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Annual report to banders — Summary of bird banding in Canada in 1980

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Introduction

This report summarizes bird banding activity in Canada in 1980. It provides information on the number of banders in Canada and the number of birds banded, and on the distribution of bandings by species and region.

Methods

We selected Canadian banding records for 1980 from the North American Bird Banding files, using October 1981 as the cut-off date for entries into the computer.

The name designated by the American Ornithologists' Union (AOU) was used wherever species names and numbers in the "North American bird banding manual" differed from those published in the AOU checklist and its supplements (Appendix 1).

Although bandings of unidentified birds do not provide useful information on species numbers or movements, we have included such records in our tables for the sake of completeness.

Results

The number of birds banded in 1980, 187 480, decreased about 19% from totals for the previous year (232 522) and fell slightly below the 10-year average (190 092) (Table 1). The number of non-game birds banded decreased by 17 400 (15%) from the previous year while the number of game birds decreased by 27 642 (23%). The percentage difference in these two categories is attributable to the greatly decreased numbers of Snow Geese (white and blue phases) banded in 1980 (total 6279) as

Table 1

Numbers of bird banding permits issued and birds banded in Canada annually, 1971-80

Year	Active master permits	Birds banded
1971	151	160 571
1972	156	152 094
1973	154	121 756
1974	146	155 315
1975	152	172 125
1976	155	206 493
1977	148	238 364
1978	155	274 203
1979	147	232 522
1980	129	187 480
Average	149	190 092

¹ CWS, Ottawa, Ontario, K1A 0E7.

opposed to 1979 (total 15 863). This difference of 9584 birds represents 8% of the 1979 game bird total.

The number of active master permittees (129) also declined from the previous year's total (147) and was below the average for the previous 10 years (149).

A total of 292 species of birds were banded in 1980 (Table 2). The largest numbers of birds and species of birds were banded in Ontario, which also had the greatest number of active master permit holders.

Figure 1 shows 1980 banding sites, most of which are in southern Canada close to population centres.

Numbers of non-game and game birds banded by province or territory are compared in Table 3.

Table 4 gives the three most frequently banded game and non-game species in each province or territory. Table 5 summarizes the numbers of game and non-game birds requiring a status code other than 300 (normal wild bird) after banding².

Table 6 lists ratios of hatching-year (young) to after-hatching-year (adult) birds banded for the years 1977-80. This table is meant to be a very rough index of productivity as reflected in banding totals. We included only species for which a total of at least 100 birds were banded each year.

Species for which the ratio of young-to-adult birds exceeded three (i.e., more than six young per adult pair) were omitted. The reasoning behind this was that, in species where the ratio was higher than three young to one adult, there probably had been selective banding of young birds in preference to adults. Such an example would be nesting colonies of gulls, where large numbers of chicks but relatively few adults are banded. The opposite reasoning also holds; if the young-to-adult ratio is very low or zero, it could be due either to few young being produced or to few young being banded. If the ratio is consistently low, further investigations into the reasons might be warranted.

Table 7 lists the numbers of birds banded in each province and territory in 1980 by species.

Acknowledgements

We thank all those who banded birds in Canada in 1980 for providing their records. K. Klimkiewicz and J. Stevens of the Bird Banding Laboratory, US Fish and Wildlife Service, provided the computer files. B. Cromie, Surveys and Mapping Branch, Department of Energy, Mines and Resources, prepared the map; M. Gratton and R. Ross, Computing and Applied Statistics Directorate, Department of Environment, prepared the data for the map and tables. J.H. Patterson, G. Cooch, and S. Wendt read and commented on the manuscript.

² For an explanation of the codes see "North American bird banding", 1976, vol. 1, part 5, published by CWS.

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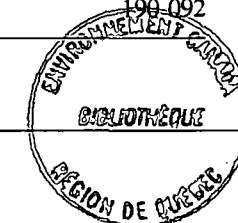


