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Progress Notes contain *interim* data and conclusions and are presented as a service to other wildlife biologists and agencies.

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Migratory birds killed in Canada during the 1979 season

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Introduction

The National Harvest Survey (NHS) is a mail survey conducted each year to estimate the kill of migratory game birds by hunters in Canada. The survey provides accurate data on the legal sport kill. Those data do not include crippling loss, illegal kill or hunting by native peoples.

The Species Composition Survey (SCS) is also an annual mail survey. Duck wings and tail fans from geese are solicited from hunters and used to identify the species, age and sex of the birds killed. Information from the SCS is used to apportion the kill estimates from the NHS by species.

Methods

Both the NHS and SCS are based on questionnaires sent to selected purchasers of Migratory Game Bird Hunting Permits. The NHS sample is chosen both from 1978 and 1979 permit purchasers according to certain strata. The SCS sample is chosen from 1978 permit purchasers only. Cooch *et al.* (1978) give a description of the survey methods and calculations.

The survey results are calculated by geographic zones, which are shown in Figure 1.

Results

In all provinces fewer hunting permits were sold in 1979 than in 1978. The overall trend since 1966, however, is towards an annual increase of about 12 000 sales (Tables 1 and 2).

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The 1979 NHS sample size changed little from 1978, but we reallocated some questionnaires among strata on the basis of 1978 results (Table 3). The response rate was higher than average (Table 4).

Nationally, there was little change in the total waterfowl kill (Tables 5-15); a slight decrease in duck kill is offset by a small increase in goose kill. On a provincial basis, waterfowl kill changed from 1978 in a marked east-west pattern. The kill decreased in the east (from Newfoundland to Ontario) and increased in the west. In comparison, the US kill estimates for 1979 showed decreased waterfowl kill in all flyways (Carney *et al.* 1980). One highlight of the increases in the prairie kill figures was the continued increase in Manitoba's goose kill. This was matched in the US kill survey by a 32% increase of goose kill in the Central Flyway.

The kill of Sandhill Cranes increased in 1979 because there was an open season for cranes in Saskatchewan for the first time in 3 years.

The SCS sample (Table 16) increased by over 7 000 responses from 1978. This survey covers about 1% of the permit-buying population. Kill estimates obtained by combining SCS and NHS results are shown in Tables 17 and 18.

References

Carney, S.M.; Sorensen, M.F.; Martin, E.M. 1980. Waterfowl harvest and hunter activity in the United States during the 1979 hunting season. U.S. Fish and Wildl. Serv. Admin. Rep. Laurel, Md. 27 pp

Cooch, F. G.; Wendt, S.; Smith, G. E. J.; Butler, G. 1978. The Canada Migratory Game Bird Hunting Permit and associated surveys. Pages 8-39 in H. Boyd and G. H. Finney, eds. Migratory game bird hunters and hunting in Canada. Can. Wild. Serv. Rep. Ser. No. 43.

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Figure 1
Geographic zones used in NHS and SCS

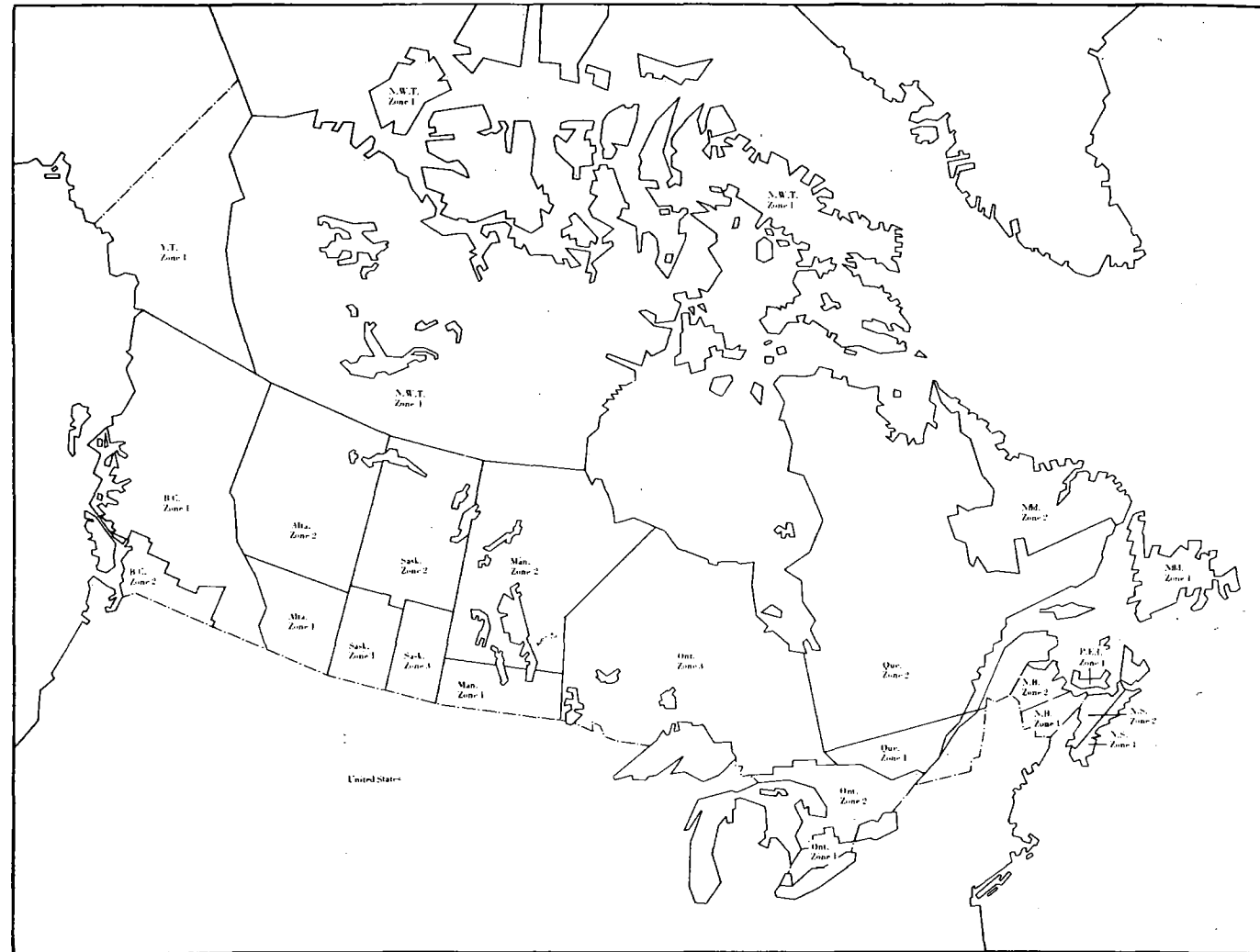


Table 1
Permit sales by province of purchase

Category	Year	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yukon	Total sales
Canadian res.		35 432	5 878	14 069	13 139	72 597	141 726	45 034	52 323	75 970	27 942	742	568	485 420
Non-res.		58	10	29	270	612	8 498	4 310	3 851	1 051	321	13	16	19 039
Total	1979	35 490	5 888	14 098	13 409	73 209	150 224	49 344	56 174	77 021	28 263	755	584	504 459
	1978	37 297	6 396	16 297	15 249	74 745	159 698	50 169	57 958	77 117	28 561	821	638	524 946
	1977	36 188	6 158	15 744	14 209	72 828	156 895	46 438	60 029	82 175	28 357	902	607	520 530
	1976	29 621	5 756	13 326	13 743	66 453	143 816	46 681	61 669	75 739	26 561	893	513	484 771
	1975	30 115	4 963	13 990	12 930	63 768	148 670	42 846	57 723	69 191	25 918	721	485	471 320
	1974	25 127	5 038	13 791	11 916	58 345	136 469	37 167	51 504	66 127	27 764	591	323	434 162
	1973	27 919	4 972	15 071	12 869	57 247	141 277	41 711	51 307	67 012	33 456	—	—	452 841
	1972	23 682	4 492	12 158	11 336	53 082	131 427	41 133	50 004	63 309	31 032	—	—	421 677
	1971	23 460	4 513	11 381	11 146	50 276	133 563	40 960	49 448	62 902	30 225	—	—	418 237
	1970	21 347	3 926	9 926	10 293	46 009	135 231	39 230	47 722	59 986	31 350	—	—	405 650
	1969	19 089	3 794	8 848	10 110	39 477	134 037	41 611	45 347	53 602	32 764	—	—	389 325
	1968	17 645	3 649	9 022	9 558	37 110	139 182	38 712	43 596	53 623	33 301	—	—	385 553
	1967	14 863	3 094	7 883	7 739	32 491	146 493	35 620	44 651	55 892	33 195	—	—	383 032
	1966	13 269	3 271	7 220	8 535	35 868	144 063	37 784	44 744	52 911	32 394	—	—	380 059

Table 2
Permit sales by resident/non-resident and renewal/non-renewal by province and zone of sale for 1979

Prov.	Zone	Total permit sales			Renewals			Non-renewals		
		Total	Res.	Non-res.	Total	Res.	Non-res.	Total	Res.	Non-res.
Nfld.	1	32 243	32 186	57	25 848	25 796	52	6 395	6 390	5
	2	3 247	3 246	1	2 746	2 746		501	500	1
	Total	35 490	35 432	58	28 594	28 542	52	6 896	6 890	6
PEI	Total	5 888	5 878	10	4 962	4 954	8	926	924	2
NS	1	9 369	9 350	19	8 182	8 167	15	1 187	1 183	4
	2	4 729	4 719	10	3 934	3 930	4	795	789	6
	Total	14 098	14 069	29	12 116	12 097	19	1 982	1 972	10
NB	1	9 138	8 998	140	7 198	7 114	84	1 940	1 884	56
	2	4 271	4 141	130	3 294	3 230	64	977	911	66
	Total	13 409	13 139	270	10 492	10 344	148	2 917	2 795	122
Que.	1	56 922	56 488	434	45 496	45 231	265	11 426	11 257	169
	2	16 287	16 109	178	11 796	11 689	107	4 491	4 420	71
	Total	73 209	72 597	612	57 292	56 920	372	15 917	15 677	240
Ont.	1	41 655	38 110	3 545	35 268	32 433	2 835	6 387	5 677	710
	2	81 727	80 959	768	71 234	70 713	521	10 493	10 246	247
	3	26 842	22 657	4 185	20 507	18 053	2 454	6 335	4 604	1 731
	Total	150 224	141 726	8 498	127 009	121 199	5 810	23 215	20 527	2 688
Man.	1	40 545	37 115	3 430	35 513	33 078	2 435	5 032	4 037	995
	2	8 799	7 919	880	7 761	7 146	615	1 038	773	265
	Total	49 344	45 034	4 310	43 274	40 224	3 050	6 070	4 810	1 260
Sask.	1	20 724	19 521	1 203	16 095	15 427	668	4 629	4 094	535
	2	10 989	10 636	353	8 649	8 435	214	2 340	2 201	139
	3	24 461	22 166	2 295	18 974	17 607	1 367	5 487	4 559	928
	Total	56 174	52 323	3 851	43 718	41 469	2 249	12 456	10 854	1 602
Alta.	1	29 511	28 889	622	21 842	21 480	362	7 669	7 409	260
	2	47 510	47 081	429	35 302	35 105	197	12 208	11 976	232
	Total	77 021	75 970	1 051	57 144	56 585	559	19 877	19 385	492
BC	1	12 562	12 303	259	9 178	9 099	79	3 384	3 204	180
	2	15 701	15 639	62	12 549	12 518	31	3 152	3 121	31
	Total	28 263	27 942	321	21 727	21 617	110	6 536	6 325	211
NWT	Total	755	742	13	520	514	6	235	228	7
Yukon	Total	584	568	16	338	333	5	246	235	11
Total		504 459	485 420	19 039	407 186	394 798	12 388	97 273	90 622	6 651

Table 3
Sample selection and response to the Harvest Survey questionnaire, 1979

Prov.	Zone	Sample	Responses	Characteristics of sample					
				% ^a	Permit purchasers	Active hunters	% ^b	Successful hunters	% ^c
Nfld.	1	2 500	1 115	44.6	859	539	63	367	43
	2	1 000	331	33.1	250	175	70	138	55
	Total	3 500	1 446	41.3	1 109	714	64	505	46
PEI	Total	1 100	408	37.1	322	270	84	208	65
NS	1	1 600	807	50.4	589	435	74	352	60
	2	1 400	916	65.4	606	460	76	349	58
	Total	3 000	1 723	57.5	1 195	895	75	701	59
NB	1	1 900	1 135	59.7	828	621	75	512	62
	2	1 700	816	48.0	553	343	62	268	49
	Total	3 600	1 951	54.2	1 381	964	70	780	57
Que.	1	3 500	2 277	65.1	1 744	1 378	79	1 203	69
	2	1 798	939	52.2	641	455	71	375	59
	Total	5 298	3 216	60.7	2 385	1 833	77	1 578	66
Ont.	1	3 200	1 903	59.5	1 525	1 151	76	949	62
	2	1 700	987	58.1	785	633	81	514	66
	3	2 800	1 648	58.9	1 223	938	87	820	67
	Total	7 700	4 538	58.9	3 533	2 722	77	2 283	65
Man.	1	2 510	1 595	63.5	1 280	1 128	88	1 022	80
	2	1 480	750	50.6	577	483	84	442	77
	Total	3 990	2 345	58.7	1 857	1 611	87	1 464	79
Sask.	1	1 460	712	48.7	545	464	85	427	78
	2	2 090	881	42.1	638	521	82	487	76
	3	2 210	1 077	48.7	827	690	83	644	78
	Total	5 760	2 670	46.3	2 010	1 675	83	1 558	78
Alta.	1	2 200	1 107	50.3	864	670	78	574	66
	2	4 030	1 872	46.4	1 412	1 089	77	998	71
	Total	6 230	2 979	47.8	2 276	1 759	77	1 572	69
BC	1	1 550	855	55.1	590	379	64	317	54
	2	2 000	1 047	52.3	788	603	77	534	68
	Total	3 550	1 902	53.5	1 378	982	71	851	62
NWT	Total	531	256	48.2	183	122	67	96	53
Yukon	Total	484	265	54.7	179	95	53	72	40
Total		44 743	23 699	53.0	17 808	13 642	77	11 668	66

^a Percent of sample for which responses were received.
^b Percent of permit purchasers that actively hunted.
^c Percent of permit purchasers that hunted successfully.

Table 4
Sample selection and response to the Harvest Survey questionnaire, 1974-79

Year	Permit sales	Sample ^a	% ^b	Responses ^c	% ^d	Permit purchasers ^e	% ^f	Active hunters	% ^g	Successful hunters	% ^h
1974	434 162	31 148	7.2	15 594	50.1	11 747	75.3	9 611	81.8	8 013	68.2
1975	471 320	40 400	8.6	20 648	51.1	15 872	76.9	12 980	81.8	11 170	70.4
1976	484 771	44 969	9.3	20 397	45.4	15 729	77.1	12 805	81.4	10 999	69.9
1977	520 530	45 015	8.6	22 896	50.9	17 833	77.9	14 119	79.2	11 812	66.2
1978	524 946	44 968	8.6	25 745	57.3	19 806	76.9	15 505	78.3	13 168	66.5
1979	504 459	44 743	8.9	23 699	53.0	17 808	75.1	13 642	77.0	11 668	66.0
Average	476 838	41 874	8.8	21 496	51.3	16 466	76.6	13 110	79.6	11 138	67.6

- ^a Sample is the number of questionnaires sent out.
- ^b Sample as a percent of permit sales.
- ^c Responses are questionnaires that have been completed and returned.
- ^d Percent of sample for which responses were received.
- ^e Respondents who bought a permit in 1979 (usable responses).
- ^f Percent of respondents that bought a permit.
- ^g Percent of permit purchasers that actively hunted.
- ^h Percent of permit purchasers that hunted successfully.

