THE 2003 AND 2004 NORTH AMERICAN BREEDING BIRD CENSUS WITH ADDITIONS FOR 2001 AND 2002

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Abstract. The Breeding Bird Census (BBC) is the longest, continuously-run bird monitoring program in North America. Here we publish BBC reports for 2003 and 2004, with an additional nine reports from 2001 and 2002 that were not included in the previous publication (Gardali and Lowe 2006) due to late submission. Breeding Bird Censuses were conducted at 21 sites in 2003 and 24 in 2004; for the two years, breeding birds were assessed at 31 different sites, with a few sites in 2004 not visited in 2003 and *vice versa*.

EL CONTEO DE AVES REPRODUCTORAS (BBC) DE NORTEAMÉRICA DE 2003 Y 2004 *Resumen.* El Conteo de Aves Reproductoras (BBC) es el programa de monitoreo más longevo de Norteamérica. Aquí presentamos informes del BBC para 2003 y 2004, con nueve informes adicionales de 2001 y 2002 que no se incluyeron en la publicación anterior (Gardali y Lowe 2006). Los conteos de BBC fueron realizados en 21 sitios en 2003 y 24 sitios en 2004; para ambos años, se contaron las aves reproductoras en 31 sitios, con varios sitios de 2004 no visitados en 2003 y *vice versa*.

INTRODUCTION

The Breeding Bird Census (BBC) is the breeding season component of the Resident Bird Counts (RBC), which also include the Winter Bird Population Study. The BBC uses the spot- or territory-mapping method to estimate densities of breeding birds. More information on methods, history, and uses of BBC data can be found in Lowe (2006).

A total of 45 BBC reports were submitted for 2003 and 2004, down considerably from 2001 and 2002 (68 reports). This downward trend is

likely an artifact of the cessation in publication (or even promise of publication) from 1996 to 2000 – in the past, publication motivated data collection. Thus, when publication stopped, many fewer reports were submitted, with lagged effects perhaps apparent here. It will be interesting to see if the number of reports increases in the near future, responding to the renewed BBC publication in 2006 (Gardali and Lowe 2006).

Nine reports from 2001 and 2002 are also included herein as they were received too late

for publication in Bird Populations 7.

Please contact Tom Gardali (tgardali@prbo.org) for BBC instructions and data forms.

UNDERSTANDING THE REPORTS

Here we provide the skeleton of a BBC report with data descriptions inserted where the meat of each report typically goes.

1. DESCRIPTIVE TITLE OF THE AREA DESCRIPTIVE TITLE IN SPANISH

Author(s)

Author(s) Address(es)

Site Number: A unique ID number assigned for some older plots. Location: State or Province; County; nearest town; latitude and longitude; USGS topographic map or other map name. Continuity: Year established; Total number of years census has been done. Size: Plot size in hectares. Description of Plot: Common names of dominate plant species, topography, elevation, edge, and other features noted as necessary (e.g., buildings, bodies of water, rock outcrops, roads). Established plots will provide the original report citation as well as citations for published updates. Weather: Mean temperature in Celsius at the start of visits (temperature range in Celsius) and other comments, as appropriate, such as deviations from long-term averages and amount of precipitation. Coverage: Total hours spent; number of visits to plot (time of day); dates of visits; maximum number of observers/visit (if more than 2). Census: Species common name, Number of territories rounded to nearest half territory (Number of territories per 40 hectares (for species with at least 3.0 territories); number of nests (N) or fledglings (FL) observed, if applicable). A "+" after a species name indicates that less than one-quarter of the species' territory occurred on the plot. Species are listed in descending order (ties are listed in taxonomic order). Total: Total number of species; Total number of territories (Total number of territories / 40 hectares). Visitors: Observed species that potentially could nest on plot but which were

not counted (listed in taxonomic order). Remarks: Comments on factors that may have affected populations on the study plot thus to explain differences from other years in the species' abundances and composition (e.g., predators, parasitism, disturbance, habitat change, large population fluctuations from previous years). Other Observers: Full names. Acknowledgements: If applicable.

BREEDING BIRD CENSUS RESULTS

2001 AND 2002

Here, for years 2001 and 2002, we add an additional nine reports, which were submitted too late for inclusion in volume 7 of *Bird Populations* (Tables 1, 2). These nine reports are all from Ontario, Canada and they raise the total reports for 2001 and 2002 to 38 and 30, respectively. The addition of these nine reports brings the total for Ontario to 13, which is second only to California (15 reports) for years 2001 and 2002.

