

Aussi disponible en français

No. 102, October 1979

**Annual report to banders: Summary of birds banded in Canada in 1977**

by R.M. Poulin,<sup>1</sup> K.L. Newell,<sup>2</sup> S.J. O'Donnell,<sup>2</sup> and S. Wendt<sup>2</sup>

**Introduction**

This is the first annual report on bird banding in Canada. It records the number of individuals of different species banded in each province and territory in 1977, the latest year for which complete records are available. We hope to encourage banders to use those data to publish the results of their programs and to co-ordinate their efforts and results for greater use of the North American Bird Banding files. The information included in this report may be used to pinpoint species and areas that are inadequately represented in, or missing from, recent banding activities.

**Methods**

Banding records were selected from the North American Bird Banding files for the calendar year 1977. In addition, we obtained banders' year-end reports, referred to as "notes for file", from the Canadian Bird Banding Office. We sent a questionnaire to all banders to verify totals they reported in the notes for file and those produced by the computer files for 1977. The tables presented here were prepared from the computer files with corrections made on the basis of responses to the questionnaires. We prefer to use the computer files to list and format the data for the tables to avoid transcription and addition errors, but the computer files are incomplete because of delayed banding reports. As a result, we must add in records by hand. In future, we hope to produce the annual banding report, which runs two years behind the present, solely from the computerized banding files.

For this report, we adopted the name designated by the American Ornithologists' Union (AOU) wherever species names and numbers used in the North American Bird Banding Manual differ from those published in the AOU Checklist and its supplements. Nevertheless, we have used the subspecies names Myrtle Warbler, Baltimore Oriole, Ipswich Sparrow, Slate-coloured Junco and Oregon Junco because the banding data are reliable to this level. Although Willow and Alder Flycatchers are now treated as separate species by the AOU, we could not objectively allocate the bandings of Traill's Flycatcher to those two species, so we have retained the three names according to the banders' identifications. Appendix I shows where conflicts arose in the use of species names and how we dealt with them.

**Results**

Compared with earlier years, 1977 produced the greatest number of banding records and banding permits issued (Table 1). In 1977, 148 master permit holders banded an

**Table 1**  
Yearly totals of bird banding permits issued and birds banded in Canada, 1965-77

Year	Number of			
	Master permits*	Sub-permits	Birds banded	Colour permits
1965	234	75	163 643	—
1966	199	113	167 667	—
1967	214	139	173 080	—
1968	218	191	131 650	—
1969	211	162	166 812	19
1970	206	221	204 776	42
1971	205	261	160 571	68
1972	210	219	152 094	65
1973	194	299	121 756	52
1974	187	311	155 315	54
1975	209	377	172 125	123
1976	207	422	206 493	136
1977	228	527	238 264	165

\*Includes inactive as well as active banders; the yearly totals represent all permits issued.

average of 1610 birds each for a total of 238 264 birds banded in Canada (Table 2). They banded 301 species, an average of 792 individuals per species.

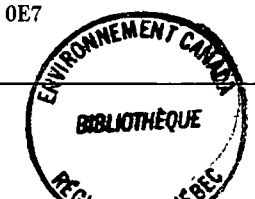
Of the total number of birds banded, 54% (128 239) were waterfowl (Anatidae); 31% (74 302), passerines; 11.4% (27 212) shorebirds and colonial waterbirds, excluding Anatidae; and 3.4% (8120) raptors. The four most frequently banded species were waterfowl: Mallard, Snow Goose, Blue-winged Teal and Canada Goose (Table 3). The species rankings are listed by province and territory in Table 4.

As the 1977 Anatidae records are to be included in a forthcoming report on the historical bandings of waterfowl in Canada (Newell and Cooch, in prep.) and because much of this banding is done by federal and provincial agencies, we have chosen to emphasize the accomplishments of those banders with non-waterfowl records. With this rearrangement of species and totals to exclude Anatidae, we find that 110 025 birds of 269 species were banded. Table 5 provides a modified ranking of the top three species in each province and territory.

The Prince Edward Point Bird Observatory (PEPBO) banded the greatest number of species: 15 311 birds of 154 species. Long Point Bird Observatory (LPBO) was second with 12 983 bandings of 139 species, and the University of Guelph banding program, headed by A. Salvadori, was third in total numbers (10 945 bandings) but exceeded LPBO in total species with 143. R.I.G. Morrison reported bandings of 12 720 birds of 86 species and the Hawk Cliff Raptor Banding Station banded 4374 birds of 18 species. Other

SK  
471  
C3371  
No. 102

<sup>1</sup>National Museum of Natural Sciences, Ottawa, Canada K1A 0M8  
<sup>2</sup>Canadian Wildlife Service, Ottawa, Canada K1A 0E7



**Table 2**  
Numbers of bird banders in Canada and their records for 1977

Province	No. active banders*	% total banders†	No. birds banded	% total birds	No. species banded	Av. no. birds/bander	Av. no. birds banded/species
Newfoundland	2	1.4	1 515	0.6	20	758	75
Prince Edward Island	3	2.0	1 491	0.6	13	497	115
Nova Scotia	7	4.7	5 905	2.5	94	844	63
New Brunswick	6	4.1	6 530	2.7	98	1 088	67
Quebec	20	13.5	6 178	2.6	100	309	62
Ontario	68	45.9	91 461	38.4	223	1 345	410
Manitoba	10	6.8	30 360	12.7	85	3 036	357
Saskatchewan	16	10.8	23 054	9.7	72	1 441	320
Alberta	20	13.5	30 745	12.9	138	1 537	223
British Columbia	6	4.1	5 649	2.4	32	942	177
Northwest Territories	10	6.8	34 301	14.4	48	3 430	715
Yukon Territory	3	2.0	1 075	0.5	22	358	49
Total‡	148	—	238 264	100%	301	1 610	792

\*The total here is actually 171 instead of 148. This is due to individual banders banding in more than one province—in one case in eight provinces.