Table 5
Number of successful hunters and birds harvested, 1977-79

Species group	Survey stratum	Successful hunters			Birds harvested			Birds harvested/ successful hunter		
		1977	1978	1979	1977	1978	1979	1977	1978	1979
Newfoundland										
Ducks	1	13 950	15 949	12 569	101 211	115 337	94 219	7.25	7.23	7.50
	2	1 936	1 816	1 830	31 676	27 322	27 981	16.36	15.04	15.29
	Total	15 886	17 765	14 400	132 888	142 660	122 200	8.36	8.03	8.49
Geese	1	2 404	2 764	2 625	7 784	8 441	8 717	3.24	2.87	3.32
	2	1 046	821	730	4 776	4 603	4 896	4.56	5.59	6.70
	Total	3 451	3 586	3 356	12 560	13 045	13 613	3.64	3.50	4.06
Prince Edward Island										
Ducks	Total	3 744	3 831	2 985	30 191	30 042	20 943	8.06	7.84	7.02
Geese	Total	2 852	2 353	2 252	18 653	11 823	10 519	6.54	5.02	4.67
Nova Scotia										
Ducks	1	5 483	5 661	4 764	96 830	75 613	61 311	17.66	13.36	12.87
	2	3 992	3 570	2 856	37 681	33 928	27 073	9.44	9.50	9.48
	Total	9 475	9 231	7 620	134 511	109 542	88 385	14.20	11.87	11.60
Geese	1	1 207	1 485	1 121	5 036	4 280	4 383	4.17	2.88	3.91
	2	939	766	514	3 883	2 529	1 767	4.13	3.30	3.44
	Total	2 147	2 251	1 636	8 919	6 809	6 151	4.15	3.02	3.76
New Brunswick										
Ducks	1	5 297	5 753	4 766	40 669	51 331	36 613	7.68	8.92	7.68
	2	2 230	2 080	1 755	13 179	14 510	12 506	5.91	6.97	7.12
	Total	7 527	7 834	6 522	53 849	65 842	49 119	7.15	8.40	7.53
Geese	1	331	585	335	741	1 455	1 153	2.24	2.48	3.44
	2	585	597	424	1 758	1 806	1 475	3.00	3.03	3.48
	Total	917	1 182	759	2 499	3 261	2 629	2.73	2.76	3.46
Quebec										
Ducks	1	38 705	36 256	33 920	518 433	414 179	381 355	13.39	11.42	11.24
	2	9 946	10 881	9 416	112 809	114 904	87 650	11.34	10.56	9.31
	Total	48 651	47 137	43 337	631 242	529 083	469 006	12.97	11.22	10.82
Geese	1	10 363	15 079	13 103	53 932	86 055	61 979	5.20	5.71	4.73
	2	3 163	4 739	3 666	18 069	22 509	17 688	5.71	4.75	4.82
	Total	13 526	19 819	16 770	72 002	108 565	79 668	5.32	5.48	4.75
Ontario										
Ducks	1	20 137	22 154	20 784	219 928	271 255	247 943	10.92	12.24	11.93
	2	55 772	56 770	49 790	531 792	495 362	417 325	9.54	8.73	8.38
	3	16 305	15 707	16 051	161 596	176 545	180 156	9.91	11.24	11.22
	Total	92 216	94 632	86 626	913 317	943 164	845 425	9.90	9.97	9.76
Geese	1	4 535	5 313	6 318	13 633	19 483	22 074	3.01	3.67	3.49
	2	10 988	8 229	9 318	29 639	29 378	27 902	2.70	3.57	2.99
	3	3 951	2 803	4 821	23 580	15 720	26 065	5.97	5.61	5.41
	Total	19 476	16 346	20 458	66 854	64 582	76 042	3.43	3.95	3.72

(cont'd)

Table 5 (concl'd)
Number of successful hunters and birds harvested, 1977-79

Species group	Survey stratum	Successful hunters			Birds harvested			Birds harvested/ successful hunter		
		1977	1978	1979	1977	1978	1979	1977	1978	1979
Manitoba										
Ducks	1	19 068	24 489	23 558	174 699	244 434	261 798	9.16	9.98	11.11
	2	8 173	9 794	9 247	84 712	116 761	121 582	10.36	11.92	13.15
	Total	27 241	34 283	32 806	259 411	361 196	383 381	9.52	10.54	11.69
Geese	1	11 199	17 551	21 255	51 740	94 734	153 729	4.62	5.40	7.23
	2	4 749	5 530	6 271	24 303	29 476	41 967	5.12	5.33	6.69
	Total	15 949	23 081	27 526	76 044	124 210	195 696	4.77	5.38	7.11
Saskatchewan										
Ducks	1	14 679	14 235	12 793	158 430	148 894	173 335	10.79	10.46	13.55
	2	9 335	8 594	8 922	135 704	136 701	154 398	14.54	15.91	17.30
	3	17 441	19 246	18 017	214 623	241 708	254 962	12.31	12.56	14.15
	Total	41 457	42 076	39 732	508 758	527 305	582 696	12.27	12.53	14.67
Geese	1	11 296	10 877	10 897	70 840	72 519	80 784	6.27	6.67	7.41
	2	2 566	3 322	4 252	11 793	16 517	22 553	4.60	4.97	5.30
	3	7 278	8 624	8 872	39 228	49 481	49 097	5.39	5.74	5.53
	Total	21 140	22 825	24 022	121 862	138 517	152 435	5.76	6.07	6.35
Alberta										
Ducks	1	20 861	20 207	16 701	248 509	203 039	199 444	11.91	10.05	11.94
	2	34 089	30 667	32 408	523 601	378 614	479 896	15.62	12.35	14.81
	Total	54 951	50 875	49 109	781 111	581 653	679 340	14.21	11.43	13.83
Geese	1	12 135	10 796	9 136	74 310	61 953	53 008	6.12	5.74	5.80
	2	8 462	8 707	9 350	39 109	46 022	51 709	4.62	5.29	5.53
	Total	20 597	19 503	18 486	113 419	107 975	104 718	5.51	5.54	5.66
British Columbia										
Ducks	1	8 121	7 181	6 313	102 234	66 231	67 931	12.59	9.22	10.76
	2	7 884	7 225	7 502	157 371	144 308	136 462	19.96	19.97	18.19
	Total	16 006	14 406	13 815	259 605	210 539	204 394	16.22	14.61	14.79
Geese	1	1 729	2 344	2 324	5 992	6 958	9 204	3.46	2.97	3.96
	2	1 198	1 403	1 646	5 107	5 620	7 908	4.26	4.00	4.80
	Total	2 928	3 748	3 970	11 099	12 579	17 113	3.79	3.36	4.31
Northwest Territories										
Ducks	Total	1 539	1 317	924	20 778	18 133	9 420	13.50	13.77	10.19
Geese	Total	130	226	267	496	2 236	1 125	3.80	9.86	4.21
Yukon Territory										
Ducks	Total	344	244	286	3 075	2 972	2 979	8.92	12.14	10.42
Geese	Total	53	106	127	161	447	518	3.02	4.18	4.05
Canada Total										
Ducks		319 042	323 637	298 167	3 728 741	3 522 135	3 457 293	11.69	10.88	11.60
Geese		103 171	115 032	119 634	504 573	594 056	660 232	4.89	5.16	5.52

Table 6
Recreational activity provided by the hunting of ducks and geese, 1979

Area	Survey stratum	Total permit sales†	Active hunters	Successful hunters	Retrieved kill	Recreation days	S. bag* (av.)	D. bag* (av.)	R. days* (av.)
Nfld.	1	32 243	19 644	12 671	102 936	223 500	5.2	.5	11.4
	2	3 247	2 335	1 856	32 877	22 996	14.1	1.4	9.8
	Total	35 490	21 979	14 527	135 813	246 496	6.2	.6	11.2
PEI	Total	5 888	5 011	3 736	31 462	47 219	6.3	.7	9.4
NS	1	9 369	5 995	4 900	65 695	63 480	11.0	1.0	10.6
	2	4 729	4 074	2 927	28 841	32 077	7.1	.9	7.9
	Total	14 098	10 069	7 827	94 536	95 557	9.4	1.0	9.5
NB	1	9 138	5 912	4 766	37 766	35 070	6.4	1.1	5.9
	2	4 271	2 506	1 840	13 982	20 594	5.6	.7	8.2
	Total	13 409	8 418	6 606	51 748	55 664	6.1	.9	6.6
Que.	1	56 922	42 985	36 416	443 335	390 063	10.3	1.1	9.1
	2	16 287	12 586	10 122	105 339	108 966	8.4	1.0	8.7
	Total	73 209	55 571	46 538	548 674	499 029	9.9	1.1	9.0
Ont.	1	41 655	27 391	21 374	270 018	228 607	9.9	1.2	8.3
	2	81 727	64 538	51 087	445 227	417 211	6.9	1.1	6.5
	3	26 842	20 064	16 994	206 221	163 492	10.3	1.3	8.1
	Total	150 224	111 993	89 455	921 466	809 310	8.2	1.1	7.2
Man.	1	40 545	32 052	28 897	415 527	204 039	13.0	2.0	6.4
	2	8 799	10 902	10 132	163 549	87 497	15.0	1.9	8.0
	Total	49 344	42 954	39 029	579 076	291 536	13.5	2.0	6.8
Sask.	1	20 724	17 685	16 226	254 119	116 649	14.4	2.2	6.6
	2	10 989	10 427	9 673	176 952	77 218	17.0	2.3	7.4
	3	24 461	20 423	19 136	304 059	146 094	14.9	2.1	7.2
	Total	56 174	48 535	45 035	735 130	339 961	15.1	2.2	7.0
Alta.	1	29 511	22 424	18 771	252 453	146 643	11.3	1.7	6.5
	2	47 510	37 355	33 670	531 605	264 812	14.2	2.0	7.1
	Total	77 021	59 779	52 441	784 058	411 455	13.1	1.9	6.9
BC	1	12 562	8 402	6 656	77 136	54 635	9.2	1.4	6.5
	2	15 701	8 626	7 658	144 371	89 106	16.7	1.6	10.3
	Total	28 263	17 028	14 314	221 507	143 741	13.0	1.5	8.4
NWT	Total	755	1 408	946	10 546	9 775	7.5	1.1	6.9
Yukon	Total	584	395	308	3 497	2 324	8.9	1.5	5.9
Canada	Total	504 459	383 140	320 762	4 117 513	2 952 067	10.7	1.4	7.7

* S. bag, seasonal bag per average hunter; D. bag, daily bag per average hunter; R. days, recreation days per average hunter.
† Migratory game bird hunting permits.

Table 7
Estimated retrieved kill of migratory game birds other than waterfowl in Canada, 1974-79

Species	1974	1975	1976	1977	1978	1979	1974-79 average
American Woodcock	113 297	130 898	159 094	125 530	139 396	106 771	129 164
Common Snipe	107 420	97 998	106 977	84 711	100 011	82 265	96 564
American Coot	48 931	53 407	47 981	26 941	35 011	30 073	40 391
Sandhill Crane	6 699	6 165	1 636	367	876	3 798	3 257
Mourning Dove	1 593	2 348	3 700	5 388	1 575	1 100	2 617
Band-tailed Pigeon	5 822	5 197	3 286	4 736	3 836	4 240	4 520
Total	283 762	296 013	322 668	247 673	280 705	228 247	276 511

Table 8
Estimated number of successful hunters of woodcock and of their retrieved kill, 1977-79

Area	Survey stratum	Successful hunters			Birds killed			Average kill/ successful hunter		
		1977	1978	1979	1977	1978	1979	1977	1978	1979
PEI	1	215	116	106	566	394	327	2.6	3.4	3.1
NS	1	546	677	469	3 105	4 480	4 984	5.7	6.6	10.6
	2	418	495	211	2 896	1 848	1 361	6.9	3.7	6.5
	Total	964	1 173	680	6 001	6 328	6 345	6.2	5.4	9.3
NB	1	942	917	696	-9 149	8 997	6 837	9.7	9.8	9.8
	2	375	384	370	3 941	2 693	4 217	10.5	7.0	11.4
	Total	1 317	1 302	1 066	13 090	11 691	11 055	9.9	9.0	10.4
Que.	1	4 549	6 019	5 069	26 910	42 530	28 856	5.9	7.1	5.7
	2	985	1 010	796	3 700	4 480	3 256	3.8	4.4	4.1
	Total	5 534	7 030	5 865	30 610	47 011	32 112	5.5	6.7	5.5
Ont.	1	3 998	4 234	3 422	26 179	27 646	20 390	6.6	6.5	6.0
	2	7 797	8 450	6 208	44 500	32 236	28 219	5.7	4.5	4.6
	3	984	1 139	1 269	4 581	8 089	8 322	4.7	7.1	6.6
	Total	12 779	13 825	10 901	75 260	73 972	56 932	5.9	5.4	5.2
Canada	Total	20 812	23 459	18 620	125 532	139 396	106 773	6.0	5.9	5.7
No. sampled		663	834	643						
% sampled		3.19	3.55	3.45						

Table 9
Estimated number of successful hunters of Common Snipe and of their retrieved kill, 1977-79

Area	Survey stratum	Successful hunters			Birds killed			Average kill/ successful hunter		
		1977	1978	1979	1977	1978	1979	1977	1978	1979
Nfld.	1	4 128	3 429	3 234	19 043	18 578	16 875	4.6	5.4	5.2
	2	183	78	113	1 935	143	388	10.6	1.8	3.4
	Total	4 311	3 508	3 347	20 978	18 722	17 264	4.9	5.3	5.2
PEI	Total	287	154	179	1 203	1 491	432	4.2	9.6	2.4
NS	1	382	395	380	1 862	1 987	2 424	4.9	5.0	6.4
	2	491	434	297	2 329	1 507	2 692	4.7	3.5	9.1
	Total	873	829	677	4 191	3 495	5 117	4.8	4.2	7.6
NB	1	297	407	226	1 089	1 217	726	3.7	3.0	3.2
	2	173	201	119	802	1 679	578	4.6	8.4	4.8
	Total	470	608	345	1 891	2 896	1 305	4.0	4.8	3.8
Que.	1	4 654	6 057	4 903	20 004	30 093	26 631	4.3	5.0	5.4
	2	982	1 552	740	6 964	10 933	3 486	7.1	7.0	4.7
	Total	5 636	7 610	5 643	26 968	41 027	30 117	4.8	5.4	5.3
Ont.	1	572	1 007	702	2 865	4 989	2 972	5.0	5.0	4.2
	2	2 227	1 646	2 046	7 212	6 409	7 570	3.2	3.9	3.7
	3	521	501	563	2 999	1 763	2 186	5.8	3.5	3.9
	Total	3 320	3 155	3 312	13 076	13 163	12 730	3.9	4.2	3.8
Man.	1	284	371	230	715	1 626	1 255	2.5	4.4	5.5
	2	204	110	271	1 057	468	2 429	5.2	4.2	9.0
	Total	488	481	501	1 772	2 095	3 684	3.6	4.4	7.4
Sask.	1	403	80	114	1 755	201	620	4.4	2.5	5.4
	2	99	136	138	432	681	710	4.4	5.0	5.1
	3	266	269	136	1 475	901	481	5.5	3.4	3.5
	Total	768	485	390	3 662	1 789	1 812	4.8	3.7	4.7
Alta.	1	600	550	518	2 863	2 085	1 937	4.8	3.8	3.7
	2	683	790	747	4 649	8 505	6 008	6.8	10.8	8.0
	Total	1 283	1 341	1 266	7 512	10 590	7 945	5.9	7.9	6.3
BC	1	228	217	154	1 024	730	529	4.5	3.4	3.4
	2	309	689	359	2 403	3 957	1 318	7.8	5.7	3.7
	Total	537	906	514	3 427	4 688	1 847	6.4	5.2	3.6
NWT	Total	0	3	5	0	10	9	0	3.0	1.7
Yukon	Total	6	6	1	24	41	3	3.5	6.4	2.0
Canada	Total	17 990	19 093	16 186	84 715	100 011	82 271	4.7	5.2	5.1
No. sampled		622	745	545						
% sampled		3.46	3.90	3.37						