Figure 1
Map of banding locations in Canada, 1980

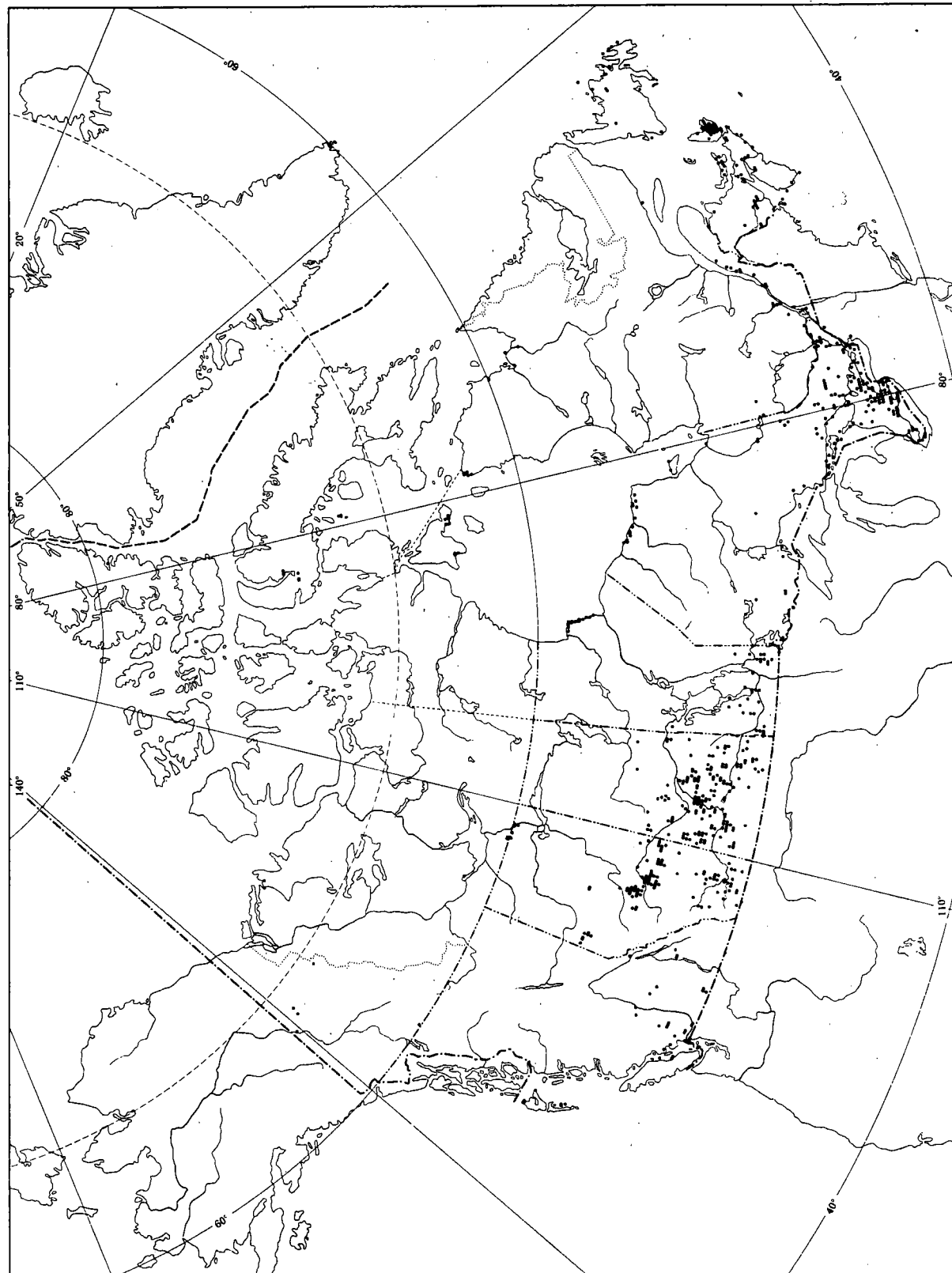


Table 2
Numbers of bird banders and birds banded by region, 1980

Region	Active master permits				Birds banded				Species banded			
	No.		% total*		No.		% total		No.		% total*	
	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980
Nfld.	3	4	2	3	2 648	2 535	1	1	47	49	16	17
PEI	3	1	2	1	1 161	934	1	1	10	11	3	4
NS	5	5	3	4	8 167	10 904	4	6	111	106	37	36
NB	5	3	3	2	9 126	11 082	4	6	113	116	37	40
Que.	19	10	13	8	5 704	3 204	2	2	95	68	31	23
Ont.	75	63	52	49	96 074	69 940	41	37	233	223	77	76
Man.	11	9	8	7	29 123	22 150	13	12	68	58	23	20
Sask.	15	17	10	13	30 939	29 401	13	16	72	58	24	20
Alta.	19	15	13	12	29 971	23 257	13	12	139	112	46	38
BC	6	8	4	6	7 317	5 418	3	3	53	54	18	18
NWT	11	8	8	6	11 951	8 328	5	4	32	29	11	10
Yukon	2	2	1	2	253	327	0	0	7	6	2	2
Total	145†	129†	-	-	232 522	187 480	100	100	302	292	-	-

*These columns do not total 100% because some banders band in more than one province and some species are banded in more than one province.