†This column does not total 100% because of the problem of banders banding in more than one province.

‡Figures from Table 3, number of banders is a tally of total active permits in 1977.

sizeable records are R.M. Poulin, 2776 bandings of 99 species; J.C. Finlay, 2752 bandings of 14 species; S. Houston, 2528 bandings of 41 species; and C. Griffith, 2506 bandings of 81 species.

Noteworthy bandings of individual species are 9659 Semipalmated Sandpipers banded by R.I.G. Morrison at James Bay; 2460 Sharp-shinned Hawks by Marshall Field of the Hawk Cliff Raptor Banding Station, and 1428 Tree Swallows by J.C. Finlay in Alberta.

When we exclude waterfowl from the ranking of the 1977 bandings, the ten species banded in the highest numbers in Canada are Semipalmated Sandpiper, 11 323 bandings; Tree Swallow, 5058; Sharp-shinned Hawk, 3286; American Goldfinch, 2972; White-throated Sparrow, 2947; Ring-billed Gull, 2926; House Sparrow, 2888; Red-winged Blackbird, 2830; Common Starling, 2773; and Evening Grosbeak, 2127.

The top five species for which the most banders contributed records are: White-throated Sparrow and American Robin, 36 banders; Black-capped Chickadee, 32 banders; Slate-coloured Junco, 30 banders; Myrtle Warbler, 28 banders; and Blue Jay, 27 banders (Table 6).

Over 45% of the banders and 38% of the bandings in 1977 occurred in Ontario (Table 6). As well, 223 of the 301 total species were banded in this province. The Northwest Territories, Alberta and Manitoba were also areas with sizeable banding totals in 1977. From the distribution of banding locations plotted in Figure 1, the area covered by recent banding programs is shown. Although most of the 1977 records resulted from programs in Ontario, many more

banding locations were represented in Alberta. Sparse coverage of areas such as Newfoundland, British Columbia and northern Ontario suggest areas for further work.

#### Discussion

We cannot discuss trends or compare banding totals as this is the first annual bird banding report in Canada. A summary of banding activities has been published in the *North American Bird Bander* (NABB) in recent years for western North America. Making adjustments to avoid overlap of western Canadian banding records, we find that the 1977 NABB report includes 128 731 records from 152 American banders. This represents an average of 847 birds per bander. Looking at western Canada — Alberta, British Columbia and Yukon — in this report, the equivalent totals seem impressive in terms of accomplishment: 29 banders contributed 37 469 banding records in 1977, an average of 1292 birds per bander.

There are some patterns in the distribution of banding in Canada, such as the almost total lack of passerine banding in British Columbia. Banding there, as well as in Newfoundland and the Territories, is largely restricted to selected species with only a very few active banders. The scarcity of records in these areas is probably as much due to the number of banders (Table 6) as to the species available to be banded in each province. The tabulations provided here may be used to show similar gaps and areas requiring additional coverage in future banding programs.

By identifying individuals with similar banding interests, banders from across the country can exchange data and co-

operate in their efforts. Pooling data from other stations creates a broader data base on which to formulate conclusions. Although we have not listed individual banders' totals, details may be obtained from the Canadian Wildlife Service Banding Office in Ottawa.

There is a lag in the preparation of this summary because of the time involved in obtaining completed and corrected banding reports from all active banders. It is also more accurate to prepare the tables from a computer file, which also imposes a delay. Prompt submission of banding schedules would reduce the delay. We hope that this report will encourage banders to co-operate among themselves, will point out species and areas lacking coverage and will demonstrate the wealth of data and expertise that is available in Canada. With your contributions, comments and continued support, we hope that this summary will prove to be increasingly useful and instructive.

#### Acknowledgements

We thank all Canadian bird banders for their co-operation in providing their 1977 records and their assistance in checking the results. K. Klimkiewicz and J. Stevens of the USFWS Bird Banding Laboratory provided computer files.

#### Appendix I

Species names used in Tables 3 and 6 where latest AOU changes are different from those currently used in the *North American Bird Banding Manual*

According to the Banding Manual	According to latest AOU changes	Name used in this publication
Snow Goose — white phase	Snow Goose	Snow Goose — white phase
Snow Goose — blue phase		Snow Goose — blue phase
Shoveler	Northern Shoveler	Northern Shoveler
Red-tailed Hawk	Red-tailed Hawk	Red-tailed Hawk
Harlan's Hawk*		
Upland plover	Upland Sandpiper	Upland Sandpiper
Knot	American Knot	American Knot
Dipper	American Dipper	American Dipper
Catbird	Gray Catbird	Gray Catbird
Myrtle Warbler	Yellow-rumped Warbler	Myrtle Warbler
Aubudon's Warbler*		
Baltimore Oriole	Northern Oriole	Baltimore Oriole
Bullock's Oriole*		
Ipswich Sparrow	subspecies of Savannah Sparrow	Ipswich Sparrow
Slate-coloured Junco	Dark-eyed Junco	Slate-coloured Junco
Oregon Junco		Oregon Junco
Traill's Flycatcher		Traill's Flycatcher
Alder (song type "fee-bee-o")	Alder Flycatcher	Alder Flycatcher
Willow (song type "fitz-bew")	Willow Flycatcher	Willow Flycatcher

\*Not banded in Canada in 1977.

J.P. Curran, Surveys and Mapping Branch, Department of Energy, Mines and Resources, prepared the map; M. Gratton of the Computing and Applied Statistics Directorate, Department of Environment, wrote the computer programs for the tables; and R. Tait and W. Mortimer checked the figures. E. Scriver and A. Demers provided the 1977 notes for file and M. Fisher typed the tables. H. Boyd and H. Ouellet reviewed the report and made many helpful suggestions.