Table 10
Estimated number of successful hunters of American Coot
and of their retrieved kill, 1977-79

Area	Survey stratum	Successful hunters			Birds killed			Average kill/ successful hunter		
		1977	1978	1979	1977	1978	1979	1977	1978	1979
Que.	1	1 472	1 560	1 201	3 802	5 463	3 782	2.6	3.5	3.2
	2	155	242	313	280	947	1 201	1.8	3.9	3.8
	Total	1 627	1 802	1 515	4 082	6 411	4 983	2.5	3.6	3.3
Ont.	1	448	805	563	907	3 245	1 449	2.0	4.0	2.6
	2	574	1 124	1 634	1 289	2 808	5 971	2.2	2.5	3.7
	3	319	699	563	1 551	3 643	3 237	4.9	5.2	5.8
	Total	1 341	2 630	2 761	3 747	9 697	10 657	2.8	3.7	3.9
Man.	1	419	565	429	2 237	3 176	1 470	5.3	5.6	3.4
	2	183	161	172	1 103	1 369	2 149	6.0	8.5	12.4
	Total	602	726	602	3 340	4 545	3 619	5.5	6.3	6.0
Sask.	1	403	334	314	1 594	1 425	853	3.9	4.3	2.7
	2	244	268	303	1 564	1 347	3 170	6.4	5.0	10.4
	3	487	515	507	3 105	2 517	1 554	6.4	4.9	3.1
	Total	1 134	1 119	1 125	6 263	5 290	5 578	5.5	4.7	5.0
Alta.	1	513	738	254	2 347	2 891	780	4.6	3.9	3.1
	2	1 056	1 183	998	4 898	4 538	3 440	4.6	3.8	3.5
	Total	1 569	1 921	1 252	7 245	7 430	4 220	4.6	3.9	3.4
BC	1	248	148	208	1 556	689	713	6.3	4.6	3.4
	2	72	104	78	613	584	233	8.5	5.6	3.0
	Total	320	253	287	2 169	1 274	946	6.8	5.0	3.3
NWT		22	76	24	67	330	70	3.0	4.3	2.9
Yukon		17	6	—	24	30	—	1.4	4.8	—
Canada	Total	6 642	8 536	7 569	26 945	35 011	30 077	4.1	4.1	4.0
No. sampled		216	303	231						
% sampled		3.25	3.55	3.05						

Table 11
Estimated number of successful hunters of Sandhill Crane
and of their retrieved kill, 1977-79

Area	Survey stratum	Successful hunters			Birds killed			Average kill/ successful hunter		
		1977	1978	1979	1977	1978	1979	1977	1978	1979
Man.	Total	183	231	372	367	876	977	2.0	3.8	2.6
Sask.	Total	*	*	862	*	*	2 821	—	—	3.3
	Total	183	231	1 234	367	876	3 798	2.0	3.8	3.1
No. sampled		7	9	49						
% sampled		3.83	3.18	3.97						

* Closed season.

Table 12
Estimated number of successful hunters of Mourning Dove
and of their retrieved kill, 1977-79

Area	Survey stratum	Successful hunters			Birds killed			Average kill/ successful hunter		
		1977	1978	1979	1977	1978	1979	1977	1978	1979
BC	1	282	81	66	2 858	855	380	10.1	10.4	5.7
	2	188	59	61	2 530	719	719	13.4	12.0	11.8
	Total	470	141	128	5 388	1 575	1 100	11.5	11.1	8.6
No. sampled		22	7	9						
% sampled		4.68	4.96	7.03						

Table 13
Estimated number of successful hunters of Band-tailed
Pigeon and of their retrieved kill, 1977-79

Area	Survey stratum	Successful hunters			Birds killed			Average kill/ successful hunter		
		1977	1978	1979	1977	1978	1979	1977	1978	1979
BC	1	18	18	15	208	108	15	11.0	6.0	1.0
	2	671	622	604	4 527	3 727	4 225	6.7	6.0	7.0
	Total	689	640	619	4 735	3 836	4 240	6.9	6.0	6.8
No. sampled		33	28	34						
% sampled		4.78	4.38	5.49						

Table 14
Estimated recreation activity provided by the hunting of migratory game birds other than waterfowl in 1979

Area	Survey stratum	Total permit sales†	Active hunters	Successful hunters	Retrieved kill	Recreation days	S. bag* (av.)	D. bag* (av.)	R. days* (av.)
Nfld.	1	32 243	5 327	3 234	16 875	48 262	3.2	.3	9.1
	2	3 247	472	113	388	4 618	.8	.1	9.8
	Total	35 490	5 799	3 347	17 263	52 880	3.0	.3	9.1
PEI	Total	5 888	689	269	759	5 433	1.1	.1	7.9
NS	1	9 369	2 011	755	7 409	16 121	3.7	.5	8.0
	2	4 729	820	444	4 053	5 238	4.9	.8	6.4
	Total	14 098	2 831	1 199	11 462	21 359	4.0	.5	7.5
NB	1	9 138	1 534	797	7 564	9 947	4.9	.8	6.5
	2	4 271	873	444	4 796	6 591	5.5	.7	7.5
	Total	13 409	2 407	1 241	12 360	16 538	5.1	.7	6.9
Que.	1	56 922	12 394	8 624	59 269	75 116	4.8	.8	6.1
	2	16 287	2 735	1 564	7 944	18 370	2.9	.4	6.7
	Total	73 209	15 129	10 188	67 213	93 486	4.4	.7	6.2
Ont.	1	41 655	6 512	4 154	24 811	41 524	3.8	.6	6.4
	2	81 727	13 443	8 257	41 761	78 906	3.1	.5	5.9
	3	26 842	3 205	1 919	13 746	21 765	4.3	.6	6.8
	Total	150 224	23 160	14 330	80 318	142 195	3.5	.6	6.1
Man.	1	40 545	2 604	745	2 924	8 857	1.1	.3	3.4
	2	8 799	1 391	659	6 728	10 971	4.8	.6	7.9
	Total	49 344	3 995	1 404	9 652	19 828	2.4	.5	5.0
Sask.	1	20 724	1 527	429	1 474	6 413	1.0	.2	4.2
	2	10 989	998	372	3 881	4 915	3.9	.8	4.9
	3	24 461	2 133	617	2 035	7 875	1.0	.3	3.7
	Total	56 174	4 658	1 418	7 390	19 203	1.6	.4	4.1
Alta.	1	29 511	2 042	644	2 717	8 063	1.3	.3	3.9
	2	47 510	3 745	1 443	9 449	21 940	2.5	.4	5.9
	Total	77 021	5 787	2 087	12 166	30 003	2.1	.4	5.2
BC	1	12 562	1 137	357	1 638	8 561	1.4	.2	7.5
	2	15 701	1 505	946	6 496	7 460	4.3	.9	5.0
	Total	28 263	2 642	1 303	8 134	16 021	3.1	.5	6.1
NWT		755	34	26	79	104	2.3	.8	3.1
Yukon		584	19	1	3	126	.2	.0	6.6
Canada		504 459	67 150	36 813	226 799	417 176	3.4	.5	6.2

* S. bag, seasonal bag per average hunter; D. bag, daily bag per average hunter; R. days, recreation days per average hunter.
† Migratory game bird hunting permits.

Table 15
Precision of estimates at 95% confidence of duck and goose kill from the NHS, 1978-79

Area	Zone	Year	Active hunters (±%)	Duck harvest (±%)	Goose harvest (±%)
Nfld.	01	1978	22 816 ± 4.18	115 337 ± 9.31	8 841 ± 22.15
		1979	19 004 ± 5.44	94 219 ± 17.88	8 717 ± 33.86
	02	1978	2 346 ± 9.87	27 322 ± 25.18	4 603 ± 34.46
		1979	2 329 ± 11.81	27 981 ± 30.81	4 896 ± 37.76
PEI	01	1978	5 391 ± 6.16	30 042 ± 15.36	11 823 ± 21.00
		1979	4 932 ± 6.22	20 943 ± 16.19	10 519 ± 23.40
NS	01	1978	7 009 ± 5.85	75 613 ± 11.24	4 280 ± 21.01
		1979	5 925 ± 6.80	61 311 ± 18.25	4 383 ± 28.10
	02	1978	4 947 ± 6.61	33 928 ± 11.42	2 529 ± 30.60
		1979	4 057 ± 7.63	27 073 ± 13.96	1 767 ± 31.20
NB	01	1978	7 300 ± 4.40	51 331 ± 9.93	1 455 ± 34.67
		1979	6 003 ± 5.56	36 613 ± 10.68	1 153 ± 63.38
	02	1978	2 935 ± 7.86	14 510 ± 16.19	1 806 ± 29.93
		1979	2 637 ± 7.86	12 506 ± 15.31	1 475 ± 33.65
Que.	01	1978	44 844 ± 3.66	414 179 ± 8.20	86 055 ± 12.29
		1979	40 953 ± 4.19	381 355 ± 9.89	61 979 ± 12.71
	02	1978	13 221 ± 5.89	114 904 ± 11.34	22 509 ± 18.88
		1979	12 164 ± 7.22	87 650 ± 15.09	17 688 ± 20.98
Ont.	01	1978	29 438 ± 4.72	271 255 ± 9.03	19 483 ± 18.52
		1979	26 757 ± 5.35	247 943 ± 9.88	22 074 ± 17.81
	02	1978	72 363 ± 3.97	495 362 ± 8.64	29 378 ± 26.27
		1979	63 652 ± 4.63	417 325 ± 9.83	27 902 ± 21.14
		1978	19 737 ± 5.06	176 545 ± 9.30	15 720 ± 19.56
		1979	19 722 ± 6.13	180 156 ± 9.34	26 065 ± 20.21
Man.	01	1978	32 353 ± 3.27	244 434 ± 7.07	94 734 ± 10.02
		1979	31 517 ± 3.44	261 798 ± 7.60	153 729 ± 7.87
	02	1978	11 838 ± 6.00	116 761 ± 10.05	29 476 ± 13.53
		1979	10 772 ± 6.31	121 582 ± 10.23	41 967 ± 14.00
Sask.	01	1978	18 876 ± 5.58	148 894 ± 10.97	72 519 ± 13.32
		1979	17 430 ± 5.68	173 335 ± 13.65	80 784 ± 12.01
	02	1978	10 094 ± 6.83	136 701 ± 11.97	16 517 ± 21.95
		1979	10 413 ± 6.96	154 398 ± 11.49	22 553 ± 17.34
		1978	22 535 ± 4.48	241 708 ± 8.14	49 481 ± 13.18
		1979	20 112 ± 4.92	254 962 ± 8.14	49 097 ± 12.42
Alta.	01	1978	26 162 ± 4.49	203 039 ± 9.98	61 953 ± 15.48
		1979	22 395 ± 5.19	199 444 ± 11.66	53 008 ± 15.75
	02	1978	36 959 ± 3.80	378 614 ± 6.64	46 022 ± 14.89
		1979	37 072 ± 4.02	479 896 ± 6.87	51 709 ± 14.40
BC	01	1978	9 500 ± 7.56	66 231 ± 13.27	6 958 ± 25.44
		1979	8 363 ± 7.51	67 931 ± 13.54	9 204 ± 22.35
	02	1978	8 969 ± 7.47	144 308 ± 12.58	5 620 ± 29.40
		1979	8 580 ± 7.02	136 462 ± 12.18	7 908 ± 29.15

(cont'd)

Table 15 (cont'd)

Precision of estimates at 95% confidence of duck and goose kill from the NHS, 1978-79

Area	Zone	Year	Active hunters (\pm %)	Duck harvest (\pm %)	Goose harvest (\pm %)
NWT	01	1978	2 893 \pm 23.75	18 133 \pm 55.57	2 236 \pm *
		1979	1 289 \pm 27.62	9 420 \pm 41.96	1 125 \pm 78.11
Yukon	01	1978	350 \pm 15.24	2 972 \pm 39.47	447 \pm 43.79
		1979	381 \pm 20.85	2 979 \pm 41.13	518 \pm 71.33

* Standard error greater than estimate.

Table 16

Net intensity of the Species Composition Survey, 1979

Zone	Permit sales	Mailing size	Return rate	Est. resp. rate from suc. hunt.	Net cov. of hunt. pop.	Parts recd.	
Nfld.	01	32 243	1 063	.143	.31	.0047	472
	02	3 247	447	.065	.12	.0089	113
PEI		5 888	1 285	*	*	*	492
NS	01	9 369	2 215	.111	.19	.0263	1 149
	02	4 729	1 301	.160	.29	.0440	943
NB	01	9 138	1 107	.232	.35	.0281	1 350
	02	4 271	915	.091	.18	.0194	393
Que.	01	56 922	2 649	.251	.36	.0117	3 338
	02	15 287	1 572	.123	.21	.0119	1 218
Ont.	01	41 655	2 977	.183	.32	.0131	2 771
	02	81 727	2 822	.258	.40	.0089	3 627
	03	26 842	2 705	.135	.21	.0136	2 213
Man	01	40 545	1 464	.311	.39	.0112	3 089
	02	8 799	456	.276	.36	.0143	959
Sask.	01	20 724	620	.303	.38	.0091	1 174
	02	10 989	518	.236	.30	.0111	864
	03	24 461	880	.232	.30	.0083	1 565
Alta.	01	29 511	908	.207	.30	.0064	997
	02	47 510	921	.278	.38	.0054	2 171
BC	01	12 562	1 839	.101	.19	.0148	759
	02	15 701	2 043	.108	.16	.0141	1 610
NWT		755	241	.083	.11	.0265	86
Yukon		584	183	.093	.13	.0291	57
Canada		504 459	31 131	.176	.27	.0109	31 410

* Not calculated.

