birds</u>		
Marsh species:	Northern Harrier Short-eared Owl (see grassland guild) plus: post-breeding passerine roosts	Swamp Sparrow
Shoreline species:	Bald Eagle Baltimore Oriole plus: migrant concentration areas	Belted Kingfisher Bank Swallow

Population Trend & Size Objectives:

- Reverse declines of priority wetland birds (BeKi, BanS, BaOr)
- Maintain populations of other priority wetland species (NoHa, SwSp)

Evaluation Measures:

- 1967-2014 BBS trends for priority wetland species stable or increasing (long-term success)
- Annual BBS indices at or above objective, or increasing (short-term progress)

Species	Trend Objective	BBS Index Objective	Pop'n Target
Belted Kingfisher	Reverse Decline	0.90	30,000
Bank Swallow	Reverse Decline	21.8	650,000
Baltimore Oriole	Reverse Decline	9.8	260,000
Northern Harrier	Maintain	0.46	4,300
Swamp Sparrow	Maintain	1.2	54,000

Wetland Guild Trend Objective:

- Maintain wetland bird populations overall, in bcr 13 portion of Ontario

Evaluation Measures:

- 1967-2014 BBS trend (stop data) for Ontario BCR 13 ≥ 0 (long-term)
- Annual BBS stop index at or above objective (short-term)

Guild	Trend Objective	BBS Index Objective
Wetland Birds	Maintain	10.1 (1968-77 avg)

Distribution Objectives:

- Reverse losses of priority wetland species in each subregion of BCR 13
- Maintain distribution of priority species that have not shown losses
- Maintain distribution of wetland bird guild overall, in each subregion

Evaluation Measures:

- Proportion of atlas squares with breeding evidence in 3rd atlas \geq proportion in 1st atlas, for each priority species in each subregion (long-term success)
- Average number of wetland bird species per atlas square in 3rd Atlas \geq average number in 1st atlas, in each subregion (long-term success)
- Priority species and wetland bird richness maintained across bird survey sites (MBMP, BBS) in each subregion (short-term progress)

Species	Targets for % Atlas Squares with Breeding Evidence				
	BCR 13	SWest	Central	East	NWest
Baltimore Oriole	98%	100%	99.7%	99.5%	76%
Belted Kingfisher	97%	97%	98%	96%	88%
Bank Swallow	85%	90%	89%	80%	46%
Swamp Sparrow	83%	70%	85%	97%	78%
Northern Harrier	79%	64%	87%	92%	64%
Bald Eagle	1%	3%	1%		2%
- based on 1981-85 Atlas, squares with \geq 20 hours effort					

Guild	Target number of species per Atlas square				
	BCR 13	SWest	Central	East	NWest
Wetland Birds	14.8	12.5	14.7	16.9	18.2
Wetland Landbirds	3.4	3.0	3.5	3.7	3.4
- based on 1981-85 Atlas, squares with \geq 20 hours effort					

AERIAL INSECTIVORE FORAGING GUILD

Priority Landbird Species in BCR 13:

<u>Priority Species</u>	<u>Other Aerial Insectivores</u>	
Whip-poor-will	Common Nighthawk	Tree Swallow
Chimney Swift	Chuck-will's-widow	Cliff Swallow
Bank Swallow	Purple Martin	Barn Swallow
	Northern Rough-winged Swallow	

Population Trend & Size Objectives:

- Reverse declines of priority aerial insectivores (Whip, ChSw, BanS)

Evaluation Measures:

- 1967-2014 BBS trends for priority aerial insectivores stable or increasing (long-term success)
- Annual BBS indices at or above objective, or increasing (short-term progress)

Species	Trend Objective	BBS Index Objective	Pop'n Target
Whip-poor-will	Reverse Decline	0.18	23,000
Chimney Swift	Reverse Decline	1.8	57,000
Bank Swallow	Reverse Decline	21.8	650,000

Aerial Insectivore Guild Trend Objective:

- Maintain aerial insectivore populations overall, in bcr 13 portion of Ontario

Evaluation Measures:

- 1967-2014 BBS trend (stop data) for Ontario BCR 13 ≥ 0 (long-term)
- Annual BBS stop index at or above objective (short-term)

Guild	Trend Objective	BBS Index Objective
Aerial Insectivores	Maintain	24.1 (1968-77 avg)

Distribution Objectives:

- Reverse losses of priority aerial insectivores in each subregion of BCR 13
- Maintain distribution of aerial insectivore guild overall, in each subregion

Evaluation Measures:

- Proportion of atlas squares with breeding evidence in 3rd atlas \geq proportion in 1st atlas, for each priority species in each subregion (long-term success)
- Average number of aerial insectivore species per atlas square in 3rd Atlas \geq average number in 1st atlas, in each subregion (long-term success)
- Priority species and number of aerial insectivore species maintained across bird survey sites (MBMP, FBMP, BBS) in each subregion (short-term progress)

Species	Targets for % Atlas Squares with Breeding Evidence				
	BCR 13	SWest	Central	East	NWest
Bank Swallow	85%	90%	89%	80%	46%
Chimney Swift	75%	82%	75%	72%	53%
Whip-poor-will	42%	19%	43%	60%	78%
- based on 1981-85 Atlas, squares with \geq 20 hours effort					

Guild	Target number of species per Atlas square				
	BCR 13	SWest	Central	East	NWest
Aerial Insectivores	6.8	6.7	6.9	7.0	6.4
- based on 1981-85 Atlas, squares with \geq 20 hours effort					