#### References

- American Ornithologists' Union. 1957. Checklist of North American birds. 5th ed. Baltimore, Maryland. 691 pp.
- American Ornithologists' Union. 1973. 32nd supplement to the Checklist of North American birds. *Auk* 90:411-419.
- American Ornithologists' Union. 1976. 33rd supplement to the Checklist of North American birds. *Auk* 93:875-896.
- Newell, K.L.; Cooch, F.G. In prep. Historical summary of waterfowl bandings in Canada to September 1978. CWS Progress Note.
- Swisher, O.D. 1978. An analysis of bird banding reports for 1977 within the area of the Western Bird Banding Association. *North Amer. Bird Bander* 3(2):76-88.

**Table 3**  
Number of birds banded in Canada in 1977 listed by species and province

Species*	No. banders	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yuk.	Total
Red-necked Grebe	1						1							1
Horned Grebe	1						1							1
Eared Grebe	1									1				1
Western Grebe	2							436	1					437
Pied-billed Grebe	3				5		1				1			7
Northern Fulmar	1											139		139
Manx Shearwater	1	167												167
Leach's Storm-Petrel	4	528		23	40									591
Wilson's Storm-Petrel	1				1									1
White Pelican	2						200		149					349
Northern Gannet	1	118												118
Great Cormorant	1		197											197
Double-crested Cormorant	5				50		50		34	547				681
Great Blue Heron	2			53		1								54
Green Heron	2						6							6
Cattle Egret	1						2							2
Black-crowned Night Heron	2						151							151
Least Bittern	1						1							1
American Bittern	2						3							3
Whistling Swan	2						2						24	26
Trumpeter Swan	1									50		5		55
Canada Goose	22			60	7	135	3016	2385	1929	2392	740	2454		13118
Brant	2											326		326
White-fronted Goose	2								631			1267		1898
<i>Snow Goose (white phase)</i>							475	2269	14			19099		21857
<i>Snow Goose (blue phase)</i>	4						1649	1070				7034		9753
Ross' Goose	2								87			51		138
<i>Snow x Ross' Goose Hybrid</i>	2								1			23		24
Mallard	48		13	25	26	922	7290	11079	10805	6560	421	1187	49	38377
<i>Mallard x Black Duck Hybrid</i>	18		3	4	1	35	51	4	3	4	1	1		107
Black Duck	36		1101	2166	661	1220	1968	49	12	1				7178
Gadwall	19		1		13	31	97	44	211	74				471
Common Pintail	31		28	36	63	62	365	313	1733	4005	135	1497	380	8617
American Green-winged Teal	33		18	203	115	247	332	702	807	2139	2	160	63	4788
Blue-winged Teal	32		92	113	647	47	2266	7129	3085	3174	1	23	4	16581
Cinnamon Teal	1										1			1
American Wigeon	23		15	103	95	1	8	85	69	254	51	2	61	744
Northern Shoveler	15		3	11	72	5	2	55	50	8		1	7	214
Wood Duck	27		2	389	152	31	1069	111	1		282			2037
Redhead	16						15	188	234	79				516
Ring-necked Duck	8		1	38	30	6	6		1					82
Canvasback	11							69	91	57			2	219
Greater Scaup	2						1						84	85
Lesser Scaup	11							120	10	6			56	192
Common Goldeneye	8			12	3	2	104		18				8	147
Barrow's Goldeneye	2						1						263	264
Bufflehead	6						5		3	3				11
Oldsquaw	1												2	2
Common Eider	3			265				41						306
King Eider	2							1				7		8
White-winged Scoter	1								53					53
Surf Scoter	1												1	1
Ruddy Duck	4							1	7	17				25

**Table 3 (cont'd)**  
Number of birds banded in Canada in 1977 listed by species and province

Species*	No. banders	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yuk.	Total
Hooded Merganser	4				3	6	8							17
Goshawk	9			2			18			8				28
Sharp-shinned Hawk	15			9		1	3261			15				3286
Cooper's Hawk	9						155			5				160
Red-tailed Hawk	17			1			524	2	3	176				706
Red-shouldered Hawk	5					1	26							27
Broad-winged Hawk	7						16	3		1				20
Swainson's Hawk	5								84	471				555
Rough-legged Hawk	5						13			2		2		17
Ferruginous Hawk	2								68	369				437
Golden Eagle	4						3		17	17		1		38
Bald Eagle	3			6			2			18		1		27
Marsh Hawk	8						74		4	18				96
Osprey	3		12						19	9				40
Gyrfalcon	2											6	45	51
Prairie Falcon	3								62	327				389
Peregrine Falcon	3					9	5		4	28	10	58	10	124
Merlin	7						13		46	103				162
American Kestrel	17					17	577		29	55				678
Whooping Crane	1											9		9
Sandhill Crane	1							15						15
Virginia Rail	3			1			2							3
Sora	2						3		1					4
Yellow Rail	2						4							4
Common Gallinule	3				4		2							6
American Coot	8			21	8		29		14	25	26			123
Black Oystercatcher	1										17			17
Semipalmated Plover	4				85		293							378
Piping Plover	2		5				4							9
Killdeer	11					1	105				4			110
American Golden Plover	1						3							3
Black-bellied Plover	5				2		2					39		43
Ruddy Turnstone	5				3		110					8		121
American Woodcock	8					21	39							60
Common Snipe	5						36			1	12			49
Whimbrel	1						1							1
Upland Sandpiper	1						4							4
Spotted Sandpiper	7				4		113							117
Solitary Sandpiper	5				1		23							24
Greater Yellowlegs	1						30							30
Lesser Yellowlegs	6						99				2			101
American Knot	3						64					27		91
Purple Sandpiper	1											5		5
Pectoral Sandpiper	3						76					7		83
White-rumped Sandpiper	3						543					4		547
Baird's Sandpiper	1											1		1
Least Sandpiper	10				161		833			1	5	1		1001
Dunlin	3						310			338				648
Short-billed Dowitcher	3				17		19							36
Long-billed Dowitcher	1										3			3
Stilt Sandpiper	1						2							2
Semipalmated Sandpiper	8				1661		9659	3						11323
Western Sandpiper	1										39			39
Buff-breasted Sandpiper	2						4					1		5
Marbled Godwit	1						1							1