Table 17
Total waterfowl harvest in Canada

	1976		1977		1978		1979	
	Harvest	%	Harvest	%	Harvest	%	Harvest	%
Common Merganser	21 278	0.5	22 566	0.6	34 113	1.0	26 151	0.8
Red-breasted Merganser	21 250	0.5	19 471	0.5	7 347	0.2	11 783	0.3
Hooded Merganser	37 174	0.9	41 917	1.1	35 493	1.0	30 451	0.9
Mallard	1 952 315	46.3	1 564 774	42.0	1 529 404	43.4	1 612 464	46.8
Black Duck	344 173	8.2	360 536	9.7	378 785	10.8	316 627	9.2
Gadwall	128 789	3.1	95 125	2.6	108 081	3.1	103 568	3.0
American Wigeon	152 605	3.6	154 194	4.1	137 363	3.9	122 143	3.5
Green-winged Teal	241 005	5.7	271 165	7.3	228 260	6.5	162 731	4.7
Blue-winged Teal	184 864	4.4	145 986	3.9	136 477	3.9	109 007	3.3
Shoveler	66 186	1.6	44 019	1.2	45 467	1.3	48 291	1.4
Pintail	201 827	4.8	195 676	5.2	135 366	3.8	146 300	4.2
Wood Duck	110 094	2.6	127 527	3.4	143 271	4.1	113 528	3.3
Redhead	61 839	1.5	40 309	1.1	41 659	1.2	66 384	1.9
Canvasback	38 092	0.9	16 959	0.5	28 465	0.8	35 522	1.0
Greater Scaup	75 141	1.8	71 813	1.9	43 825	1.2	50 459	1.5
Lesser Scaup	150 634	3.6	117 795	3.2	96 403	2.7	99 103	2.9
Ring-necked Duck	94 882	2.3	119 112	3.2	120 392	3.4	126 370	3.7
Goldeneye	108 938	2.6	105 911	2.8	122 518	3.5	100 380	2.9
Bufflehead	65 947	1.6	71 426	1.9	69 492	2.0	61 762	1.8
Ruddy Duck	7 444	0.2	3 730	0.1	1 201	0.0	8 300	0.2
Total sport ducks	4 064 477	96.5	3 590 011	96.3	3 443 382	97.8	3 351 324	97.2
Oldsquaw	19 424	0.5	9 907	0.3	11 288	0.3	21 048	0.6
Common Eider	33 466	0.8	33 929	0.9	30 882	0.9	25 053	0.7
Common Scoter	33 753	0.8	41 150	1.1	11 296	0.3	17 295	0.5
White-winged Scoter	17 541	0.4	17 349	0.5	10 634	0.3	17 291	0.5
Surf Scoter	43 956	1.0	36 286	1.0	14 558	0.4	15 403	0.4
Total sea ducks	148 140	3.5	138 621	3.7	78 658	2.2	96 090	2.8
Total ducks	4 212 617	89.0	3 728 632	88.1	3 522 040	85.6	3 447 414	83.9
Canada Goose	331 197	63.6	343 124	68.0	406 469	68.4	431 462	65.4
Snow Goose	121 765	23.4	99 090	19.7	120 638	20.3	159 012	24.1
White-fronted Goose	61 762	11.9	57 782	11.5	62 128	10.5	60 938	9.2
Ross' Goose	5 038	1.0	4 143	0.8	4 809	0.8	8 283	1.3
Brant	609	0.1	100	0.0	0	0.0	524	0.1
Total geese	520 371	11.0	504 239	11.9	594 044	14.4	660 219	16.1
Total waterfowl	4 732 988	100.0	4 232 871	100.0	4 116 084	100.0	4 107 633	100.0

Table 18
Estimated retrieved kill of waterfowl in Newfoundland

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	2 646	3.5	2 631	2.6	8 584	7.4	5 666	6.0
	02	957	4.3	1 348	4.3	2 441	8.9	805	2.9
	Total	3 603	3.7	3 979	3.0	11 025	7.7	6 471	5.3
Red-breasted Merganser	01	6 002	7.9	3 963	3.9	4 441	3.9	1 344	1.4
	02	870	3.9	1 544	4.9	0	0.0	2 851	10.2
	Total	6 872	7.0	5 507	4.1	4 441	3.1	4 195	3.4
Hooded Merganser	01	0	0.0	0	0.0	0	0.0	45	0.0
	Total	0	0.0	0	0.0	0	0.0	45	0.0
Mallard	01	649	0.9	837	0.8	200	0.2	0	0.0
	02	59	0.3	312	1.0	582	2.1	456	1.6
	Total	708	0.7	1 149	0.9	782	0.5	456	0.4
Black Duck	01	20 933	27.4	30 250	29.9	41 464	36.0	33 398	35.4
	02	2 301	10.4	10 804	34.1	4 780	17.5	8 274	29.6
	Total	23 234	23.6	41 054	30.9	46 244	32.4	41 672	34.1
Gadwall	02	0	0.0	0	0.0	138	0.5	0	0.0
	Total	0	0.0	0	0.0	138	0.1	0	0.0
American Wigeon	01	588	0.8	745	0.7	552	0.5	140	0.1
	Total	588	0.6	745	0.6	552	0.4	140	0.1
Green-winged Teal	01	11 679	15.3	15 780	15.6	27 549	23.9	13 362	14.2
	02	2 333	10.5	4 176	13.2	3 283	12.0	4 283	15.3
	Total	14 012	14.2	19 956	15.0	30 832	21.6	17 645	14.4
Blue-winged Teal	01	926	1.2	1 755	1.7	895	0.8	230	0.2
	02	0	0.0	0	0.0	582	2.1	95	0.3
	Total	926	0.9	1 755	1.3	1 477	1.0	325	0.3
Pintail	01	410	0.5	1 978	2.0	619	0.5	370	0.4
	02	899	4.1	435	1.4	275	1.0	1 428	5.1
	Total	1 309	1.3	2 413	1.8	894	0.6	1 798	1.5
Wood Duck	01	98	0.1	0	0.0	0	0.0	2 169	2.3
	Total	98	0.1	0	0.0	0	0.0	2 169	1.8
Greater Scaup	01	1 792	2.3	2 319	2.3	276	0.2	642	0.7
	02	905	4.1	87	0.3	1 479	5.4	0	0.0
	Total	2 697	2.7	2 406	1.8	1 755	1.2	642	0.5
Lesser Scaup	01	482	0.6	0	0.0	0	0.0	0	0.0
	02	184	0.8	624	2.0	1 314	4.8	267	1.0
	Total	666	0.7	624	0.5	1 314	0.9	267	0.2
Ring-necked Duck	01	7 181	9.4	12 635	12.5	7 664	6.6	12 555	13.3
	02	0	0.0	0	0.0	1 287	4.7	0	0
	Total	7 181	7.3	12 635	9.5	8 951	6.3	12 555	10.3
Goldeneye	01	6 633	8.7	13 985	13.8	12 338	10.7	11 227	11.9
	02	5 585	25.2	1 233	3.9	5 704	20.9	6 054	21.6
	Total	12 218	12.4	15 218	11.5	18 042	12.6	17 281	14.1
Bufflehead	02	0	0.0	1 232	3.9	0	0.0	0	0.0
	Total	0	0.0	1 232	0.9	0	0.0	0	0.0
Total sport ducks		74 112	75.3	108 673	81.8	126 447	88.6	105 661	86.5

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Newfoundland

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Oldsquaw	01	2 154	2.8	666	0.7	0	0.0	0	0.0
	02	109	0.5	0	0.0	0	0.0	0	0.0
	Total	2 263	2.3	666	0.5	0	0.0	0	0.0
Common Eider	01	9 733	12.8	10 082	10.0	9 846	8.5	11 205	11.9
	02	4 698	21.2	5 628	17.8	4 719	17.3	1 463	5.2
	Total	14 431	14.7	15 710	11.8	14 565	10.2	12 668	10.4
Common Scoter	01	1 642	2.2	3 226	3.2	395	0.3	1 504	1.6
	02	1 635	7.4	3 239	10.2	0	0.0	358	1.3
	Total	3 277	3.3	6 465	4.9	395	0.3	1 862	1.5
White-winged Scoter	01	106	0.1	0	0.0	514	0.4	0	0.0
	02	0	0.0	0	0.0	0	0.0	1 202	4.3
	Total	106	0.1	0	0.0	514	0.4	1 202	1.0
Surf Scoter	01	2 614	3.4	358	0.4	0	0.0	362	0.4
	02	1 594	7.2	1 015	3.2	739	2.7	446	1.6
	Total	4 208	4.3	1 373	1.0	739	0.5	808	0.7
Total sea ducks		24 285	24.7	24 214	18.2	16 213	11.4	16 540	13.5
Total ducks		98 397	92.1	132 887	91.4	142 660	91.6	122 201	90.0
Canada Goose	01	5 815	100.0	7 784	100.0	8 441	100.0	8 717	100.0
	02	2 640	100.0	4 776	100.0	4 603	100.0	4 896	100.0
	Total	8 455	100.0	12 560	100.0	13 044	100.0	13 613	100.0
Total geese		8 455	7.9	12 560	8.6	13 044	8.4	13 613	10.0
Waterfowl		106 852	100.0	145 447	100.0	155 704	100.0	135 814	100.0

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Prince Edward Island

Species	1976		1977		1978		1979	
	Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	0	0.0	200	0.7	150	0.5	327	1.6
Red-breasted Merganser	2 352	6.3	313	1.0	45	0.1	269	1.3
Hooded Merganser	0	0.0	67	0.2	0	0.0	0	0.0
Mallard	292	0.8	212	0.7	297	1.0	450	2.1
Black Duck	22 124	59.1	17 717	58.7	20 008	66.6	12 667	60.5
American Wigeon	155	0.4	147	0.5	268	0.9	202	1.0
Green-winged Teal	7 610	20.3	6 699	22.2	6 093	20.3	5 302	25.3
Blue-winged Teal	1 278	3.4	799	2.6	1 071	3.6	817	3.9
Pintail	650	1.7	1 778	5.9	771	2.6	576	2.8
Wood Duck	0	0.0	49	0.2	45	0.1	0	0.0
Greater Scaup	0	0.0	229	0.8	0	0.0	0	0.0
Lesser Scaup	89	0.2	66	0.2	45	0.1	0	0.0
Ring-necked Duck	671	1.8	524	1.7	357	1.2	180	0.9
Goldeneye	584	1.6	49	0.2	348	1.2	90	0.4
Ruddy Duck	195	0.5	0	0.0	0	0.0	64	0.3
Total sport ducks	36 000	96.2	28 849	95.5	29 498	98.2	20 944	100.0
Oldsquaw	499	1.3	488	1.6	309	1.0	0	0.0
Common Eider	45	0.1	67	0.2	45	0.1	0	0.0
Common Scoter	0	0.0	98	0.3	0	0.0	0	0.0
White-winged Scoter	185	0.5	0	0.0	117	0.4	0	0.0
Surf Scoter	710	1.9	691	2.3	75	0.2	0	0.0
Total sea ducks	1 439	3.8	1 344	4.5	546	1.8	0	0.0
Total ducks	37 439	67.3	30 193	61.8	30 044	71.8	20 944	66.6
Canada Goose	17 925	98.5	18 653	100.0	11 823	100.0	10 157	96.6
Large Canada Goose	0	0.0	0	0.0	0	0.0	362	3.4
Ross' Goose	269	1.5	0	0.0	0	0.0	0	0.0
Total geese	18 194	32.7	18 653	38.2	11 823	28.2	10 519	33.4
Waterfowl	55 633	100.0	48 846	100.0	41 867	100.0	31 463	100.0

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Nova Scotia

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	416	0.5	1 320	1.4	1 291	1.7	1 116	1.8
	02	146	0.4	945	2.5	1 095	3.2	427	1.6
	Total	562	0.5	2 265	1.7	2 386	2.2	1 543	1.7
Red-breasted Merganser	01	1 201	1.4	2 757	2.8	432	0.6	1 828	3.0
	02	301	0.9	605	1.6	361	1.1	177	0.7
	Total	1 502	1.3	3 362	2.5	793	0.7	2 005	2.3
Hooded Merganser	01	431	0.5	491	0.5	256	0.3	402	0.7
	02	32	0.1	292	0.8	64	0.2	276	1.0
	Total	463	0.4	783	0.6	320	0.3	678	0.8
Mallard	01	727	0.9	968	1.0	850	1.1	512	0.8
	02	758	2.3	1 293	3.4	326	1.0	259	1.0
	Total	1 485	1.3	2 261	1.7	1 176	1.1	771	0.9
Black Duck	01	36 670	43.2	46 392	47.9	42 016	55.6	28 456	46.4
	02	20 616	62.6	21 487	57.0	22 723	67.0	15 462	57.1
	Total	57 286	48.6	67 879	50.5	64 739	59.1	43 918	49.7
Gadwall	01	0	0.0	93	0.1	58	0.1	0	0.0
	Total	0	0.0	93	0.1	58	0.1	0	0.0
American Wigeon	01	244	0.3	49	0.1	88	0.1	147	0.2
	02	212	0.6	350	0.9	132	0.4	168	0.6
	Total	456	0.4	399	0.3	220	0.2	315	0.4
Green-winged Teal	01	8 543	10.1	8 334	8.6	6 855	9.1	5 480	8.9
	02	5 245	15.9	5 713	15.2	5 326	15.7	3 525	13.0
	Total	13 788	11.7	14 047	10.4	12 181	11.1	9 005	10.2
Blue-winged Teal	01	432	0.5	291	0.3	634	0.8	520	0.8
	02	1 558	4.7	1 849	4.9	599	1.8	1 084	4.0
	Total	1 990	1.7	2 140	1.6	1 233	1.1	1 604	1.8
Shoveler	01	0	0.0	0	0.0	29	0.0	0	0.0
	02	32	0.1	0	0.0	0	0.0	0	0.0
	Total	32	0.0	0	0.0	29	0.0	0	0.0
Pintail	01	883	1.0	640	0.7	476	0.6	392	0.6
	02	121	0.4	512	1.4	197	0.6	111	0.4
	Total	1 004	0.9	1 152	0.9	673	0.6	503	0.6
Wood Duck	01	53	0.1	312	0.3	478	0.6	703	1.1
	02	170	0.5	283	0.8	296	0.9	240	0.9
	Total	223	0.2	595	0.4	774	0.7	943	1.1
Redhead	02	0	0.0	0	0.0	0	0.0	16	0.1
	Total	0	0.0	0	0.0	0	0.0	16	0.0
Canvasback	01	227	0.3	0	0.0	0	0.0	0	0.0
	Total	227	0.2	0	0.0	0	0.0	0	0.0
Greater Scaup	01	2 303	2.7	771	0.8	760	1.0	88	0.1
	02	0	0.0	235	0.6	0	0.0	211	0.8
	Total	2 303	2.0	1 006	0.7	760	0.7	299	0.3
Lesser Scaup	01	703	0.8	409	0.4	0	0.0	46	0.1
	02	0	0.0	403	1.1	0	0.0	161	0.6
	Total	703	0.6	812	0.6	0	0.0	207	0.2