2003 AND 2004

A total of 45 Breeding Bird Census reports are included, 21 in 2003 and 24 in 2004 (Tables 3, 4). The counts come from 8 U.S. states, 2 Canadian provinces, and the District of Columbia. Connecticut, California, and Ontario each had the most counts with 10; 5 in 2003 and 5 in 2004 in Connecticut, 3 in 2003 and 7 in 2004 in California, and 6 in 2003 and 4 in 2004 in Ontario. Included here are a total of 6 plots being published for the first time; 1 in 2003 (report # 13) and 5 in 2004 (report #s 15, 16, 17, 18, 23).

LITERATURE CITED

Gardali, T., and J. D. Lowe. 2006. Reviving resident bird counts: the 2001 and 2002 Breeding Bird Census. Bird Populations 7:90-95.

Lowe, J. D. 2006. An annotated bibliography of Breeding Bird Census publications. Bird Populations 7:128-135.

TABLE 1. Summary of Breeding Bird Census reports from 2001 for sites not included in Gardali and Lowe (2006).

Habitat	State/ Prov.	Author(s)	Plot Size (ha)	Terr. per 40 ha	Num.	Hrs. Obs.	Yrs. Study
Broadleaf Forests							_
35. Dry Cottonwood Sand Dune	ON	V. Brown	10.0	54	6	16.2	6
36. Red Ash-Red Oak Savannah	ON	J. Fischer	10.3	381	22	32.7	4
37. Red Oak–Ironwood Savannah	ON	S. Bublitz	12.2	435	27	39.5	6
Needleleaf Forests							
38. Tamarack Slough	ON	M. J. Hindle	8.8	480	32	19.5	8

 $TABLE\ 2.\ Summary\ of\ Breeding\ Bird\ Census\ reports\ from\ 2002\ for\ sites\ not\ included\ in\ Gardali\ and\ Lowe\ (2006).$

Habitat	State/ Prov.	Author(s)	Plot Size (ha)	Terr. per 40 ha	Num. spp.	Hrs. Obs.	Yrs. Study
Broadleaf Forests 26. Red Oak–White Birch Savannah	ON	M. Hindle	10.0	330	27	14.0	5
Needleleaf Forests 27. White Pine–White Cedar Savannah	ON	M. Hindle	9.3	303	25	14.5	7
Broadleaf/Needleleaf Forests 28. Red Oak–White Pine Savannah	ON	R. Fuentes	11.0	285	22	18.2	3
Non-forested Wetlands 29. Sedge–Rush Swale I 30. Sedge–Rush Swale II	ON ON	R. Fuentes R. Fuentes	9.3 9.3	41 41	4 5	10.5 9.0	5 3

TABLE 3. Summary of Breeding Bird Census reports from 2003.

Habitat	State/ Prov.	Author(s)	Plot Size (ha)	Terr. per 40 ha	Num.	Hrs. Obs.	Yrs. Study
Broadleaf Forests					11		
Mixed Hardwood Poletimber	CT	D. Rosgen	8.5	574	50	22.0	37
2. Second-Growth Hardwood Forest	CT	D. Rosgen	10.1	394	41	18.5	37
3. Mixed Upland Broadleaf Forest	DC	M.E. D'Imperio	14.2	358	29	50.0	45
4. Mature Broadleaf Forest	OH	C.W. Saunders et al.	16.0	220	26	21.4	9
5. White Oak Savannah	ON	M.F.G. Clark	10.4	238	17	13.9	9
6. Oak-Maple-Poplar Hollow	PA	L. Ingram	11.3	96	12	18.2	11
7. Virgin Hardwood Swamp Forest	SC	M. Dawson	8.9	474	19	15.8	13
8. Mature Maple-Beech-Birch Forest	TN	H. Wilson, L.M. Lewis		182	7	16.7	11
Needleleaf Forests	111	11. VVIISOH, E.IVI. ECVVI	3 10.2	102	,	10.7	11
9. White Pine-White Cedar Savannah	ON	M. Timpf	9.3	353	26	40.3	8
Broadleaf/Needleleaf Forests							
10. Climax Hemlock-White Pine Forest							
with Transition Hardwoods	CT	D. Rosgen	10.5	520	40	22.5	37
11. Young Mixed Hardwood-Conifer Stand	l CT	D. Rosgen	8.5	442	43	13.5	26
12. Riparian Woodland	ID	S.R. Robinson	8.9	209	23	13.3	7
13. Hemlock-Mixed Broadleaf							
Riparian Forest	NY	L. Bowdery et al.	12.1	149	18	23.0	3
14. Intergrading Dune-Swale Savannah	ON	M.A. Kurcz	11.0	171	16	25.8	7
Mixed Habitats							
15. Field, Ridge, Shrubby Trees, and Woods	ON	M.F.G. Clark	5.8	814	15	12.7	10
16. Sedge-Tamarack Dune Pond	ON	M. Timpf	10.0	270	17	28.8	4
Non-forested Wetlands		_					
17. Shrubby Swamp and Sedge Hummocks	s CT	D. Rosgen	8.1	993	48	25.5	37
Shrublands							
18. Coastal Scrub	CA	P. Abbaspour, E. Porz	ig 8.1	301	27	268.7	29
19. Disturbed Coastal Scrub A	CA	A. Shults, E. Porzig	4.7	357	29	164.6	29
20. Disturbed Coastal Scrub B	CA	G. Jayabose, E. Porzig	g 8.1	351	25	401.5	29
Grasslands							
21. Bluegrass-Milkweed Grassland	ON	M.A. Kurcz	10.5	162	16	28.0	5