Table 3 (cont'd)  
Number of birds banded in Canada in 1977 listed by species and province

Species*	No. banders	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yuk.	Total
Hudsonian Godwit	1						15							15
Sanderling	5						72				1	25		98
American Avocet	2								10	2				12
Black-necked Stilt	1								2					2
Red Phalarope	2											20		20
Wilson's Phalarope	3						16				2			18
Northern Phalarope	2						12	11						23
Parasitic Jaeger	1											6		6
Long-tailed Jaeger	1											67		67
Glaucous Gull	2											41		41
Glaucous-winged Gull	1										2082			2082
Great Black-backed Gull	4	2		108	111		2							223
Herring Gull	10	559			470		814							1483
California Gull	2								134	6				140
Ring-billed Gull	10						2355		478	93				2926
Mew Gull	1												1	1
Franklin's Gull	1									1				1
Ivory Gull	1											263		263
Black-legged Kittiwake	1											90		90
Sabine's Gull	2											10		10
Common Tern	7						462		202	240				904
Arctic Tern	2				32							39		71
Caspian Tern	2						113							113
Black Tern	1						3							3
Thick-billed Murre	1											126		126
Black Guillemot	4				9	157						23	2	191
Mourning Dove	10						216	2	22					240
Yellow-billed Cuckoo	2						12							12
Black-billed Cuckoo	8				4		47	38						89
Barn Owl	2						7							7
Screech Owl	6					2	8							10
Great Horned Owl	15		1				31		168	112	1			313
Snowy Owl	5						6			5		3		14
Hawk Owl	2							5		6				11
Burrowing Owl	1								2	10				12
Barred Owl	3			3			1	1						5
Great Gray Owl	2							30		6				36
Long-eared Owl	11					7	37		3	41				88
Short-eared Owl	5			1			5			3				9
Boreal Owl	1									3				3
Saw-whet Owl	16			1		11	733			26				771
Whip-poor-will	5						18							18
Common Nighthawk	2						3							3
Chimney Swift	2						2							2
Ruby-throated Hummingbird	1							11						11
Belted Kingfisher	6						14							14
Yellow-shafted Flicker	12			11	2	8	243			7			2	273
Yellow x Red-shafted Flicker	1						1							1
Red-headed Woodpecker	3						19							19
Yellow-bellied Sapsucker	14			2	1	1	166			8				178
Hairy Woodpecker	13				1	2	25	4		1				33
Downy Woodpecker	24			1	6	4	76	15		13				115
Black-backed Three-toed Woodpecker	1						1							1

Table 3 (cont'd)  
Number of birds banded in Canada in 1977 listed by species and province

Species*	No. banders	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yuk.	Total
Eastern Kingbird	12				3		296	48	7	2				356
Western Kingbird	1							7						7
Great Crested Flycatcher	9						142			3				145
Eastern Phoebe	13			1			105	14		1				121
Yellow-bellied Flycatcher	16			10	29	8	309			5				361
Acadian Flycatcher	2						6							6
Trail's Flycatcher	16			6	62	10	188	44		26				336
Alder Flycatcher	5				3	4	13							20
Willow Flycatcher	2					14	2							16
Least Flycatcher	21			17	9	8	1402			38				1474
Unidentified Empidonax	2					1	3							4
Eastern Wood Pewee	15			2	1	2	231	2						238
Western Wood Pewee	1									8				8
Olive-sided Flycatcher	9			2	1		7	1		1				12
Horned Lark	5						10					2		12
Violet-green Swallow	1												1	1
Tree Swallow	25			1	184		2043	100	842	1881		6	1	5058
Bank Swallow	5						959							959
Rough-winged Swallow	7						68			1				69
Barn Swallow	24				31	1	439	18	11	39	38			577
Cliff Swallow	2						29							29
Purple Martin	7						337			490				827
Gray Jay	6				6	2		1		19	1			29
Blue Jay	27	4		37	4	6	533	117	5	23				729
Black-billed Magpie	4								74	1				75
Common Raven	2			112									9	121
Common Crow	7			115			3		14	4				136
Northwestern Crow	1										55			55
Black-capped Chickadee	32	10		3	32	27	807	44	49	211				1183
Boreal Chickadee	7	2		4	8	5				1				20
White-breasted Nuthatch	20						91	10	1	7				109
Red-breasted Nuthatch	23			5	2	29	411	3	4	21				475
Brown Creeper	13			6		7	1107			3				1123
American Dipper	1									4				4
House Wren	15						157	11	11	90				269
Winter Wren	9			1		1	111							113
Carolina Wren	2						2							2
Long-billed Marsh Wren	2						1				593			594
Northern Mockingbird	2						4							4
Gray Catbird	21			26	18	48	609	234		3				938
Brown Thrasher	12					4	127	14						145
American Robin	36	1		3	47	62	586	42	4	52		1		798
Varied Thrush	1									1				1
Wood Thrush	11			1		1	172							174
Swainson's Thrush	25			20	128	70	1581			35				1834
Hermit Thrush	22			1	12	23	402			13				451
Gray-cheeked Thrush	12	4					191							195
Veery	19			7	1	79	460	44		1				592
Eastern Bluebird	9						120		16					136
Mountain Bluebird	6								549	823				1372
Blue-gray Gnatcatcher	3						21							21
Golden-crowned Kinglet	11	5		16	1		177			2				201
Ruby-crowned Kinglet	17			4	4	12	814			8				842
Water Pipit	1						2							2