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Nova Scotia

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Ring-necked Duck	01	3 084	3.6	2 197	2.3	2 060	2.7	2 068	3.4
	02	773	2.3	1 369	3.6	683	2.0	1 897	7.0
	Total	3 857	3.3	3 566	2.7	2 743	2.5	3 965	4.5
Goldeneye	01	1 516	1.8	4 330	4.5	6 111	8.1	2 103	3.4
	02	754	2.3	1 141	3.0	1 621	4.8	1 039	3.8
	Total	2 270	1.9	5 471	4.1	7 732	7.1	3 142	3.6
Bufflehead	01	1 230	1.4	3 203	3.3	599	0.8	1 377	2.2
	02	86	0.3	56	0.1	0	0.0	447	1.7
	Total	1 316	1.1	3 259	2.4	599	0.5	1 824	2.1
Ruddy Duck	01	162	0.2	0	0.0	0	0.0	0	0.0
	02	345	1.0	0	0.0	0	0.0	0	0.0
	Total	507	0.4	0	0.0	0	0.0	0	0.0
Total sport ducks		89 974	76.3	109 090	81.1	96 416	88.0	70 738	80.0
Oldsquaw	01	1 678	2.0	2 172	2.2	1 183	1.6	4 597	7.5
	02	254	0.8	112	0.3	289	0.9	865	3.2
	Total	1 932	1.6	2 284	1.7	1 472	1.3	5 462	6.2
Common Eider	01	8 975	10.6	10 455	10.8	7 657	10.1	6 235	10.2
	02	157	0.5	141	0.4	145	0.4	80	0.3
	Total	9 132	7.7	10 596	7.9	7 802	7.1	6 315	7.1
King Eider	01	0	0.0	49	0.1	0	0.0	93	0.2
	Total	0	0.0	49	0.0	0	0.0	93	0.1
Harlequin Duck	01	0	0.0	0	0.0	0	0.0	108	0.2
	Total	0	0.0	0	0.0	0	0.0	108	0.1
Common Scoter	01	5 587	6.6	3 150	3.3	2 233	3.0	2 144	3.5
	02	126	0.4	158	0.4	0	0.0	62	0.2
	Total	5 713	4.8	3 308	2.5	2 233	2.0	2 206	2.5
White-winged Scoter	01	2 617	3.1	1 830	1.9	292	0.4	665	1.1
	02	399	1.2	255	0.7	72	0.2	406	1.5
	Total	3 016	2.6	2 085	1.6	364	0.3	1 071	1.2
Surf Scoter	01	7 213	8.5	6 617	6.8	1 255	1.7	2 230	3.6
	02	874	2.7	481	1.3	0	0.0	161	0.6
	Total	8 087	6.9	7 098	5.3	1 255	1.1	2 391	2.7
Total sea ducks		27 880	23.7	25 420	18.9	13 126	12.0	17 646	20.0
Total ducks		117 854	91.5	134 510	93.8	109 542	94.1	88 384	93.5
Canada Goose	01	7 622	100.0	4 874	96.9	4 280	100.0	4 383	100.0
	02	3 331	100.0	3 883	100.0	2 529	100.0	1 767	100.0
	Total	10 953	100.0	8 757	98.2	6 809	100.0	6 150	100.0
Snow Goose	01	0	0.0	58	1.2	0	0.0	0	0.0
	Total	0	0.0	58	0.7	0	0.0	0	0.0
Brant	01	0	0.0	100	2.0	0	0.0	0	0.0
	Total	0	0.0	100	1.1	0	0.0	0	0.0
Geese		10 953	8.5	8 915	6.2	6 809	5.9	6 150	6.5
Waterfowl		128 807	100.0	143 425	100.0	116 351	100.0	94 534	100.0

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in New Brunswick

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	0	0.0	494	1.2	415	0.8	179	0.5
	02	440	2.1	492	3.7	92	0.6	590	4.7
	Total	440	0.6	986	1.8	507	0.8	769	1.6
Red-breasted Merganser	01	451	1.0	0	0.0	65	0.1	46	0.1
	02	679	3.2	336	2.5	0	0.0	248	2.0
	Total	1 130	1.6	336	0.6	65	0.1	294	0.6
Hooded Merganser	01	356	0.8	206	0.5	828	1.6	431	1.2
	02	74	0.3	134	1.0	39	0.3	82	0.7
	Total	430	0.6	340	0.6	867	1.3	513	1.0
Mallard	01	728	1.5	549	1.3	1 433	2.8	896	2.4
	02	74	0.3	181	1.4	92	0.6	708	5.7
	Total	802	1.2	730	1.4	1 525	2.3	1 604	3.3
Black Duck	01	15 521	32.8	13 990	34.4	19 249	37.5	12 531	34.2
	02	10 710	50.5	5 636	42.8	7 010	48.3	4 842	38.7
	Total	26 231	38.2	19 626	36.4	26 259	39.9	17 373	35.4
American Wigeon	01	1 028	2.2	961	2.4	1 421	2.8	1 328	3.6
	02	696	3.3	631	4.8	0	0.0	334	2.7
	Total	1 724	2.5	1 592	3.0	1 421	2.2	1 662	3.4
Green-winged Teal	01	7 456	15.7	7 581	18.6	9 989	19.5	5 049	13.8
	02	3 289	15.5	2 682	20.4	4 513	31.1	2 272	18.2
	Total	10 745	15.7	10 263	19.1	14 502	22.0	7 321	14.9
Blue-winged Teal	01	4 454	9.4	3 421	8.4	4 914	9.6	4 558	12.4
	02	1 773	8.4	569	4.3	474	3.3	1 162	9.3
	Total	6 227	9.1	3 990	7.4	5 388	8.2	5 720	11.6
Shoveler	01	94	0.2	74	0.2	98	0.2	46	0.1
	Total	94	0.1	74	0.1	98	0.1	46	0.1
Pintail	01	1 005	2.1	686	1.7	728	1.4	775	2.1
	02	744	3.5	312	2.4	685	4.7	307	2.5
	Total	1 749	2.5	998	1.9	1 413	2.1	1 082	2.2
Wood Duck	01	1 463	3.1	1 792	4.4	2 079	4.1	1 268	3.5
	02	74	0.3	44	0.3	298	2.1	164	1.3
	Total	1 537	2.2	1 836	3.4	2 377	3.6	1 432	2.9
Greater Scaup	01	1 584	3.3	549	1.3	270	0.5	472	1.3
	02	166	0.8	97	0.7	193	1.3	0	0.0
	Total	1 750	2.6	646	1.2	463	0.7	472	1.0
Lesser Scaup	01	628	1.3	938	2.3	173	0.3	294	0.8
	02	148	0.7	47	0.4	539	3.7	83	0.7
	Total	776	1.1	985	1.8	712	1.1	337	0.8
Ring-necked Duck	01	3 896	8.2	2 875	7.1	2 740	5.3	3 184	8.7
	02	297	1.4	1 141	8.7	316	2.2	342	2.7
	Total	4 193	6.1	4 016	7.5	3 056	4.6	3 526	7.2

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in New Brunswick

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Goldeneye	01	6 418	13.5	4 304	10.6	5 374	10.5	4 395	12.0
	02	1 270	6.0	194	1.5	153	1.1	1 037	8.3
	Total	7 688	11.2	4 498	8.4	5 527	8.4	5 432	11.1
Bufflehead	01	0	0.0	669	1.6	333	0.6	357	1.0
	02	187	0.9	0	0.0	0	0.0	0	0.0
	Total	187	0.3	669	1.2	333	0.5	357	0.7
Ruddy Duck	01	238	0.5	0	0.0	0	0.0	0	0.0
	Total	238	0.3	0	0.0	0	0.0	0	0.0
Total sport ducks		65 941	96.1	51 585	95.8	64 513	98.0	47 980	97.7
Oldsquaw	01	475	1.0	0	0.0	0	0.0	237	0.6
	02	35	0.2	0	0.0	0	0.0	259	2.1
	Total	510	0.7	0	0.0	0	0.0	496	1.0
Common Eider	01	536	1.1	1 178	2.9	448	0.9	244	0.7
	02	0	0.0	224	1.7	0	0.0	0	0.0
	Total	536	0.8	1 402	2.6	448	0.7	244	0.5
Common Scoter	01	179	0.4	0	0.0	0	0.0	46	0.1
	02	74	0.3	47	0.4	0	0.0	27	0.2
	Total	253	0.4	47	0.1	0	0.0	73	0.1
White-winged Scoter	01	185	0.4	0	0.0	293	0.6	149	0.4
	Total	185	0.3	0	0.0	293	0.4	149	0.3
Surf Scoter	01	675	1.4	403	1.0	481	0.9	126	0.3
	02	492	2.3	411	3.1	106	0.7	49	0.4
	Total	1 167	1.7	814	1.5	587	0.9	175	0.4
Total sea ducks		2 651	3.9	2 263	4.2	1 328	2.0	1 137	2.3
Total ducks		68 592	91.3	53 848	95.6	65 841	95.3	49 117	94.9
Canada Goose	01	2 500	100.0	741	100.0	1 455	100.0	1 153	100.0
	02	4 038	100.0	1 758	100.0	1 760	97.5	1 475	100.0
	Total	6 538	100.0	2 499	100.0	3 215	98.6	2 628	100.0
Blue Goose	02	0	0.0	0	0.0	46	2.5	0	0.0
	Total	0	0.0	0	0.0	46	1.4	0	0.0
Total geese		6 538	8.7	2 499	4.4	3 261	4.7	2 628	5.1
Waterfowl		75 130	100.0	56 347	100.0	69 102	100.0	51 745	100.0

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Quebec

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	7 035	1.4	6 807	1.3	11 652	2.8	10 309	2.8
	02	5 675	5.0	3 738	3.3	2 737	2.4	1 578	1.8
	Total	12 710	2.1	10 545	1.7	14 389	2.7	11 887	2.6
Red-breasted Merganser	01	2 343	0.5	4 137	0.8	1 196	0.3	2 229	0.6
	02	2 232	2.0	1 894	1.7	337	0.3	1 106	1.3
	Total	4 575	0.8	6 031	1.0	1 533	0.3	3 335	0.7
Hooded Merganser	01	12 822	2.6	10 350	2.0	10 349	2.5	7 273	2.0
	02	847	0.7	1 107	1.0	886	0.8	3 074	3.5
	Total	13 669	2.3	11 457	1.8	11 235	2.1	10 347	2.2
Mallard	01	69 584	14.2	76 824	14.8	56 426	13.6	58 278	15.6
	02	4 083	3.6	6 776	6.0	6 023	5.2	9 972	11.4
	Total	73 667	12.2	83 600	13.2	62 449	11.8	68 250	14.8
Black Duck	01	89 075	18.2	104 811	20.2	89 955	21.7	82 441	22.1
	02	29 363	25.9	26 646	23.6	40 888	35.6	30 617	35.0
	Total	118 438	19.6	131 457	20.8	130 843	24.7	113 058	24.6
Gadwall	01	6 338	1.3	6 710	1.3	7 484	1.8	9 528	2.6
	02	54	0.0	0	0.0	0	0.0	231	0.3
	Total	6 392	1.1	6 710	1.1	7 484	1.4	9 759	2.1
American Wigeon	01	10 714	2.2	8 501	1.6	6 272	1.5	7 688	2.1
	02	919	0.8	642	0.6	598	0.5	1 436	1.6
	Total	11 633	1.9	9 143	1.4	6 870	1.3	9 124	2.0
Green-winged Teal	01	53 457	10.9	65 953	12.7	44 818	10.8	27 241	7.3
	02	15 324	13.5	17 443	15.5	15 755	13.7	8 375	9.6
	Total	68 781	11.4	83 396	13.2	60 573	11.4	35 616	7.7
Blue-winged Teal	01	52 861	10.8	43 044	8.3	33 218	8.0	12 617	3.4
	02	2 192	1.9	1 337	1.2	2 790	2.4	1 367	1.6
	Total	55 053	9.1	44 381	7.0	36 008	6.8	13 984	3.0
Shoveler	01	2 638	0.5	6 388	1.2	2 714	0.7	2 320	0.6
	02	0	0.0	281	0.2	40	0.0	210	0.2
	Total	2 638	0.4	6 669	1.1	2 754	0.5	2 530	0.5
Pintail	1	25 390	5.2	33 971	6.6	16 597	4.0	13 213	3.5
	02	3 620	3.2	6 587	5.8	3 953	3.4	2 100	2.4
	Total	29 010	4.8	40 558	6.4	20 550	3.9	15 313	3.3
Wood Duck	01	16 883	3.4	21 103	4.1	17 620	4.3	17 585	4.7
	02	439	0.4	1 373	1.2	399	0.3	928	1.1
	Total	17 322	2.9	22 476	3.6	18 019	3.4	18 513	4.0
Redhead	01	5 909	1.2	3 870	0.7	3 664	0.9	3 300	0.9
	02	231	0.2	0	0.0	0	0.0	0	0.0
	Total	6 140	1.0	3 870	0.6	3 664	0.7	3 300	0.7
Canvasback	01	2 391	0.5	1 069	0.2	3 680	0.9	3 980	1.1
	Total	2 391	0.4	1 069	0.2	3 680	0.7	3 980	0.9
Greater Scaup	01	26 789	5.5	19 028	3.7	18 577	4.5	19 673	5.3
	02	1 211	1.1	1 238	1.1	0	0.0	741	0.8
	Total	28 000	4.6	20 266	3.2	18 577	3.5	20 414	4.4

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Quebec

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Lesser Scaup	01	26 317	5.4	26 698	5.1	17 739	4.3	24 395	6.5
	02	7 465	6.6	6 246	5.5	4 282	3.7	2 171	2.5
	Total	33 782	5.6	32 944	5.2	22 021	4.2	26 566	5.8
Ring-necked Duck	01	13 462	2.7	16 566	3.2	18 075	4.4	15 669	4.2
	02	3 015	2.7	3 173	2.8	6 483	5.6	2 259	2.6
	Total	16 477	2.7	19 739	3.1	24 558	4.6	17 928	3.9
Goldeneye	01	15 922	3.3	17 349	3.3	26 250	6.3	21 669	5.8
	02	8 730	7.7	9 026	8.0	13 660	11.9	5 223	6.0
	Total	24 652	4.1	26 375	4.2	39 910	7.5	26 892	5.8
Bufflehead	01	6 565	1.3	3 395	0.7	8 414	2.0	7 157	1.9
	02	1 901	1.7	1 347	1.2	668	0.6	578	0.7
	Total	8 466	1.4	4 742	0.8	9 082	1.7	7 735	1.7
Ruddy Duck	01	818	0.2	0	0.0	0	0.0	1 398	0.4
	02	334	0.3	0	0.0	0	0.0	0	0.0
	Total	1 152	0.2	0	0.0	0	0.0	1 398	0.3
Total sport ducks	Total	534 948	88.7	565 428	89.6	494 199	93.4	419 929	91.2
Oldsquaw	01	6 771	1.4	2 722	0.5	3 410	0.8	7 786	2.1
	02	4 878	4.3	1 853	1.6	3 984	3.5	3 685	4.2
	Total	11 649	1.9	4 575	0.7	7 394	1.4	11 471	2.5
Common Eider	01	1 737	0.4	1 943	0.4	2 093	0.5	506	0.1
	02	7 585	6.7	4 211	3.7	5 709	5.0	4 762	5.4
	Total	9 322	1.5	6 154	1.0	7 802	1.5	5 268	1.1
King Eider	01	0	0.0	0	0.0	0	0.0	280	0.1
	Total	0	0.0	0	0.0	0	0.0	280	0.1
Harlequin Duck	02	0	0.0	42	0.0	0	0.0	0	0.0
	Total	0	0.0	42	0.0	0	0.0	0	0.0
Common Scoter	01	14 733	3.0	21 618	4.2	5 273	1.3	9 836	2.6
	02	3 267	2.9	4 852	4.3	1 239	1.1	983	1.1
	Total	18 000	3.0	26 470	4.2	6 512	1.2	10 819	2.4
White-winged Scoter	01	7 606	1.6	6 984	1.3	3 830	0.9	6 407	1.7
	02	1 098	1.0	3 368	3.0	972	0.8	2 025	2.3
	Total	8 704	1.4	10 352	1.6	4 802	0.9	8 432	1.8
Surf Scoter	01	11 535	2.4	8 591	1.7	4 872	1.2	0	0.0
	02	8 743	7.7	9 628	8.5	3 501	3.0	4 155	4.7
	Total	20 278	3.4	18 219	2.9	8 373	1.6	4 155	0.9
Total sea ducks		67 953	11.3	65 812	10.4	34 883	6.6	40 425	8.8
Total ducks		602 901	91.9	631 240	89.8	529 082	83.0	460 354	85.2
Canada Goose	01	13 562	35.1	33 778	62.7	44 839	52.1	38 144	61.5
	02	12 624	86.7	17 594	97.4	20 427	90.8	14 550	82.3
	Total	26 186	49.2	51 372	71.4	65 266	60.1	52 694	66.1
Snow Goose	01	143	0.4	20 133*	37.3	0	0.0	3 556	5.7
	02	0	0.0	473*	2.6	0	0.0	1 219	6.9
	Total	143	0.3	20 606*	28.6	0	0.0	4 775	6.0

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Quebec

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Blue Goose	01	0	0.0	0	0.0	549	0.6	0	0.0
	Total	0	0.0	0	0.0	549	0.5	0	0.0
Greater Snow Goose	01	24 984	64.6	0*	0.0	40 666	47.3	863	32.0
	02	1 934	13.3	0*	0.0	2 082	9.2	1 919	10.8
	Total	26 918	50.6	0*	0.0	42 748	39.4	782	27.3
Brant	01	0	0.0	0	0.0	0	0.0	416	0.7
	Total	0	0.0	0	0.0	0	0.0	416	0.5
Total geese		53 247	8.1	71 978	10.2	108 563	17.0	79 667	14.8
Waterfowl		656 148	100.0	703 218	100.0	637 645	100.0	540 021	100.0

(cont'd)

*Lesser and greater snow geese not differentiated in 1977.