†The total here counts each bander only once, although some banders band in more than one province.

Table 3
Numbers and percentages of non-game and game* birds banded by region, 1980

Region	Non-game species	% non-game species †	Non-game birds	% non-game birds	Game species	% game species †	Game species	% game birds
Nfld.	39	15	1 745	2	10	28	790	1
PEI	-	0	-	0	11	31	934	1
NS	90	35	7 331	8	16	44	3 573	4
NB	102	40	8 154	8	14	39	2 928	3
Que.	59	23	837	1	9	25	2 367	3
Ont.	199	78	56 711	59	23	64	13 229	14
Man.	39	15	1 510	2	19	53	20 640	23
Sask.	39	15	3 953	4	19	53	25 448	28
Alta.	96	38	7 949	8	16	44	15 308	17
BC	46	18	4 577	5	8	22	841	1
NWT	19	7	3 310	3	11	31	5 018	5
Yukon	2	1	3	0	4	11	324	0
Total	256	-	96 080	100	36	-	91 400	100

*In the category of migratory game birds, we include the family Anatidae, the family Gruidae except Whooping Cranes, the family Rallidae, the American Woodcock, Common Snipe, and Mourning Dove. Game birds that were not hunted in Canada in 1980 because of closed seasons were not included.

†These columns do not total 100% because some species are banded in more than one province.

Table 4
Most frequently banded game and non-game species by region, 1980

Region	Game birds			Non-game birds		
	AOU no.	Common name	Total	AOU no.	Common name	Total
Nfld.	1330	Black Duck	569	5580	White-throated Sparrow	202
	1390	American Green-winged Teal	142	7580	Swainson's Thrush	151
	1500	Ring-necked Duck	41	0300	Common Murre	150
PEI	1330	Black Duck	756	-	-	-
	1400	Blue-winged Teal	72	-	-	-
	1370	American Widgeon	28	-	-	-
NS	1330	Black Duck	2 141	5670	Slate-colored Junco	637
	1400	Blue-winged Teal	314	6550	Myrtle Warbler	615
	1440	Wood Duck	263	4860	Common Raven	515
NB	1330	Black Duck	1 361	1060	Leach's Storm Petrel	1036
	1400	Blue-winged Teal	617	6550	Myrtle Warbler	875
	1370	American Widgeon	361	6500	Cape May Warbler	812
Que.	1320	Mallard	977	0540	Ring-billed Gull	312
	1330	Black Duck	950	5580	White-throated Sparrow	131
	1390	American Green-winged Teal	289	5670	Slate-colored Junco	109
Ont.	1320	Mallard	5 511	0540	Ring-billed Gull	6418
	1720	Canada Goose	3 724	5290	American Goldfinch	2827
	1400	Blue-winged Teal	1 841	5580	White-throated Sparrow	2821
Man.	1320	Mallard	8 482	4980	Red-winged Blackbird	507
	1690	Snow Goose (white phase)	4 031	5140	Evening Grosbeak	240
	1400	Blue-winged Teal	2 349	2400	White-rumped Sandpiper	218
Sask.	1320	Mallard	12 081	0540	Ring-billed Gull	723
	1400	Blue-winged Teal	6 934	6140	Tree Swallow	624
	1720	Canada Goose	4 000	4980	Red-winged Blackbird	579
Alta.	1320	Mallard	5 658	1200	Double-crested Cormorant	1856
	1400	Wood Duck	4 757	6140	Tree Swallow	820
	1430	Common Pintail	2 216	6470	Tennessee Warbler	731
BC	1720	Canada Goose	587	2470	Western Sandpiper	2978
	1440	Wood Duck	155	2430	Dunlin	519
	1320	Mallard	59	2420	Least Sandpiper	277
NWT	1720	Canada Goose	1 894	0310	Thick-billed Murre	2878
	1320	Mallard	1 312	0270	Black Guillemot	145
	1730	Brant	1 019	2410	Baird's Sandpiper	79
Yukon	1320	Mallard	272	3547	Gyrfalcon	2
	1430	Common Pintail	31	3560	Peregrine Falcon	1
	1720	Canada Goose	12	-	-	-