**Table 3 (cont'd)**  
Number of birds banded in Canada in 1977 listed by species and province

Species*	No. banders	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yuk.	Total
Bohemian Waxwing	3							1	97	1				99
Cedar Waxwing	19				25	26	397	20	5	37				510
Northern Shrike	8						11	1	1					13
Loggerhead Shrike	2						2							2
Common Starling	6					1564	898		4	7	300			2773
White-eyed Vireo	2						4							4
Yellow-throated Vireo	4			1			5							6
Solitary Vireo	13			42	11	1	100			8				162
Red-eyed Vireo	23			112	35	14	1090			71				1322
Philadelphia Vireo	15			5	2	2	206			12				227
Warbling Vireo	13				1	1	120	122		5				249
Black and White Warbler	20	1		84	22	7	447	1		18				580
Golden-winged Warbler	4						13							13
Blue-winged Warbler	2						3							3
Tennessee Warbler	23			20	104	72	1028	145		659				2028
Orange-crowned Warbler	10					1	26	1		81				109
Nashville Warbler	21			8	33	15	645							701
Northern Parula Warbler	9			30	12	2	17							61
Yellow Warbler	18			25	103	148	1097	449		39				1861
Magnolia Warbler	25			139	60	46	1704			35				1984
Cape May Warbler	18			10	4	14	553			4				585
Black-throated Blue Warbler	14			13	3	7	232							255
Myrtle Warbler	28	1		41	112	39	1615		1	65				1874
Black-throated Green Warbler	18			61	21	5	284			2				373
Cerulean Warbler	1						1							1
Blackburnian Warbler	16			23	3	4	437							467
Chestnut-sided Warbler	15			15	21	3	367							406
Bay-breasted Warbler	19			62	25	16	1275	1		4				1383
Blackpoll Warbler	17	5		83	15	5	552	5		39				704
Pine Warbler	2						11							11
Prairie Warbler	2						3							3
Palm Warbler	9			7	4		119							130
Ovenbird	19			25	18	15	375	7		56				496
Northern Waterthrush	17	5		30	16	1	266	57		16				391
Louisiana Waterthrush	1						1							1
Kentucky Warbler	2						3							3
Connecticut Warbler	2						2			3				5
Mourning Warbler	15			14		10	87			11				122
Common Yellowthroat	24			57	74	40	464			4				639
Yellow-breasted Chat	1						6							6
Hooded Warbler	2						3							3
Wilson's Warbler	19			16	24	7	306			84				437
Canada Warbler	23			16	28	17	586			13				660
American Redstart	24			64	155	18	723			125				1085
House Sparrow	11					9	1077	7		1795				2888
Bobolink	4				12		26							38
Eastern Meadowlark	2						17							17
Western Meadowlark	1							1						1
Yellow-headed Blackbird	2							18	14					32
Red-winged Blackbird	24				53	47	1502			1098	130			2830
Orchard Oriole	2						1	15						16
Baltimore Oriole	16			12		6	357	593		89				1057
Rusty Blackbird	4				4		5			4				13
Brewer's Blackbird	3							1	5					6
Common Grackle	19			2	6	15	620		16					659

**Table 3 (cont'd)**  
Number of birds banded in Canada in 1977 listed by species and province

Species*	No. banders	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yuk.	Total
Brown-headed Cowbird	24				5	132	720	71	5	2				935
Western Tanager	2						1			18				19
Scarlet Tanager	11			4			219							223
Cardinal	10						71							71
Rose-breasted Grosbeak	22			39	29	46	579	27		24				744
Indigo Bunting	6						64							64
Evening Grosbeak	21					56	1640	227		204				2127
Purple Finch	24			5	49	26	1046	646	4	41				1817
Pine Grosbeak	3				2	2		8						12
Hoary Redpoll	1							5						5
Common Redpoll	3						14	92				53		159
Unidentified Redpoll	1											15		15
Pine Siskin	10	9		7		4	74	8		138				240
American Goldfinch	22			3	4	40	2824	92		9				2972
White-winged Crossbill	1						5							5
Rufous-sided Towhee	5						51				2			53
Ipswich Sparrow	1		482											482
Savannah Sparrow	22	1		3	23	8	235	226	59	3	4			562
Grasshopper Sparrow	3						10							10
Baird's Sparrow	1								4					4
Le Conte's Sparrow	1								2					2
Henslow's Sparrow	1						3							3
Vesper Sparrow	7					1	21							22
Slate-colored Junco	30	53		85	15	46	1516	229	6	126				2076
Oregon Junco	1						1							1
Tree Sparrow	18					17	962	7		3				989
Chipping Sparrow	23			2	16	16	206	1		57				298
Clay-colored Sparrow	4						8			54	8			70
Field Sparrow	11			1			159							160
Harris' Sparrow	1							8						8
White-crowned Sparrow	2					10	516	2		6				534
White-throated Sparrow	36	5		170	88	154	2365	97	2	66				2947
Fox Sparrow	14	35		1		1	48	22		2				109
Lincoln's Sparrow	16			12	47	3	245	5		10				322
Swamp Sparrow	14			4	11	32	234							281
Song Sparrow	26			1	96	7	771	63		13	268			1219
Lapland Longspur	6						25	1				5		31
Chestnut-collared Longspur	1									4				4
Snow Bunting	7						347					59		406
<b>Total species</b>		<b>20</b>	<b>13</b>	<b>94</b>	<b>98</b>	<b>100</b>	<b>223</b>	<b>85</b>	<b>72</b>	<b>138</b>	<b>32</b>	<b>48</b>	<b>22</b>	<b>301</b>
<b>Total hybrids and others</b>			<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>9</b>
<b>Total birds</b>		<b>1515</b>	<b>1491</b>	<b>5905</b>	<b>6530</b>	<b>6178</b>	<b>91 461</b>	<b>30 360</b>	<b>23 054</b>	<b>30 745</b>	<b>5649</b>	<b>34 301</b>	<b>1075</b>	<b>238 264</b>

\*Italics indicate hybrid, subspecies and records unidentified as to species.