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Ontario

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	475	0.2	625	0.3	1 400	0.5	610	0.2
	02	2 197	0.4	2 291	0.4	1 024	0.2	2 053	0.5
	03	1 091	0.7	888	0.5	2 826	1.6	2 249	1.2
	Total	3 763	0.4	3 804	0.4	5 250	0.6	4 912	0.6
Red-breasted Merganser	01	1 505	0.5	665	0.3	0	0.0	245	0.1
	02	2 834	0.6	2 182	0.4	182	0.0	726	0.2
	03	375	0.2	102	0.1	288	0.2	478	0.3
	Total	4 714	0.5	2 949	0.3	470	0.0	1 449	0.2
Hooded Merganser	01	426	0.1	1 975	0.9	2 218	0.8	1 257	0.5
	02	17 485	3.4	20 793	3.9	15 584	3.1	12 624	3.0
	03	4 219	2.5	5 752	3.6	4 191	2.4	4 534	2.5
	Total	22 130	2.3	28 520	3.1	21 993	2.3	18 415	2.2
Mallard	01	123 677	40.9	81 618	37.1	113 713	41.9	93 235	37.6
	02	162 780	32.0	137 343	25.8	158 047	31.9	122 844	29.4
	03	31 718	19.1	45 969	28.4	50 663	28.7	49 518	27.5
	Total	318 175	32.6	264 930	29.0	322 423	34.2	265 597	31.4
Black Duck	01	22 761	7.5	14 276	6.5	18 774	6.9	16 714	6.7
	02	53 417	10.5	42 496	8.0	45 149	9.1	44 132	10.6
	03	19 624	11.8	24 679	15.3	26 303	14.9	25 905	14.4
	Total	95 802	9.8	81 451	8.9	90 226	9.6	86 751	10.3
Gadwall	01	2 589	0.9	2 472	1.1	7 152	2.6	3 788	1.5
	02	3 240	0.6	2 591	0.5	3 226	0.7	2 161	0.5
	03	756	0.5	238	0.1	402	0.2	433	0.2
	Total	6 585	0.7	5 301	0.6	10 780	1.1	6 382	0.8
American Wigeon	01	9 519	3.1	7 767	3.5	10 616	3.9	13 861	5.6
	02	9 989	2.0	3 694	0.7	7 013	1.4	6 911	1.7
	03	3 107	1.9	1 851	1.1	4 162	2.4	4 479	2.5
	Total	22 615	2.3	13 312	1.5	21 791	2.3	25 251	3.0
Green-winged Teal	01	14 732	4.9	19 385	8.8	14 253	5.3	10 418	4.2
	02	22 208	4.4	25 607	4.8	19 275	3.9	14 033	3.4
	03	10 252	6.2	5 425	3.4	4 845	2.7	6 440	3.6
	Total	47 192	4.8	50 417	5.5	38 373	4.1	30 891	3.7
Blue-winged Teal	01	10 294	3.4	6 399	2.9	12 794	4.7	8 511	3.4
	02	25 058	4.9	23 961	4.5	27 102	5.5	16 943	4.1
	03	12 121	7.3	4 365	2.7	7 314	4.1	6 447	3.6
	Total	47 473	4.9	34 725	3.8	47 210	5.0	31 901	3.8
Shoveler	01	456	0.2	1 812	0.8	797	0.3	1 071	0.4
	02	720	0.1	2 045	0.4	345	0.1	595	0.1
	03	247	0.1	92	0.1	0	0.0	304	0.2
	Total	1 423	0.1	3 949	0.4	1 142	0.1	1 970	0.2
Pintail	01	5 608	1.9	4 782	2.2	4 862	1.8	3 947	1.6
	02	7 911	1.6	7 252	1.4	5 200	1.0	3 045	0.7
	03	3 785	2.3	2 474	1.5	3 165	1.8	2 115	1.2
	Total	17 304	1.8	14 508	1.6	13 227	1.4	9 107	1.1

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Ontario

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Wood Duck	01	16 518	5.5	12 411	5.6	18 406	6.8	13 919	5.6
	02	66 286	13.0	78 514	14.8	96 194	19.4	64 781	15.5
	03	5 853	3.5	8 665	5.4	6 953	3.9	10 167	5.6
	Total	88 657	9.1	99 590	10.9	121 553	12.9	88 867	10.5
Redhead	01	15 117	5.0	9 588	4.4	10 174	3.8	19 455	7.8
	02	10 566	2.1	6 287	1.2	5 090	1.0	6 061	1.5
	03	1 866	1.1	582	0.4	1 395	0.8	1 991	1.1
	Total	27 549	2.8	16 457	1.8	16 659	1.8	27 507	3.3
Canvasback	01	10 128	3.4	4 024	1.8	9 597	3.5	10 969	4.4
	02	6 951	1.4	2 315	0.4	1 437	0.3	2 768	0.7
	03	1 185	0.7	503	0.3	1 577	0.9	969	0.5
	Total	18 264	1.9	6 842	0.7	12 611	1.3	14 706	1.7
Greater Scaup	01	16 930	5.6	11 712	5.3	7 890	2.9	8 009	3.2
	02	17 335	3.4	31 220	5.9	7 408	1.5	15 282	3.7
	03	3 450	2.1	3 657	2.3	4 688	2.7	3 155	1.8
	Total	37 715	3.9	46 589	5.1	19 986	2.1	26 446	3.1
Lesser Scaup	01	16 721	5.5	11 448	5.2	3 451	1.3	10 259	4.1
	02	15 944	3.1	28 630	5.4	14 613	2.9	13 303	3.2
	03	19 189	11.6	8 211	5.1	9 516	5.4	11 541	6.4
	Total	51 854	5.3	48 289	5.3	27 580	2.9	35 103	4.2
Ring-necked Duck	01	5 442	1.8	4 225	1.9	7 125	2.6	5 227	2.1
	02	26 118	5.1	40 975	7.7	39 733	8.0	37 607	9.0
	03	20 635	12.4	23 955	14.8	22 862	12.9	29 873	16.6
	Total	52 195	5.3	69 155	7.6	69 720	7.4	72 707	8.6
Goldeneye	01	6 185	2.0	3 401	1.5	5 613	2.1	4 726	1.9
	02	25 302	5.0	36 529	6.9	23 268	4.7	21 219	5.1
	03	10 685	6.4	13 024	8.1	13 452	7.6	9 474	5.3
	Total	42 172	4.3	52 954	5.8	42 333	4.5	35 419	4.2
Bufflehead	01	16 461	5.4	16 707	7.6	19 882	7.3	14 881	6.0
	02	21 767	4.3	23 352	4.4	18 587	3.8	18 569	4.4
	03	7 213	4.3	9 250	5.7	9 636	5.5	5 639	3.1
	Total	45 441	4.7	49 309	5.4	48 105	5.1	39 089	4.6
Ruddy Duck	01	2 606	0.9	2 054	0.9	966	0.4	2 533	1.0
	02	71	0.0	429	0.1	0	0.0	329	0.1
	03	1 043	0.6	0	0.0	0	0.0	0	0.0
	Total	3 720	0.4	2 483	0.3	966	0.1	2 862	0.3
Total sport ducks		954 743	97.8	895 534	98.1	932 398	98.9	825 332	97.6
Oldsquaw	01	1 468	0.5	424	0.2	207	0.1	563	0.2
	02	478	0.1	1 470	0.3	1 464	0.3	2 472	0.6
	03	625	0.4	0	0.0	82	0.0	584	0.3
	Total	2 571	0.3	1 894	0.2	1 753	0.2	3 619	0.4
Common Eider	02	0	0.0	0	0.0	220	0.0	558	0.1
	Total	0	0.0	0	0.0	220	0.0	558	0.1
King Eider	03	0	0.0	0	0.0	82	0.0	0	0.0
	Total	0	0.0	0	0.0	82	0.0	0	0.0

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Ontario

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Harlequin Duck	03	0	0.0	0	0.0	0	0.0	146	0.1
	Total	0	0.0	0	0.0	0	0.0	146	0.0
Common Scoter	01	1 277	0.4	765	0.3	0	0.0	0	0.0
	02	4 246	0.8	2 325	0.4	1 495	0.3	1 384	0.3
	03	987	0.6	506	0.3	566	0.3	624	0.3
	Total	6 510	0.7	3 596	0.4	2 061	0.2	2 008	0.2
White-winged Scoter	01	943	0.3	804	0.4	1 363	0.5	2 402	1.0
	02	2 554	0.5	3 300	0.6	1 476	0.3	1 851	0.4
	03	535	0.3	92	0.1	598	0.3	1 632	0.9
	Total	4 032	0.4	4 196	0.5	3 437	0.4	5 885	0.7
Surf Scoter	01	441	0.1	590	0.3	0	0.0	1 345	0.5
	02	2 833	0.6	6 189	1.2	2 232	0.5	5 071	1.2
	03	5 290	3.2	1 312	0.8	977	0.6	1 458	0.8
	Total	8 564	0.9	8 091	0.9	3 209	0.3	7 874	0.9
Total sea ducks		21 677	2.2	17 777	1.9	10 762	1.1	20 090	2.4
Total ducks		976 420	95.1	913 311	93.2	943 160	93.6	845 422	91.7
Canada Goose	01	14 534	93.9	12 611	92.7	18 197	93.4	21 174	95.9
	02	16 314	97.8	29 426	99.3	29 231	99.5	27 121	97.2
	03	8 672	47.5	17 759	75.3	7 496	47.7	17 657	67.7
	Total	39 520	78.4	59 796	89.5	54 924	85.0	65 952	86.7
Large Canada Goose	01	0	0.0	0	0.0	1 286	6.6	0	0.0
	Total	0	0.0	0	0.0	1 286	2.0	0	0.0
Snow Goose	01	528	3.4	896	6.6	0	0.0	804	3.6
	02	300	1.8	210	0.7	0	0.0	673	2.4
	03	9 575	52.5	5 822	24.7	1 707	10.9	4 959	19.0
	Total	10 403	20.6	6 928	10.4	1 707	2.6	6 436	8.5
Blue Goose	01	0	0.0	0	0.0	0	0.0	96	0.4
	02	0	0.0	0	0.0	147	0.5	0	0.0
	03	0	0.0	0	0.0	5 151	32.8	3 449	13.2
	Total	0	0.0	0	0.0	5 298	8.2	3 545	4.7
Greater Snow Goose	02	72	0.4	0	0.0	0	0.0	0	0.0
	03	0	0.0	0	0.0	1 367	8.7	0	0.0
	Total	72	0.1	0	0.0	1 367	2.1	0	0.0
Ross' Goose	01	0	0.0	101	0.7	0	0.0	0	0.0
	Total	0	0.0	101	0.2	0	0.0	0	0.0
Brant	01	410	2.6	0	0.0	0	0.0	0	0.0
	02	0	0.0	0	0.0	0	0.0	108	0.4
	Total	410	0.8	0	0.0	0	0.0	108	0.1
Total geese		50 405	4.9	66 825	6.8	64 582	6.4	76 041	8.3
Waterfowl		1 026 825	100.0	980 136	100.0	1 007 742	100.0	921 463	100.0

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Manitoba

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	0	0.0	0	0.0	0	0.0	0	0.0
	02	0	0.0	0	0.0	311	0.3	0	0.0
	Total	0	0.0	0	0.0	311	0.1	0	0.0
Hooded Merganser	01	0	0.0	136	0.1	154	0.1	0	0.0
	02	120	0.1	206	0.2	292	0.3	453	0.4
	Total	120	0.0	342	0.1	446	0.1	453	0.1
Mallard	01	122 449	50.0	99 382	56.9	153 529	62.8	155 003	59.2
	02	82 640	76.7	63 701	75.2	86 059	73.7	90 114	74.1
	Total	205 089	58.2	163 083	62.9	239 588	66.3	245 117	63.9
Black Duck	01	180	0.1	614	0.4	400	0.2	0	0.0
	02	0	0.0	144	0.2	0	0.0	260	0.2
	Total	180	0.1	758	0.3	400	0.1	260	0.1
Gadwall	01	10 002	4.1	11 215	6.4	10 565	4.3	13 324	5.1
	02	373	0.3	3 014	3.6	2 670	2.3	2 893	2.4
	Total	10 375	2.9	14 229	5.5	13 235	3.7	16 217	4.2
American Wigeon	01	8 312	3.4	7 592	4.3	8 838	3.6	8 066	3.1
	02	3 071	2.9	2 357	2.8	4 174	3.6	2 024	1.7
	Total	11 383	3.2	9 949	3.8	13 012	3.6	10 090	2.6
Green-winged Teal	01	11 954	4.9	12 577	7.2	10 503	4.3	5 467	2.1
	02	1 996	1.9	3 504	4.1	3 941	3.4	5 374	4.4
	Total	13 950	4.0	16 081	6.2	14 444	4.0	10 841	2.8
Blue-winged Teal	01	13 689	5.6	7 008	4.0	6 505	2.7	11 581	4.4
	02	4 244	3.9	3 479	4.1	2 412	2.1	3 898	3.2
	Total	17 933	5.1	10 487	4.0	8 917	2.5	15 479	4.0
Shoveler	01	6 294	2.6	5 281	3.0	6 892	2.8	8 359	3.2
	02	2 068	1.9	956	1.1	1 023	0.9	646	0.5
	Total	8 362	2.4	6 237	2.4	7 915	2.2	9 005	2.3
Pintail	01	11 764	4.8	9 725	5.6	16 511	6.8	15 136	5.8
	02	5 814	5.4	1 911	2.3	4 234	3.6	5 178	4.3
	Total	17 578	5.0	11 636	4.5	20 745	5.7	20 314	5.3
Wood Duck	01	1 010	0.4	823	0.5	154	0.1	757	0.3
	02	383	0.4	0	0.0	0	0.0	0	0.0
	Total	1 393	0.4	823	0.3	154	0.0	757	0.2
Redhead	01	9 595	3.9	877	0.5	5 891	2.4	8 189	3.1
	02	2 534	2.4	431	0.5	2 433	2.1	3 862	3.2
	Total	12 129	3.4	1 308	0.5	8 324	2.3	12 051	3.1
Canvasback	01	5 072	2.1	2 187	1.3	4 353	1.8	6 526	2.5
	02	120	0.1	738	0.9	247	0.2	362	0.3
	Total	5 192	1.5	2 925	1.1	4 600	1.3	6 888	1.8
Greater Scaup	01	703	0.3	0	0.0	1 880	0.8	375	0.1
	02	447	0.4	0	0.0	0	0.0	322	0.3
	Total	1 150	0.3	0	0.0	1 880	0.5	697	0.2
Lesser Scaup	01	26 221	10.7	9 128	5.2	8 501	3.5	13 000	5.0
	02	1 090	1.0	2 373	2.8	6 387	5.5	3 144	2.6
	Total	27 311	7.8	11 501	4.4	14 888	4.1	16 144	4.2