Table 5
Status of banded birds (excluding normal wild birds), 1980

Status	Codes*	Game birds		Non-game birds	
		No. spp.	No. birds	No. spp.	No. birds
Held and/or transported	603, 611, 612, 613, 636, 650, 656, 675	9	2687	14	291
Colour-marked	602, 608, 619, 623, 639, 651, 669	12	1021	34	5194
Injured or sick	615, 621, 660, 666	2	6	27	95
Hand-reared or game farm	400, 401, 402, 409, 451	12	1734	12	56
Double-banded	607	-	-	1	733
Radio transmitter attached	689	2	15	2	3
Blood sample taken	618, 652	2	640	14	307
Miscellaneous	642, 685	1	42	5	35
Total		40	6145	109	6714

*For explanation of the codes see "North American bird banding", 1976, vol. 1, part 5, published by CWS.

Table 6
Ratios of young to adult birds banded in Canada,
1977-80

AOU no.	Common name	1977		1978		1979		1980	
		No. banded	Young/ adult	No. banded	Young/ adult	No. banded	Young/ adult	No. banded	Young/ adult
1060	Leach's Storm Petrel	621	0.6	1 068	0.5	1 794	0.2	1 503	0.5
1320	Mallard	38 063	0.6	34 192	1.1	40 494	0.7	34 477	0.6
1330	Black Duck	6 986	1.6	6 539	1.7	6 347	1.9	6 803	2.0
1400	Blue-winged Teal	16 577	0.8	19 044	2.6	20 252	1.1	16 936	0.6
1430	Common Pintail	8 615	0.6	6 280	1.9	9 183	2.2	4 516	1.4
1460	Redhead	516	0.2	919	2.4	856	2.4	881	0.9
1490	Lesser Scaup	192	0.1	267	0.4	455	1.5	184	1.6
1690-91	Snow Goose	31 474	0.7	58 784	0.3	15 831	1.5	4 067	2.4
1720	Canada Goose	12 908	2.5	14 740	2.6	13 711	2.1	14 121	2.7
2430	Dunlin	633	0.6	914	0.5	1 421	0.2	585	0.0
2460	Semipalmated Sandpiper	11 229	0.6	6 051	0.1	4 317	0.9	3 058	0.8
2740	Semipalmated Plover	372	1.0	146	0.1	216	0.8	104	0.2
3720	Saw-whet Owl	758	2.3	460	0.9	566	1.4	595	2.7
4120	Yellow-shafted Flicker	254	0.3	189	0.8	180	0.5	344	0.2
4610	Eastern Wood Pewee	234	0.5	286	1.1	256	1.1	181	0.7
4630	Yellow-bellied Flycatcher	323	0.7	333	1.0	605	1.1	469	1.2
4670	Least Flycatcher	1 327	1.0	1 224	1.4	1 539	1.1	1 023	1.0
4770	Blue Jay	588	0.3	933	0.2	497	0.6	434	0.5
4930	Common Starling	2 689	1.5	293	1.1	307	1.2	149	2.5
4950	Brown-headed Cowbird	812	0.6	1 611	0.1	760	0.3	450	0.2
4980	Red-winged Blackbird	2 815	0.4	1 828	0.7	1 952	1.2	2 310	0.3
5070	Baltimore Oriole	917	1.0	553	0.3	534	0.3	363	0.5
5110	Common Grackle	622	0.3	644	0.4	509	0.5	415	0.3
5140	Evening Grosbeak	1 505	0.3	1 984	0.0	2 029	0.1	2 339	0.0
5170	Purple Finch	1 649	0.0	922	0.1	978	0.0	273	0.4
5290	American Goldfinch	2 883	0.3	2 782	0.3	2 222	0.1	2 817	0.2
5540	White-crowned Sparrow	514	0.2	464	0.3	399	0.6	437	0.3
5580	White-throated Sparrow	2 567	0.2	3 399	0.4	2 924	0.6	2 991	0.3
5590	Tree Sparrow	864	0.1	1 213	0.1	789	0.6	382	0.2
5630	Field Sparrow	146	0.3	163	0.5	111	1.0	150	0.4
5670	Slate-colored Junco	1 685	0.4	1 805	0.5	1 796	0.5	1 466	0.4
5810	Song Sparrow	1 183	1.5	1 420	1.7	1 526	2.6	1 266	1.1
5830	Lincoln's Sparrow	304	0.4	491	0.4	681	1.3	379	0.4
5840	Swamp Sparrow	271	0.3	227	0.4	208	1.3	266	0.0
5950	Rose-breasted Grosbeak	687	0.4	603	0.4	569	0.5	652	0.4
6160	Bank Swallow	959	0.4	298	0.9	1 430	0.7	1 867	0.9
6190	Cedar Waxwing	524	0.3	551	0.4	451	0.3	351	0.5
6240	Red-eyed Vireo	1 261	1.4	1 062	1.7	1 097	1.9	652	1.6
6260	Philadelphia Vireo	147	1.2	147	1.8	167	1.7	102	1.5