**Table 4**  
The top three species and number banded in each province and the territories in 1977

Newfoundland . . . . .	Herring Gull . . . . .	559	Leach's Storm-Petrel . . . . .	528	Manx Shearwater . . . . .	167
Prince Edward Island . . . . .	Black Duck . . . . .	1 101	Great Cormorant . . . . .	197	Blue-winged Teal . . . . .	92
Nova Scotia . . . . .	Black Duck . . . . .	2 166	Ipswich Sparrow . . . . .	482	Wood Duck . . . . .	389
New Brunswick . . . . .	Semipalmated Sandpiper . . . . .	1 611	Black Duck . . . . .	661	Blue-winged Teal . . . . .	647
Quebec . . . . .	Starling . . . . .	1 564	Black Duck . . . . .	1220	Mallard . . . . .	922
Ontario . . . . .	Semipalmated Sandpiper . . . . .	9 659	Mallard . . . . .	7290	Sharp-shinned Hawk . . . . .	3261
Manitoba . . . . .	Mallard . . . . .	11 079	Blue-winged Teal . . . . .	7129	Snow Goose . . . . .	3339
Saskatchewan . . . . .	Mallard . . . . .	10 805	Blue-winged Teal . . . . .	3085	Canada Goose . . . . .	1929
Alberta . . . . .	Mallard . . . . .	6 560	Common Pintail . . . . .	4005	Blue-winged Teal . . . . .	3174
British Columbia . . . . .	Glaucous-winged Gull . . . . .	2 082	Canada Goose . . . . .	740	Long-billed Marsh Wren . . . . .	593
Northwest Territories . . . . .	Snow Goose . . . . .	22 133	Canada Goose . . . . .	2454	Common Pintail . . . . .	1497
Yukon Territory . . . . .	Common Pintail . . . . .	380	Barrow's Goldeneye . . . . .	263	Greater Scaup . . . . .	84

**Table 5**  
Top three species banded in each province and the territories in 1977 (excluding Anatidae)

Newfoundland . . . . .	Herring Gull . . . . .	559	Leach's Petrel . . . . .	528	Manx Shearwater . . . . .	167
Prince Edward Island . . . . .	Great Cormorant . . . . .	197	Osprey . . . . .	12	Piping Plover . . . . .	5
Nova Scotia . . . . .	Ipswich Sparrow . . . . .	482	White-throated Sparrow . . . . .	170	Magnolia Warbler . . . . .	139
New Brunswick . . . . .	Semipalmated Sandpiper . . . . .	1611	Herring Gull . . . . .	470	Tree Swallow . . . . .	184
Quebec . . . . .	Starling . . . . .	1564	Black Guillemot . . . . .	157	White-throated Sparrow . . . . .	154
Ontario . . . . .	Semipalmated Sandpiper . . . . .	9659	Sharp-shinned Hawk . . . . .	3261	American Goldfinch . . . . .	2824
Manitoba . . . . .	Purple Finch . . . . .	646	Baltimore Oriole . . . . .	593	Yellow Warbler . . . . .	449
Saskatchewan . . . . .	Tree Swallow . . . . .	842	Mountain Bluebird . . . . .	549	Ring-billed Gull . . . . .	478
Alberta . . . . .	Tree Swallow . . . . .	1881	House Sparrow . . . . .	1795	Red-winged Blackbird . . . . .	1098
British Columbia . . . . .	Glaucous-winged Gull . . . . .	2082	Long-billed Marsh Wren . . . . .	593	Dunlin . . . . .	338
Northwest Territories . . . . .	Ivory Gull . . . . .	263	Northern Fulmar . . . . .	139	Thick-billed Murre . . . . .	126
Yukon Territory . . . . .	Gyr Falcon . . . . .	45	Peregrine Falcon . . . . .	10	Common Raven . . . . .	9

**Table 6**  
Number of banders per species in 1977 listed by province

Species*	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yuk.
Red-necked Grebe						1						
Horned Grebe						1						
Eared Grebe									1			
Western Grebe							1	1				
Pied-billed Grebe				1		1			1			
Northern Fulmar												1
Manx Shearwater	1											
Leach's Storm Petrel	1		1	2								
Wilson's Storm Petrel				1								
White Pelican						1		1				
Northern Gannet	1											
Great Cormorant		1										
Double-crested Cormorant				1		1		1	2			
Great Blue Heron			1		1							
Green Heron						2						
Cattle Egret						1						
Black-crowned Night Heron						2						
Least Bittern						1						
American Bittern						2						
Whistling Swan						1						1
Trumpeter Swan									1			1
Canada Goose			1	1	1	11	2	3	2	3		2
Brant												2
White-fronted Goose								1				2
Snow Goose (Blue and White)						1	1	1				1
Ross' Goose								1				1
<i>Snow x Ross' Goose Hybrid</i>								1				1
Mallard Duck		2	2	1	3	22	4	10	4	1	1	1
<i>Mallard x Black Duck Hybrid</i>		2	2	1	1	6	2	2	2	1	1	
Black Duck		2	3	2	3	18	4	7	1			
Gadwall		1			1	4	2	8	3	1		
Pintail		1	2	1	1	9	4	9	3	1	1	1
American Green-winged Teal		2	2	1	2	10	3	9	4	1	1	1
Blue-winged Teal		2	2	1	2	10	4	8	3	1	1	1
Cinnamon Teal									1			
American Wigeon		2	3	1	1	5	3	8	3	1	1	1
Northern Shoveler		1	1	1	1	1	2	4	3		1	1
Wood Duck		1	3	1	2	17	2	1		2		
Redhead						3	3	7	3			
Ring-necked Duck		1	2	1	1	3		1				
Canvasback							3	5	2			1
Greater Scaup						1						1
Lesser Scaup							2	6	2			1
Common Goldeneye			1	1	1	1		3				1