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Manitoba

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Ring-necked Duck	01	8 636	3.5	4 180	2.4	5 706	2.3	9 395	3.6
	02	709	0.7	1 644	1.9	1 097	0.9	2 209	1.8
	Total	9 345	2.7	5 824	2.2	6 803	1.9	11 604	3.0
Goldeneye	01	3 434	1.4	0	0.0	1 866	0.8	1 490	0.6
	02	1 668	1.5	0	0.0	862	0.7	843	0.7
	Total	5 102	1.4	0	0.0	2 728	0.8	2 333	0.6
Bufflehead	01	3 441	1.4	3 039	1.7	2 186	0.9	3 005	1.1
	02	406	0.4	254	0.3	496	0.4	0	0.0
	Total	3 847	1.1	3 293	1.3	2 682	0.7	3 005	0.8
Ruddy Duck	01	929	0.4	741	0.4	0	0.0	2 127	0.8
	Total	929	0.3	741	0.3	0	0.0	2 127	0.6
	Total sport ducks	351 368	99.7	259 217	99.9	361 072	100.0	383 382	100.0
Oldsquaw	02	0	0.0	0	0.0	123	0.1	0	0.0
	Total	0	0.0	0	0.0	123	0.0	0	0.0
	White-winged Scoter	01	397	0.2	195	0.1	0	0.0	0
Total		397	0.1	195	0.1	0	0.0	0	0.0
Surf Scoter		01	577	0.2	0	0.0	0	0.0	0
	Total	577	0.2	0	0.0	0	0.0	0	0.0
	Total sea ducks	974	0.3	195	0.1	123	0.0	0	0.0
Total ducks	352 342	78.2	259 412	77.3	361 195	74.4	383 382	66.2	
Canada Goose	01	1 465	2.1	1 428	2.8	278	0.3	390	0.3
	02	433	1.6	1 893	7.8	179	0.6	1 172	2.8
	Total	1 898	1.9	3 321	4.4	457	0.4	1 562	0.8
Small Canada Goose	01	9 091	12.8	5 671	11.0	9 040	9.5	28 722	18.7
	02	5 029	18.4	3 123	12.8	3 640	12.3	9 823	23.4
	Total	14 120	14.3	8 794	11.6	12 680	10.2	38 545	19.7
Large Canada Goose	01	30 444	42.8	16 940	32.7	51 324	54.2	36 233	23.6
	02	19 296	70.5	16 006	65.8	18 908	64.1	21 652	57.6
	Total	49 740	50.5	32 946	43.3	70 232	56.5	57 885	29.6
Snow Goose	01	18 238	25.6	17 555	33.9	19 222	20.3	59 619	38.8
	02	1 653	6.0	1 368	5.6	3 679	12.5	6 435	15.3
	Total	19 891	20.2	18 923	24.9	22 901	18.4	66 054	33.8
Blue Goose	01	11 452	16.1	10 167	19.6	14 283	15.1	28 203	18.3
	02	610	2.2	1 935	8.0	2 661	9.0	2 677	6.4
	Total	12 062	12.2	12 102	15.9	16 944	13.6	30 880	15.8
White-fronted Goose	01	334	0.5	0	0.0	103	0.1	105	0.1
	02	350	1.3	0	0.0	231	0.8	0	0.0
	Total	684	0.7	0	0.0	334	0.3	105	0.1
Ross' Goose	01	100	0.1	0	0.0	484	0.5	456	0.3
	02	0	0.0	0	0.0	179	0.6	208	0.5
	Total	100	0.1	0	0.0	663	0.5	664	0.3
Total geese	98 495	21.8	76 086	22.7	124 211	25.6	195 695	33.8	
Waterfowl		450 837	100.0	335 498	100.0	485 406	100.0	579 077	100.0

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Saskatchewan

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Hooded Merganser	01	237	0.1	0	0.0	0	0.0	0	0.0
	02	0	0.0	0	0.0	417	0.3	0	0.0
	03	0	0.0	0	0.0	215	0.1	0	0.0
	Total	237	0.0	0	0.0	632	0.1	0	0.0
Mallard	01	212 647	74.9	118 835	75.0	118 016	79.3	117 330	67.7
	02	128 482	75.7	107 011	78.9	106 978	78.3	119 394	77.3
	03	267 548	75.6	166 594	77.6	171 738	71.1	185 940	72.9
	Total	608 677	75.3	392 440	77.1	396 732	75.2	422 664	72.5
Black Duck	01	675	0.2	0	0.0	0	0.0	0	0.0
	02	0	0.0	277	0.2	0	0.0	396	0.3
	03	0	0.0	265	0.1	0	0.0	0	0.0
	Total	675	0.1	542	0.1	0	0.0	396	0.1
Gadwall	01	18 704	6.6	6 267	4.0	10 268	6.9	15 470	8.9
	02	10 697	6.3	7 726	5.7	6 741	4.9	6 415	4.2
	03	11 195	3.2	12 600	5.9	20 505	8.5	15 875	6.2
	Total	40 596	5.0	26 593	5.2	37 514	7.1	37 760	6.5
American Wigeon	01	10 633	3.7	10 014	6.3	6 435	4.3	5 992	3.5
	02	6 588	3.9	7 513	5.5	5 679	4.2	2 989	1.9
	03	10 407	2.9	8 549	4.0	12 959	5.4	11 067	4.3
	Total	27 628	3.4	26 076	5.1	25 073	4.8	20 048	3.4
Green-winged Teal	01	3 396	1.2	1 876	1.2	1 550	1.0	2 398	1.4
	02	2 196	1.3	1 566	1.2	1 688	1.2	4 120	2.7
	03	5 394	1.5	5 646	2.6	3 164	1.3	2 037	0.8
	Total	10 986	1.4	9 088	1.8	6 402	1.2	8 555	1.5
Blue-winged Teal	01	5 843	2.1	5 366	3.4	2 645	1.8	6 438	3.7
	02	4 513	2.7	4 339	3.2	2 416	1.8	4 319	2.8
	03	9 609	2.7	3 898	1.8	8 302	3.4	6 144	2.4
	Total	19 965	2.5	13 603	2.7	13 363	2.5	16 901	2.9
Shoveler	01	11 276	4.0	1 082	0.7	2 557	1.7	3 626	2.1
	02	2 772	1.6	1 646	1.2	3 210	2.3	2 749	1.8
	03	14 669	4.1	1 620	0.8	5 319	2.2	8 319	3.3
	Total	28 717	3.6	4 348	0.9	11 086	2.1	14 694	2.5
Pintail	01	11 786	4.2	9 238	5.8	5 120	3.4	11 915	6.9
	02	4 267	2.5	4 084	3.0	1 751	1.3	5 211	3.4
	03	18 248	5.2	6 622	3.1	6 785	2.8	12 457	4.9
	Total	34 301	4.2	19 944	3.9	13 656	2.6	29 583	5.1
Wood Duck	03	0	0.0	0	0.0	0	0.0	106	0.0
	Total	0	0.0	0	0.0	0	0.0	106	0.0
Redhead	01	3 051	1.1	1 940	1.2	700	0.5	4 954	2.9
	02	1 087	0.6	168	0.1	1 769	1.3	2 938	1.9
	03	5 044	1.4	1 821	0.8	2 085	0.9	4 656	1.8
	Total	9 182	1.1	3 929	0.8	4 554	0.9	12 548	2.2
Canvasback	01	3 386	1.2	1 666	1.1	903	0.6	3 991	2.3
	02	304	0.2	124	0.1	665	0.5	1 283	0.8
	03	3 567	1.0	2 399	1.1	3 137	1.3	2 319	0.9
	Total	7 257	0.9	4 189	0.8	4 705	0.9	7 593	1.3

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Saskatchewan

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Greater Scaup	02	300	0.2	0	0.0	0	0.0	0	0.0
	03	0	0.0	0	0.0	0	0.0	0	0.0
	Total	300	0.0	0	0.0	0	0.0	0	0.0
Lesser Scaup	01	2 304	0.8	2 146	1.4	480	0.3	547	0.3
	02	7 055	4.2	1 251	0.9	4 201	3.1	2 042	1.3
	03	7 438	2.1	4 122	1.9	5 721	2.4	4 779	1.9
	Total	16 797	2.1	7 519	1.5	10 402	2.0	7 368	1.3
Ring-necked Duck	01	0	0.0	0	0.0	0	0.0	0	0.0
	02	304	0.2	0	0.0	0	0.0	354	0.2
	03	0	0.0	241	0.1	1 347	0.6	844	0.3
	Total	304	0.0	241	0.0	1 347	0.3	1 198	0.2
Goldeneye	01	0	0.0	0	0.0	0	0.0	465	0.3
	02	371	0.2	0	0.0	593	0.4	201	0.1
	03	845	0.2	0	0.0	0	0.0	0	0.0
	Total	1 216	0.2	0	0.0	593	0.1	666	0.1
Bufflehead	01	0	0.0	0	0.0	220	0.1	0	0.0
	02	384	0.2	0	0.0	176	0.1	1 261	0.8
	03	153	0.0	246	0.1	430	0.2	266	0.1
	Total	537	0.1	246	0.0	826	0.2	1 527	0.3
Ruddy Duck	01	0	0.0	0	0.0	0	0.0	210	0.1
	02	465	0.3	0	0.0	0	0.0	499	0.3
Total	465	0.1	0	0.0	0	0.0	709	0.1	
Total sport ducks		807 840	100.0	508 758	100.0	526 885	99.9	582 316	99.9
White-winged Scoter	02	0	0.0	0	0.0	417	0.3	226	0.1
	03	0	0.0	0	0.0	0	0.0	151	0.1
	Total	0	0.0	0	0.0	417	0.1	377	0.1
Total sea ducks		0	0.0	0	0.0	417	0.1	377	0.1
Total ducks		807 840	84.5	508 758	80.7	527 302	79.2	582 693	79.3
Canada Goose	01	0	0.0	1 396	2.0	543	0.7	309	0.4
	02	0	0.0	121	1.0	0	0.0	0	0.0
	03	0	0.0	635	1.6	0	0.0	1 179	2.4
	Total	0	0.0	2 152	1.8	543	0.4	1 488	1.0
Small Canada Goose	01	27 893	29.1	18 170	25.7	15 511	21.4	22 751	28.2
	02	2 065	15.8	2 173	18.4	522	3.2	2 697	12.0
	03	4 723	12.1	3 464	8.9	5 060	10.2	2 930	6.0
	Total	34 681	23.4	23 807	19.6	21 093	15.2	28 378	18.6
Large Canada Goose	01	8 882	9.3	10 251	14.5	13 003	17.9	10 239	12.7
	02	7 212	55.2	9 255	78.5	12 855	77.8	17 338	76.9
	03	21 659	55.5	20 174	51.6	25 979	52.5	26 065	53.1
	Total	37 753	25.5	39 680	32.6	51 837	37.4	53 642	35.2
Snow Goose	01	18 953	19.8	5 086	7.2	4 815	6.6	8 526	10.6
	02	781	6.0	0	0.0	0	0.0	0	0.0
	03	690	1.8	6 170	15.8	2 556	5.2	3 057	6.2
	Total	20 424	13.8	11 256	9.3	7 371	5.3	11 583	7.6

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Saskatchewan

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Blue Goose	01	374	0.4	135	0.2	673	0.9	679	0.8
	03	0	0.0	1 879	4.8	3 640	7.4	883	1.8
	Total	374	0.3	2 014	1.7	4 313	3.1	1 562	1.0
White-fronted Goose	01	37 207	38.8	34 556	48.9	35 549	49.0	32 494	40.2
	02	3 006	23.0	242	2.1	2 620	15.9	1 941	8.6
	03	11 416	29.3	6 751	17.3	11 521	23.3	14 744	30.0
	Total	51 629	34.9	41 549	34.2	49 690	35.9	49 179	32.3
Ross' Goose	01	2 609	2.7	1 126	1.6	2 424	3.3	5 786	7.2
	02	0	0.0	0	0.0	519	3.1	578	2.6
	03	519	1.3	0	0.0	725	1.5	238	0.5
	Total	3 128	2.1	1 126	0.9	3 668	2.6	6 602	4.3
Total geese		147 989	15.5	121 584	19.3	138 515	20.8	152 434	20.7
Waterfowl		955 829	100.0	630 342	100.0	665 817	100.0	735 127	100.0

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Alberta

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	02	0	0.0	0	0.0	0	0.0	175	0.0
	Total	0	0.0	0	0.0	0	0.0	175	0.0
Mallard	01	163 372	62.0	152 094	61.2	118 886	58.6	130 023	65.2
	02	448 908	72.0	363 495	68.2	260 721	68.9	356 450	74.3
	Total	612 280	69.1	515 589	66.0	379 607	65.3	486 473	71.6
Black Duck	01	0	0.0	0	0.0	0	0.0	251	0.1
	02	140	0.0	0	0.0	0	0.0	0	0.0
	Total	140	0.0	0	0.0	0	0.0	251	0.0
Gadwall	01	18 425	7.0	13 127	5.3	13 841	6.8	15 009	7.5
	02	44 951	7.2	26 447	5.0	23 268	6.1	17 418	3.6
	Total	63 376	7.1	39 574	5.1	37 109	6.4	32 427	4.8
American Wigeon	01	12 826	4.9	19 444	7.8	15 012	7.4	11 416	5.7
	02	26 021	4.2	36 403	6.8	19 113	5.0	14 378	3.0
	Total	38 847	4.4	55 847	7.1	34 125	5.9	25 794	3.8
Green-winged Teal	01	12 908	4.9	9 411	3.8	6 344	3.1	3 800	1.9
	02	15 073	2.4	17 079	3.2	13 109	3.5	13 468	2.8
	Total	27 981	3.2	26 490	3.4	19 453	3.3	17 268	2.5
Blue-winged Teal	01	8 806	3.3	10 510	4.2	9 394	4.6	4 874	2.4
	02	21 684	3.5	14 011	2.6	10 791	2.9	15 207	3.2
	Total	30 490	3.4	24 521	3.1	20 185	3.5	20 081	3.0
Shoveler	01	7 688	2.9	6 191	2.5	6 969	3.4	4 700	2.4
	02	11 900	1.9	11 362	2.1	12 806	3.4	13 097	2.7
	Total	19 588	2.2	17 553	2.2	19 775	3.4	17 797	2.6
Pintail	01	27 520	10.5	32 872	13.2	21 298	10.5	20 595	10.3
	02	33 294	5.3	38 454	7.2	16 759	4.4	27 666	5.8
	Total	60 814	6.9	71 326	9.1	38 057	6.5	48 261	7.1
Redhead	01	2 726	1.0	1 337	0.5	2 604	1.3	2 393	1.2
	02	3 773	0.6	12 604	2.4	5 180	1.4	8 211	1.7
	Total	6 499	0.7	13 941	1.8	7 784	1.3	10 604	1.6
Canvasback	01	2 548	1.0	349	0.1	412	0.2	783	0.4
	02	817	0.1	1 365	0.3	2 208	0.6	1 572	0.3
	Total	3 365	0.4	1 714	0.2	2 620	0.5	2 355	0.3
Lesser Scaup	01	4 523	1.7	1 410	0.6	5 871	2.9	3 634	1.8
	02	10 250	1.6	7 254	1.4	9 597	2.5	6 339	1.3
	Total	14 773	1.7	8 664	1.1	15 468	2.7	9 973	1.5
Ring-necked Duck	01	265	0.1	1 322	0.5	0	0.0	0	0.0
	02	0	0.0	235	0.0	746	0.2	475	0.1
	Total	265	0.0	1 557	0.2	746	0.1	475	0.1
Goldeneye	01	1 532	0.6	0	0.0	1 112	0.5	278	0.1
	02	3 424	0.5	484	0.1	1 319	0.3	1 168	0.2
	Total	4 956	0.6	484	0.1	2 431	0.4	1 446	0.2
Bufflehead	01	159	0.1	221	0.1	1 297	0.6	1 103	0.6
	02	2 356	0.4	3 122	0.6	2 657	0.7	2 954	0.6
	Total	2 515	0.3	3 343	0.4	3 954	0.7	4 057	0.6