(cont'd)

Table 6 (cont'd)
Ratios of young to adult birds banded in Canada,
1977-80

AOU no.	Common name	1977		1978		1979		1980	
		No. banded	Young/ adult	No. banded	Young/ adult	No. banded	Young/ adult	No. banded	Young/ adult
6360	Black-and-white Warbler	547	1.0	336	1.5	531	2.0	479	1.7
6450	Nashville Warbler	643	1.3	621	1.2	685	1.6	493	1.4
6540	Black-throated Blue Warbler	241	1.1	281	1.8	228	1.3	217	1.9
6550	Myrtle Warbler	1 687	1.3	2 383	1.0	2 306	2.9	2 557	1.7
6570	Magnolia Warbler	1 911	1.0	1 805	1.7	2 025	1.0	1 439	0.9
6590	Chestnut-sided Warbler	378	1.6	303	1.5	312	0.9	287	0.7
6610	Blackpoll Warbler	595	1.4	716	1.4	618	1.6	468	1.7
6670	Black-throated Green Warbler	326	1.1	330	1.6	391	0.9	327	0.9
6740	Ovenbird	424	0.9	451	1.5	517	1.2	409	0.9
6750	Northern Waterthrush	363	1.3	445	1.5	845	3.0	608	2.6
6790	Mourning Warbler	124	0.7	174	1.0	234	1.1	152	0.8
6810	Common Yellowthroat	622	0.3	621	0.7	778	0.5	929	0.9
6850	Wilson's Warbler	347	0.8	374	0.9	594	1.3	321	1.2
6860	Canada Warbler	622	0.7	434	1.4	713	1.6	503	1.6
6870	American Redstart	971	0.8	809	1.3	1 132	1.9	1 160	2.1
7040	Gray Catbird	921	0.4	565	0.3	736	0.3	557	0.2
7050	Brown Thrasher	140	0.4	132	0.2	133	0.4	107	0.1
7210	House Wren	264	2.7	257	1.8	320	1.9	201	1.0
7260	Brown Creeper	978	0.2	632	0.6	462	1.7	546	0.2
7350	Black-capped Chickadee	600	0.8	721	0.2	579	0.9	762	1.1
7490	Ruby-crowned Kinglet	517	0.4	712	0.9	659	1.3	959	0.4
7550	Wood Thrush	169	0.1	122	0.1	113	0.2	140	0.1
7560	Veery	546	0.4	380	0.6	366	0.5	352	0.3
7580	Swainson's Thrush	1 693	0.9	1 674	1.3	1 626	1.0	1 317	0.5
7590	Hermit Thrush	376	1.1	532	1.5	679	2.7	505	0.6
7610	American Robin	771	0.9	670	1.1	731	1.5	415	0.8

Table 7 (cont'd)
Number of birds banded in Canada in 1980 listed by species and region