**Table 6 (cont'd)**  
Number of banders per species in 1977 listed by province

Species*	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yukon
Barrow's Goldeneye							1					1
Bufflehead						1		3	2			
Oldsquaw												1
Common Eider			2				1					
King Eider							1				1	
White-winged Scoter								1				
Surf Scoter												1
Ruddy Duck							1	1	2			
Hooded Merganser				1	1	2						
Goshawk			1			4			4			
Sharp-shinned Hawk			1		1	10			3			
Cooper's Hawk						6			3			
Red-tailed Hawk			1			10	1	1	4			
Red-shouldered Hawk					1	4						
Broad-winged Hawk						5	1		1			
Swainson's Hawk								1	4			
Rough-legged Hawk						2			2		1	
Ferruginous Hawk								2	1			
Golden Eagle						2		2	1		1	
Bald Eagle			1			1			1		1	
Marsh Hawk						5		1	2			
Osprey		1						1	1			
Gyr Falcon											2	1
Prairie Falcon								2	2			
Peregrine Falcon					1	2		1	1	1	2	1
Merlin						3		2	3			
American Kestrel					2	10		2	4			
Whooping Crane											1	
Sandhill Crane							1					
Virginia Rail			1			2						
Sora						1			1			
Yellow Rail						2						
Common Gallinule				1		2						
American Coot			1	1		3		2	1	1		
Black Oystercatcher										1		
Semipalmated Plover				1		3						
Piping Plover		1				1						
Killdeer					1	9				1		
American Golden Plover						1						
Black-bellied Plover				1		2					2	
Ruddy Turnstone				2		1					2	
American Woodcock					2	6						
Common Snipe						3			1	1		
Whimbrel						1						
Upland Sandpiper						1						

**Table 6 (cont'd)**  
Number of banders per species in 1977 listed by province

Species*	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yukon
Spotted Sandpiper				1		6						
Solitary Sandpiper				1		4						
Greater Yellowlegs						1						
Lesser Yellowlegs						5				1		
American Knot						2						1
Purple Sandpiper												1
Pectoral Sandpiper						2						1
White-rumped Sandpiper						1						2
Baird's Sandpiper												1
Least Sandpiper							1	6		1	1	1
Dunlin						2				1		
Short-billed Dowitcher							1	2				
Long-billed Dowitcher										1		
Stilt Sandpiper						1						
Semipalmated Sandpiper							1	6		1		
Western Sandpiper										1		
Buff-breasted Sandpiper						1						1
Marbled Godwit						1						
Hudsonian Godwit						1						
Sanderling						3				1	1	
American Avocet								1	1			
Black-necked Stilt									1			
Red Phalarope												2
Wilson's Phalarope						2				1		
Northern Phalarope						1	1					
Parasitic Jaeger												1
Long-tailed Jaeger												1
Glaucous Gull												2
Glaucous-winged Gull										1		
Great Black-backed Gull	1		1	1		1						
Herring Gull	1			2		7						
California Gull								1	1			
Ring-billed Gull						8		1	1			
Mew Gull												1
Franklin's Gull									1			
Ivory Gull												1
Black-legged Kittiwake												1
Sabine's Gull												2
Common Tern						4		2	1			
Arctic Tern				1								1
Caspian Tern						2						
Black Tern						1						
Thick-billed Murre												1
Black Guillemot				1	1						1	1
Mourning Dove						8	1	1				

**Table 6 (cont'd)**  
Number of banders per species in 1977 listed by province

Species*	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yukon
Yellow-billed Cuckoo						2						
Black-billed Cuckoo				1		6	1					
Barn Owl						2						
Screech Owl					1	5						
Great Horned Owl			1			8		3	3	1		
Snowy Owl						2			2			1
Hawk Owl							1		1			
Burrowing Owl								1	1			
Barred Owl			1			1	1					
Great Gray Owl							1		1			
Long-eared Owl					2	5		1	3			
Short-eared Owl			1			2			2			
Boreal Owl									1			
Saw-whet Owl			1		2	8			5			
Whip-poor-will						5						
Common Nighthawk						2						
Chimney Swift						2						
Ruby-throated Hummingbird							1					
Belted Kingfisher						6						
Yellow-shafted Flicker			1	1	1	8			1			1
Yellow x Red-shafted Flicker						1						
Red-headed Woodpecker						3						
Yellow-bellied Sapsucker			1	1	1	9			2			
Hairy Woodpecker				1	1	10	1		1			
Downy Woodpecker			1	3	2	15	2		3			
Black-backed Three-toed Woodpecker					1							
Eastern Kingbird				1		7	1	2	1			
Western Kingbird							1					
Great Crested Flycatcher						8			1			
Eastern Phoebe			1			10	1		1			
Yellow-bellied Flycatcher			1	3	2	10			1			
Acadian Flycatcher						2						
Trail's Flycatcher			1	2	1	9	1		2			
Alder Flycatcher				1	3	2						
Willow Flycatcher					1	1						
Least Flycatcher			1	2	3	14			2			
Eastern Wood Pewee			1	1	2	10	1					
Western Wood Pewee									1			
Olive-sided Flycatcher			1	1		5	1		1			
Horned Lark						4					1	
Violet-green Swallow												1
Tree Swallow			1	2		13	1	2	4		1	1
Bank Swallow						5						
Rough-winged Swallow						7						
Barn Swallow				2	1	13	1	1	3	2		