TABLE 4. Summary of Breeding Bird Census reports from 2004.

Habitat	State/ Prov.	Author(s)	Plot Size (ha)	Terr. per 40 ha	Num. spp.	Hrs. Obs.	Yrs. Study
Broadleaf Forests							
1. Mixed Hardwood Poletimber	CT	D. Rosgen	8.5	649	47	19.5	38
2. Second-Growth Hardwood Forest	CT	D. Rosgen	10.1	307	42	17.5	38
3. Mixed Upland Broadleaf Forest	DC	M.E. D'Imperio	14.2	265	26	32.0	46
4. Mature Broadleaf Forest	OH	C.W. Saunders et al.	16.0	236	29	25.2	10
5. Red Oak-Sugar Maple Forest	ON	C. Friis	11.0	689	39	38.2	7
6. Red Oak-Sugar Maple Savannah	ON	C. Friis	10.5	667	32	44.8	5
7. Oak-Maple-Poplar Hollow	PA	L. Ingram	11.3	85	11	16.5	12
8. Hardwood Swamp Forest	SC	M.R. Dawson	8.1	440	17	14.7	13
9. Mature Maple-Beech-Birch Forest	TN	D.F. Vogt, L.M. Lewis	s 10.2	225	9	19.8	12
Broadleaf/Needleleaf Forests 10. Climax Hemlock-White Pine Forest							
with Transition Hardwoods	CT	D. Rosgen	10.5	470	43	24.5	38
11. Young Mixed Hardwood-Conifer Star	nd CT	D. Rosgen	8.5	334	40	13.5	27
12. Riparian Woodland	ID	S.R. Robinson	8.9	189	19	11.5	8
13. Dry Cottonwood-Juniper Savannah	ON	J. Ethelberg	10.5	135	15	34.0	4
14. Intergrading Dune-Swale Savannah	ON	J. Ethelberg	11.0	131	12	34.8	8
Mixed Habitats							
15. Riparian Scrub Basin	CA	M. Aimar	12.7	288	27	23.2	New
16. Streamside Riparian Woodland I	CA	T. Reeser	16.4	557	28	36.8	New
17. Streamside Riparian Woodland II	CA	B. Nash	10.3	406	30	13.4	New
18. Streamside Riparian Woodland III	CA	T. Barbee, A. Beckma	n 13.0	415	35	21.5	New
Non-forested Wetlands							
19. Shrubby Swamp and Sedge Hummoc	ks CT	D. Rosgen	8.1	1064	43	24.5	38
Shrublands							
20. Coastal Scrub	CA	G. Epke, E. Porzig	8.1	254	25	170.5	30
21. Disturbed Coastal Scrub A	CA	E. Kramer-Wilt, E. Por	zig 4.7	277	31	136.1	30
22. Disturbed Coastal Scrub B	CA	L. Kaplan, E. Porzig	8.1	267	23	204.2	30
23. Red Osier Dogwood Shrubland	BC	R. Mader	10.0	452	21	12.2	New
Successional Fields							
24. Abandoned Upland Pasture II	NY	L. Bowdery et al.	30.0	263	52	33.0	3