AOU No.	Species	No. banders	No. banded												Total
			Nfld.	PEI	NS	NB	Qué.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yuk.	
6680	Townsend's Warbler	1	-	-	-	-	-	-	-	-	-	3	-	-	3
6710	Pine Warbler	1	-	-	-	-	-	2	-	-	-	-	-	-	2
6720	Palm Warbler	10	-	-	6	6	-	62	-	-	1	-	-	-	75
6729	Yellow Palm Warbler	7	7	-	46	20	-	8	-	-	-	-	-	-	81
6730	Prairie Warbler	2	-	-	-	5	-	2	-	-	-	-	-	-	7
6740	Ovenbird	19	8	-	37	40	5	313	-	-	121	-	-	-	524
6750	Northern Waterthrush	18	98	-	76	185	2	245	-	-	36	-	-	-	642
6760	Louisiana Waterthrush	2	-	-	-	-	-	3	-	-	-	-	-	-	3
6770	Kentucky Warbler	1	-	-	-	-	-	1	-	-	-	-	-	-	1
6780	Connecticut Warbler	7	-	-	2	1	-	5	-	-	7	-	-	-	15
6790	Mourning Warbler	17	10	-	12	12	4	103	-	-	16	-	-	-	157
6800	MacGillivray's Warbler	2	-	-	-	-	-	-	-	-	-	2	-	-	2
6810	Common Yellowthroat	23	-	-	251	130	2	612	-	-	2	-	-	-	997
6830	Yellow-breasted Chat	5	-	-	2	5	-	11	-	-	-	-	-	-	18
6840	Hooded Warbler	1	-	-	-	-	-	1	-	-	-	-	-	-	1
6850	Wilson's Warbler	22	35	-	40	24	6	225	-	-	45	-	-	-	375
6860	Canada Warbler	17	-	-	111	82	2	329	-	-	6	-	-	-	530
6870	American Redstart	18	25	-	221	276	-	478	-	-	253	-	-	-	1 253
6882	House Sparrow	12	-	-	-	-	3	505	-	-	-	-	-	-	508
7030	Northern Mockingbird	2	-	-	-	-	1	1	-	-	-	-	-	-	2
7040	Gray Catbird	23	-	-	20	22	2	523	-	-	2	-	-	-	569
7050	Brown Thrasher	11	-	-	-	-	-	109	-	-	-	-	-	-	109
7180	Carolina Wren	3	-	-	-	-	-	5	-	-	-	-	-	-	5
7190	Bewick's Wren	1	-	-	-	-	-	-	-	-	-	1	-	-	1
7210	House Wren	18	-	-	-	1	-	184	1	8	16	-	-	-	210
7220	Winter Wren	7	-	-	3	6	-	102	-	-	-	-	-	-	111
7250	Long-billed Marsh Wren	1	-	-	-	-	-	21	-	-	-	-	-	-	21
7260	Brown Creeper	13	-	-	23	31	-	578	-	-	2	3	-	-	637
7270	White-breasted Nuthatch	11	-	-	-	-	-	43	-	-	2	-	-	-	45
7280	Red-breasted Nuthatch	19	-	-	174	107	-	113	-	4	20	10	-	-	428
7350	Black-capped Chickadee	35	15	-	166	51	11	724	27	26	268	27	8	-	1 323
7380	Mountain Chickadee	1	-	-	-	-	-	-	-	-	-	31	-	-	31
7400	Boreal Chickadee	6	18	-	25	33	-	5	-	-	5	-	-	-	86
7480	Golden-crowned Kinglet	15	3	-	248	101	1	699	-	-	-	-	-	-	1 052
7490	Ruby-crowned Kinglet	20	61	-	239	79	6	1 208	2	-	8	-	-	-	1 603
7510	Blue-gray Gnatcatcher	3	-	-	-	-	-	11	-	-	-	-	-	-	11
7540	Townsend's Solitaire	1	-	-	-	-	-	-	-	-	-	24	-	-	24
7550	Wood Thrush	7	-	-	-	-	-	142	-	-	-	-	-	-	142
7560	Veery	19	-	-	5	18	6	328	-	-	-	-	-	-	357
7570	Gray-cheeked Thrush	14	-	-	2	6	1	83	1	-	2	-	-	-	95
7580	Swainson's Thrush	26	151	-	20	116	17	1 005	6	-	53	29	-	-	1 397
7590	Hermit Thrush	20	23	-	29	23	5	491	-	-	10	-	-	-	581
7610	American Robin	28	45	-	16	11	13	314	1	-	45	21	2	-	468
7660	Eastern Bluebird	3	-	-	-	-	-	33	-	-	-	-	-	-	33
7680	Mountain Bluebird	6	-	-	-	-	-	-	-	488	663	201	-	-	1 352
Total birds			2 535	934	10 904	11 082	3 204	69 940	22 150	29 401	23 257	5 418	8 328	327 187	480
Total species			49	11	106	116	68	223	58	58	112	54	29	6	292

Appendix 1

Species names used in Tables 4 and 7 where latest AOU changes are different from those currently used in the North American bird banding manual

Banding manual	Latest AOU changes	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*		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
Audubon's Warbler		Audubon's Warbler
Baltimore Oriole	Northern Oriole	Baltimore Oriole
Bullock's Oriole*		Bullock's Oriole
Ipswich Sparrow*	Subspecies of Savannah Sparrow	Ipswich Sparrow
Slate-colored Junco	Dark-eyed Junco	Slate-colored Junco
Oregon Junco		Oregon Junco
Trail's Flycatcher		Trail'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 1980.