**Table 6 (cont'd)**  
Number of banders per species in 1977 listed by province

Species*	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yukon
Cliff Swallow						2						
Purple Martin						5			2			
Gray Jay				2	1		1		2	1		
Blue Jay	1		2	1	1	19	2	1	2			
Black-billed Magpie								3	1			
Common Raven			1									1
Common Crow			1			2		2	2			
Northwestern Crow										1		
Black-capped Chickadee	2		2	2	3	19	2	1	4			
Boreal Chickadee	2		1	1	3				1			
White-breasted Nuthatch						16	1	1	2			
Red-breasted Nuthatch			1	1	3	16	1	1	1			
Brown Creeper			1		2	9			1			
American Dipper												1
House Wren						10	1	1	3			
Winter Wren			1		1	7						
Carolina Wren						2						
Long-billed Marsh Wren						1					1	
Northern Mockingbird						2						
Gray Catbird			1	2	3	13	2		1			
Brown Thrasher					1	10	1					
Robin	1		1	3	7	18	2	1	3			1
Varied Thrush									1			
Wood Thrush			1		1	9						
Swainson's Thrush			1	4	4	15			2			
Hermit Thrush			1	2	2	16			2			
Gray-cheeked Thrush	2					10						
Veery			1	1	5	11	1		1			
Eastern Bluebird						7		2				
Mountain Bluebird								2	4			
Blue-gray Gnatcatcher						3						
Golden-crowned Kinglet	1		1	1	2	7			1			
Ruby-crowned Kinglet			1	2	2	12			1			
Water Pipit						1						
Bohemian Waxwing								1	1			
Cedar Waxwing				1	4	10	1	1	2			
Northern Shrike						6	1	1				
Loggerhead Shrike						2						
Common Starling					2	12		1	1	1		
White-eyed Vireo						2						
Yellow-throated Vireo			1			3						
Solitary Vireo			1	2	1	9			1			
Red-eyed Vireo			1	3	4	14			2			
Philadelphia Vireo			1	1	1	11			2			
Warbling Vireo				1	1	8	1		2			



**Table 6 (cont'd)**  
Number of banders per species in 1977 listed by province

Species*	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yukon
Black and White Warbler	1		1	3	2	12	1		2			
Golden-winged Warbler						4						
Blue-winged Warbler						2						
Tennessee Warbler			1	3	5	11	1		3			
Orange-crowned Warbler					1	7	1		1			
Nashville Warbler			1	3	5	13						
Northern Parula Warbler			1	3	1	4						
Yellow Warbler			1	2	2	10	2		1			
Magnolia Warbler			2	4	5	13			2			
Cape May Warbler			1	2	3	11			1			
Black-throated Blue Warbler			1	2	1	11						
Myrtle Warbler	1		1	3	6	15			2			
Black-throated Green Warbler			1	4	3	9			2			
Cerulean Warbler						1						
Blackburnian Warbler			1	2	3	11						
Chestnut-sided Warbler			1	2	3	9						
Bay-breasted Warbler			1	3	3	11	1		1			
Blackpoll Warbler	2		1	4	2	8	1		1			
Pine Warbler						2						
Prairie Warbler						2						
Palm Warbler			1	1		7						
Ovenbird			1	2	3	11	1		2			
Northern Waterthrush	1		1	4	1	10	1		1			
Louisiana Waterthrush						1						
Kentucky Warbler						2						
Connecticut Warbler						1			1			
Mourning Warbler			1		3	10			1			
Common Yellowthroat			1	4	4	14			2			
Yellow-breasted Chat						1						
Hooded Warbler						2						
Wilson's Warbler			1	2	2	12			3			
Canada Warbler			1	3	5	13			2			
American Redstart			2	4	5	12			2			
House Sparrow					1	8	1		1			
Bobolink				1		3						
Eastern Meadowlark						2						
Western Meadowlark								1				
Yellow-headed Blackbird								1	1			
Red-winged Blackbird				1	3	10		3	1			
Orchard Oriole						1	1					
Northern Oriole			2		2	10	1		1			
Rusty Blackbird				1		2			1			
Brewer's Blackbird								1	2			
Common Grackle			1	1	4	13		1				
Brown-headed Cowbird				1	5	16	1	1	1			
Western Tanager						1			1			

**Table 6 (cont'd)**  
Number of banders per species in 1977 listed by province

Species*	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yukon
Scarlet Tanager						10						
Cardinal						10						
Rose-breasted Grosbeak			2	3	3	12	2		1			
Indigo Bunting						6						
Evening Grosbeak					2	14	2		4			
Purple Finch			1	2	5	15	1	1	1			
Pine Grosbeak				1	1		1					
Hoary Redpoll							1					
Common Redpoll						1	1					1
<i>Unidentified Redpoll</i>												1
Pine Siskin	1		1		1	5	1		1			
American Goldfinch			1	1	2	15	1		2			
White-winged Crossbill						1						
Rufous-sided Towhee						4				1		
<i>Ipswich Sparrow</i>												
Savannah Sparrow	1		2	3	1	11	1	1	1	1		
Grasshopper Sparrow						3						
Baird's Sparrow								1				
Le Conte's Sparrow								1				
Henslow's Sparrow						1						
Vesper Sparrow					1	6						
<i>Slate-colored Junco</i>	1		2	2	7	16	1	1	2			
<i>Oregon Junco</i>						1						
Tree Sparrow					2	15	1		1			
Chipping Sparrow			1	2	4	13	1		3			
Clay-colored Sparrow						2		1	1			
Field Sparrow			1			10						
Harris' Sparrow							1					
White-crowned Sparrow					4	16	1		2			
White-throated Sparrow	1		2	3	10	18	1	1	2			
Fox Sparrow	2		1		1	8	1		1			
Lincoln's Sparrow			1	2	1	10	1		2			
Swamp Sparrow			1	2	1	11						
Song Sparrow			1	2	3	17	1		2	1		
Lapland Longspur						4	1					1
Chestnut-collared Longspur									1			
Snow Bunting						6						1

\*Italics indicate hybrids, subspecies and records unidentified as to species.

Figure 1  
1977 bird banding sites in Canada.  
Scale 1:25 000 000