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Alberta

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Ruddy Duck	01	0	0.0	221	0.1	0	0.0	0	0.0
	02	0	0.0	162	0.0	0	0.0	1 140	0.2
	Total	0	0.0	383	0.0	0	0.0	1 140	0.2
Total sport ducks		885 889	99.9	780 986	100.0	581 314	99.9	678 577	99.9
Harlequin Duck	01	0	0.0	0	0.0	0	0.0	583	0.3
	Total	0	0.0	0	0.0	0	0.0	583	0.1
White-winged Scoter	02	665	0.1	123	0.0	339	0.1	175	0.0
	Total	665	0.1	123	0.0	339	0.1	175	0.0
Total sea ducks		665	0.1	123	0.0	339	0.1	758	0.1
Total ducks		886 554	88.7	781 109	87.3	581 653	84.3	679 335	86.6
Canada Goose	01	0	0.0	4 421	5.9	164	0.3	728	1.4
	02	0	0.0	864	2.2	0	0.0	250	0.5
	Total	0	0.0	5 285	4.7	164	0.2	978	0.9
Small Canada Goose	01	11 818	16.5	12 306	16.5	9 419	15.2	11 284	21.3
	02	13 061	31.8	8 483	21.7	9 244	20.1	17 796	34.4
	Total	24 879	22.1	20 789	18.3	18 663	17.3	29 080	27.8
Large Canada Goose	01	25 116	35.1	19 194	25.8	29 662	47.9	24 043	45.4
	02	24 307	59.1	22 429	57.4	32 136	69.8	28 710	55.5
	Total	49 423	43.9	41 623	36.7	61 798	57.2	52 753	50.4
Snow Goose	01	26 411	36.9	25 451	34.2	15 373	24.8	8 787	16.6
	02	1 012	2.5	1 244	3.2	0	0.0	684	1.3
	Total	27 423	24.3	26 695	23.5	15 373	14.2	9 471	9.0
White-fronted Goose	01	6 860	9.6	10 730	14.4	6 857	11.1	7 311	13.8
	02	2 542	6.2	5 409	13.8	4 642	10.1	4 108	7.9
	Total	9 402	8.3	16 139	14.2	11 499	10.6	11 419	10.9
Ross' Goose	01	1 331	1.9	2 259	3.0	478	0.8	856	1.6
	02	210	0.5	657	1.7	0	0.0	161	0.3
	Total	1 541	1.4	2 916	2.6	478	0.4	1 017	1.0
Total geese		112 668	11.3	113 447	12.7	107 975	15.7	104 718	13.4
Waterfowl		999 222	100.0	894 556	100.0	689 628	100.0	784 053	100.0

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in British Columbia

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	0	0.0	0	0.0	0	0.0	0	0.0
	02	200	0.1	52	0.0	66	0.0	67	0.0
	Total	200	0.1	52	0.0	66	0.0	67	0.0
Red-breasted Merganser	01	0	0.0	144	0.1	0	0.0	0	0.0
	02	0	0.0	0	0.0	0	0.0	236	0.2
	Total	0	0.0	144	0.1	0	0.0	236	0.1
Hooded Merganser	01	125	0.2	91	0.1	0	0.0	0	0.0
	02	0	0.0	317	0.2	0	0.0	0	0.0
	Total	125	0.1	408	0.2	0	0.0	0	0.0
Mallard	01	45 846	55.9	53 585	52.4	40 770	61.6	40 195	59.2
	02	70 403	47.2	75 670	48.1	76 013	52.7	76 315	55.9
	Total	116 249	50.3	129 255	49.8	116 783	55.5	116 510	57.0
Black Duck	01	63	0.1	0	0.0	0	0.0	281	0.4
	02	0	0.0	52	0.0	66	0.0	0	0.0
	Total	63	0.0	52	0.0	66	0.0	281	0.1
Gadwall	01	208	0.3	1 815	1.8	350	0.5	152	0.2
	02	1 257	0.8	810	0.5	1 413	1.0	853	0.6
	Total	1 465	0.6	2 625	1.0	1 763	0.8	1 005	0.5
American Wigeon	01	8 022	9.8	10 421	10.2	4 821	7.3	5 818	8.6
	02	23 020	15.4	24 802	15.8	24 516	17.0	21 909	16.1
	Total	31 042	13.4	35 223	13.6	29 337	13.9	27 727	13.6
Green-winged Teal	01	5 578	6.8	6 686	6.5	5 544	8.4	4 881	7.2
	02	16 902	11.3	27 482	17.5	18 009	12.5	13 945	10.2
	Total	22 480	9.7	34 168	13.2	23 553	11.2	18 826	9.2
Blue-winged Teal	01	2 982	3.6	8 390	8.2	1 312	2.0	1 880	2.8
	02	547	0.4	552	0.4	272	0.2	315	0.2
	Total	3 529	1.5	8 942	3.4	1 584	0.8	2 195	1.1
Shoveler	01	1 346	1.6	2 388	2.3	880	1.3	560	0.8
	02	3 260	2.2	2 423	1.5	1 414	1.0	939	0.7
	Total	4 606	2.0	4 811	1.9	2 294	1.1	1 499	0.7
Pintail	01	5 036	6.1	8 819	8.6	6 448	9.7	1 838	2.7
	02	30 119	20.2	21 545	13.7	16 552	11.5	16 034	11.7
	Total	35 155	15.2	30 364	11.7	23 000	10.9	17 872	8.7
Wood Duck	01	187	0.2	1 672	1.6	142	0.2	0	0.0
	02	677	0.5	486	0.3	207	0.1	741	0.5
	Total	864	0.4	2 158	0.8	349	0.2	741	0.4
Redhead	01	340	0.4	665	0.7	674	1.0	358	0.5
	02	0	0.0	139	0.1	0	0.0	0	0.0
	Total	340	0.1	804	0.3	674	0.3	358	0.2
Canvasback	01	1 315	1.6	91	0.1	103	0.2	0	0.0
	02	81	0.1	78	0.0	146	0.1	0	0.0
	Total	1 396	0.6	169	0.1	249	0.1	0	0.0
Greater Scaup	01	659	0.8	84	0.1	180	0.3	134	0.2
	02	567	0.4	515	0.3	137	0.1	1 355	1.0
	Total	1 226	0.5	599	0.2	317	0.2	1 489	0.7

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in British Columbia

Species	Zone	1976		1977		1978		1979	
		Kill	%	Kill	%	Kill	%	Kill	%
Lesser Scaup	01	1 680	2.0	2 603	2.5	1 100	1.7	1 338	2.0
	02	686	0.5	867	0.6	1 834	1.3	569	0.4
	Total	2 366	1.0	3 470	1.3	2 934	1.4	1 907	0.9
Ring-necked Duck	01	187	0.2	880	0.9	757	1.1	1 878	2.8
	02	207	0.1	176	0.1	636	0.4	336	0.2
	Total	394	0.2	1 056	0.4	1 393	0.7	2 214	1.1
Goldeneye	01	5 435	6.6	730	0.7	575	0.9	6 464	9.5
	02	966	0.6	114	0.1	1 039	0.7	935	0.7
	Total	6 401	2.8	844	0.3	1 614	0.8	7 399	3.6
Bufflehead	01	2 773	3.4	3 078	3.0	2 129	3.2	2 153	3.2
	02	314	0.2	1 230	0.8	1 606	1.1	1 913	1.4
	Total	3 087	1.3	4 308	1.7	3 735	1.8	4 066	2.0
Ruddy Duck	01	71	0.1	0	0.0	161	0.2	0	0.0
	Total	71	0.0	0	0.0	161	0.1	0	0.0
Total sport ducks		231 059	99.9	259 452	99.9	209 872	99.7	204 392	100.0
Common Scoter	01	0	0.0	91	0.1	95	0.1	0	0.0
	Total	0	0.0	91	0.0	95	0.0	0	0.0
White-winged Scoter	01	62	0.1	0	0.0	113	0.2	0	0.0
	02	0	0.0	63	0.0	238	0.2	0	0.0
	Total	62	0.0	63	0.0	351	0.2	0	0.0
Surf Scoter	01	83	0.1	0	0.0	77	0.1	0	0.0
	02	0	0.0	0	0.0	143	0.1	0	0.0
	Total	83	0.0	0	0.0	220	0.1	0	0.0
Total sea ducks		145	0.1	154	0.1	666	0.3	0	0.0
Total ducks		231 204	95.3	259 606	95.9	210 538	94.4	204 392	92.3
Canada Goose	01	0	0.0	0	0.0	176	2.5	919	10.0
	02	0	0.0	0	0.0	0	0.0	404	5.1
	Total	0	0.0	0	0.0	176	1.4	1 323	7.7
Small Canada Goose	01	601	10.5	1 149	19.2	1 353	19.4	1 816	19.7
	02	0	0.0	3 438	68.1	733	13.0	463	5.9
	Total	601	5.2	4 587	41.6	2 086	16.6	2 279	13.3
Large Canada Goose	01	5 147	89.5	4 751	79.3	5 138	73.8	6 469	70.3
	02	2 896	50.7	1 100	21.8	4 513	80.3	5 152	65.2
	Total	8 043	70.2	5 851	53.0	9 651	76.7	11 621	67.9
Snow Goose	02	2 617	45.8	508	10.1	374	6.7	1 799	22.8
	Total	2 617	22.8	508	4.6	374	3.0	1 799	10.5
White-fronted Goose	01	0	0.0	92	1.5	292	4.2	0	0.0
	02	0	0.0	0	0.0	0	0.0	89	1.1
	Total	0	0.0	92	0.8	292	2.3	89	0.5
Brant	02	199	3.5	0	0.0	0	0.0	0	0.0
	Total	199	1.7	0	0.0	0	0.0	0	0.0
Total geese		11 460	4.7	11 038	4.1	12 579	5.6	17 111	7.7
Waterfowl	Total	242 664	100.0	270 644	100.0	223 117	100.0	221 503	100.0

(cont'd)

Table 18 (cont'd)
Estimated retrieved kill of waterfowl in Northwest Territories

Species	1976		1977		1978		1979	
	Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	0	0.0	735	3.5	0	0.0	0	0.0
Red-breasted Merganser	0	0.0	829	4.0	0	0.0	0	0.0
Mallard	13 844	47.5	10 715	51.6	6 736	37.1	2 715	28.8
American Wigeon	5 579	19.1	1 443	6.9	4 422	24.4	1 473	15.6
Green-winged Teal	3 433	11.8	246	1.2	1 549	8.5	1 261	13.4
Blue-winged Teal	0	0.0	625	3.0	0	0.0	0	0.0
Shoveler	574	2.0	123	0.6	374	2.1	750	8.0
Pintail	2 620	9.0	645	3.1	2 155	11.9	1 703	18.1
Lesser Scaup	1 048	3.6	2 621	12.6	681	3.8	1 191	12.6
Ring-necked Duck	0	0.0	799	3.8	718	4.0	0	0.0
Goldeneye	1 427	4.9	0	0.0	1 162	6.4	0	0.0
Bufflehead	240	0.8	799	3.8	0	0.0	102	1.1
Ruddy Duck	167	0.6	123	0.6	0	0.0	0	0.0
Total sport ducks	28 932	99.2	19 703	94.8	17 797	98.1	9 195	97.6
Oldsquaw	0	0.0	0	0.0	237	1.3	0	0.0
Common Scoter	0	0.0	1 075	5.2	0	0.0	227	2.4
Surf Scoter	240	0.8	0	0.0	100	0.6	0	0.0
Total sea ducks	240	0.8	1 075	5.2	337	1.9	227	2.4
Total ducks	29 172	94.4	20 778	97.7	18 134	89.0	9 422	89.3
Small Canada Goose	144	8.3	496	100.0	320	14.3	0	0.0
Large Canada Goose	144	8.3	0	0.0	72	3.2	0	0.0
Snow Goose	1 438	83.3	0	0.0	1 647	73.7	1 125	100.0
White-fronted Goose	0	0.0	0	0.0	196	8.8	0	0.0
Total geese	1 726	5.6	496	2.3	2 235	11.0	1 125	10.7
Waterfowl	30 898	100.0	21 274	100.0	20 369	100.0	10 547	100.0

(cont'd)

Table 18 (concl'd)
 Estimated retrieved kill of waterfowl in Yukon

Species	1976		1977		1978		1979	
	Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	0	0.0	0	0.0	29	1.0	0	0.0
Red-breasted Merganser	105	2.7	0	0.0	0	0.0	0	0.0
Mallard	1 047	26.8	810	26.3	1 306	44.0	1 857	62.4
Gadwall	0	0.0	0	0.0	0	0.0	18	0.6
American Wigeon	955	24.5	318	10.3	272	9.2	317	10.6
Green-winged Teal	47	1.2	314	10.2	305	10.3	200	6.7
Blue-winged Teal	0	0.0	18	0.6	41	1.4	0	0.0
Shoveler	152	3.9	255	8.3	0	0.0	0	0.0
Pintail	333	8.5	354	11.5	225	7.6	188	6.3
Canvasback	0	0.0	51	1.7	0	0.0	0	0.0
Greater Scaup	0	0.0	72	2.3	87	2.9	0	0.0
Lesser Scaup	469	12.0	300	9.8	358	12.0	0	0.0
Ring-necked Duck	0	0.0	0	0.0	0	0.0	18	0.6
Goldeneye	252	6.5	18	0.6	98	3.3	280	9.4
Bufflehead	311	8.0	226	7.3	176	5.9	0	0.0
Ruddy Duck	0	0.0	0	0.0	74	2.5	0	0.0
Total sport ducks	3 671	94.1	2 736	88.9	2 971	100.0	2 878	96.6
Harlequin Duck	0	0.0	5	0.2	0	0.0	0	0.0
Common Scoter	0	0.0	0	0.0	0	0.0	100	3.4
White-winged Scoter	189	4.8	335	10.9	0	0.0	0	0.0
Surf Scoter	42	1.1	0	0.0	0	0.0	0	0.0
Total sea ducks	231	5.9	340	11.1	0	0.0	100	3.4
Total ducks	3 902	94.2	3 076	95.1	2 971	86.9	2 978	85.2
Canada Goose	0	0.0	27	17.1	0	0.0	0	0.0
Small Canada Goose	89	36.9	67	42.4	269	60.2	146	28.2
Large Canada Goose	105	43.6	62	39.2	61	13.6	226	43.6
White-fronted Goose	47	19.5	2	1.3	117	26.2	146	28.2
Total geese	241	5.8	158	4.9	447	13.1	518	14.8
Waterfowl	4 143	100.0	3 234	100.0	3 418	100.0	3 496	100.0