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No. 137, August 1983

Migratory birds killed in Canada during the 1981 season

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Introduction

The National Harvest Survey (NHS) and Species Composition Survey (SCS) are used to estimate kill, by species, of migratory birds in Canada.

Methods

Both the NHS and SCS are based on questionnaires mailed to selected purchasers of Canada migratory game bird hunting permits. Our results do not include illegal kill, legal hunting without permits by native people, or crippling loss. Cooch *et al.* (1978) give a description of the survey methods.

The survey results are calculated by geographic zones, as shown in Figure 2.

Figure 1 shows how permit sales have changed from 1966 to 1982. The decrease in sales since 1979 will be reflected in kill estimates, and this should be kept in mind by those who use kill statistics as indices to population size.

An investigation of biases is ongoing, but we believe that duck kill estimates in Newfoundland present special problems.

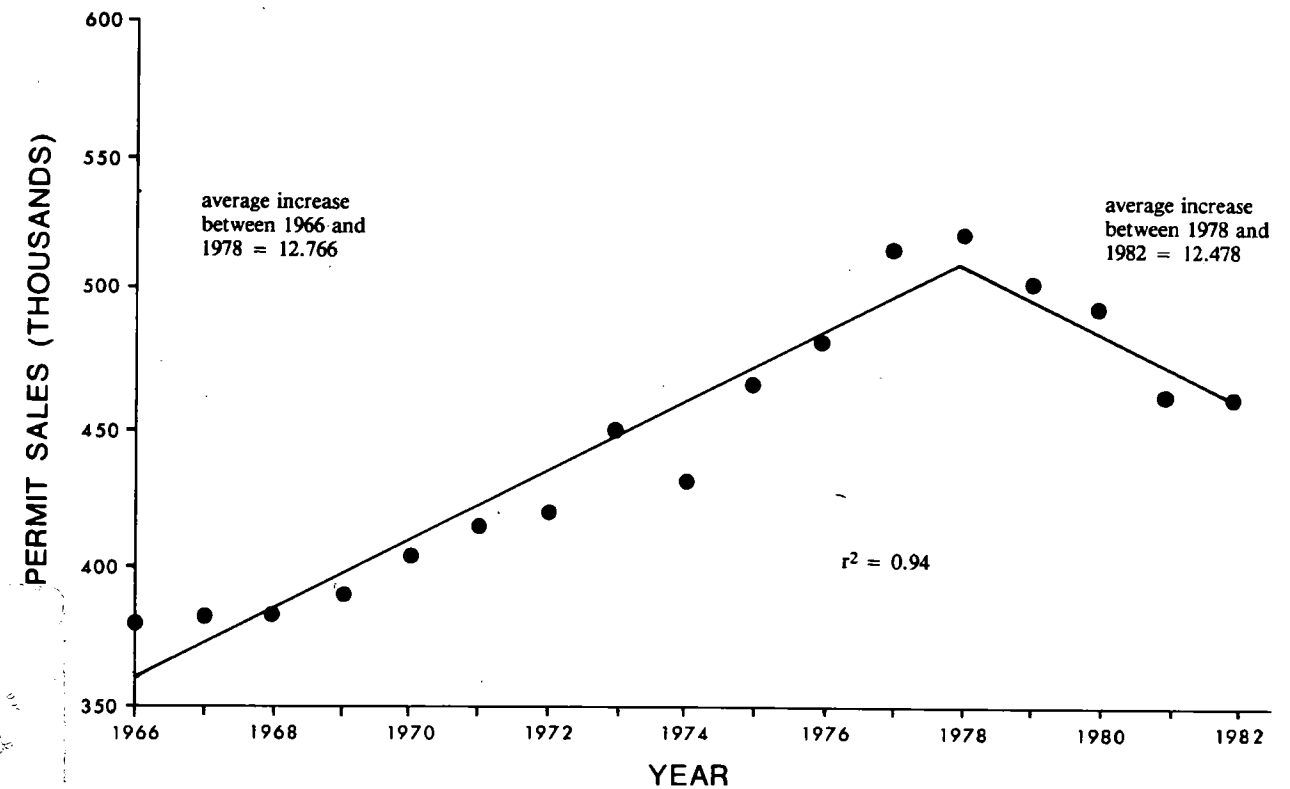
Acknowledgements

I thank Steve Wendt for advice, and Lucy Teevens, who helped with the tables.

References

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. Wildl. Serv. Rep. Ser. No. 43. 127 pp.

Figure 1
Total sales of migratory game bird hunting permits in Canada (1966-82)



¹ CWS, Ottawa, Ont. K1A 0E7.

Figure 2
Geographic zones used in NHS and SCS

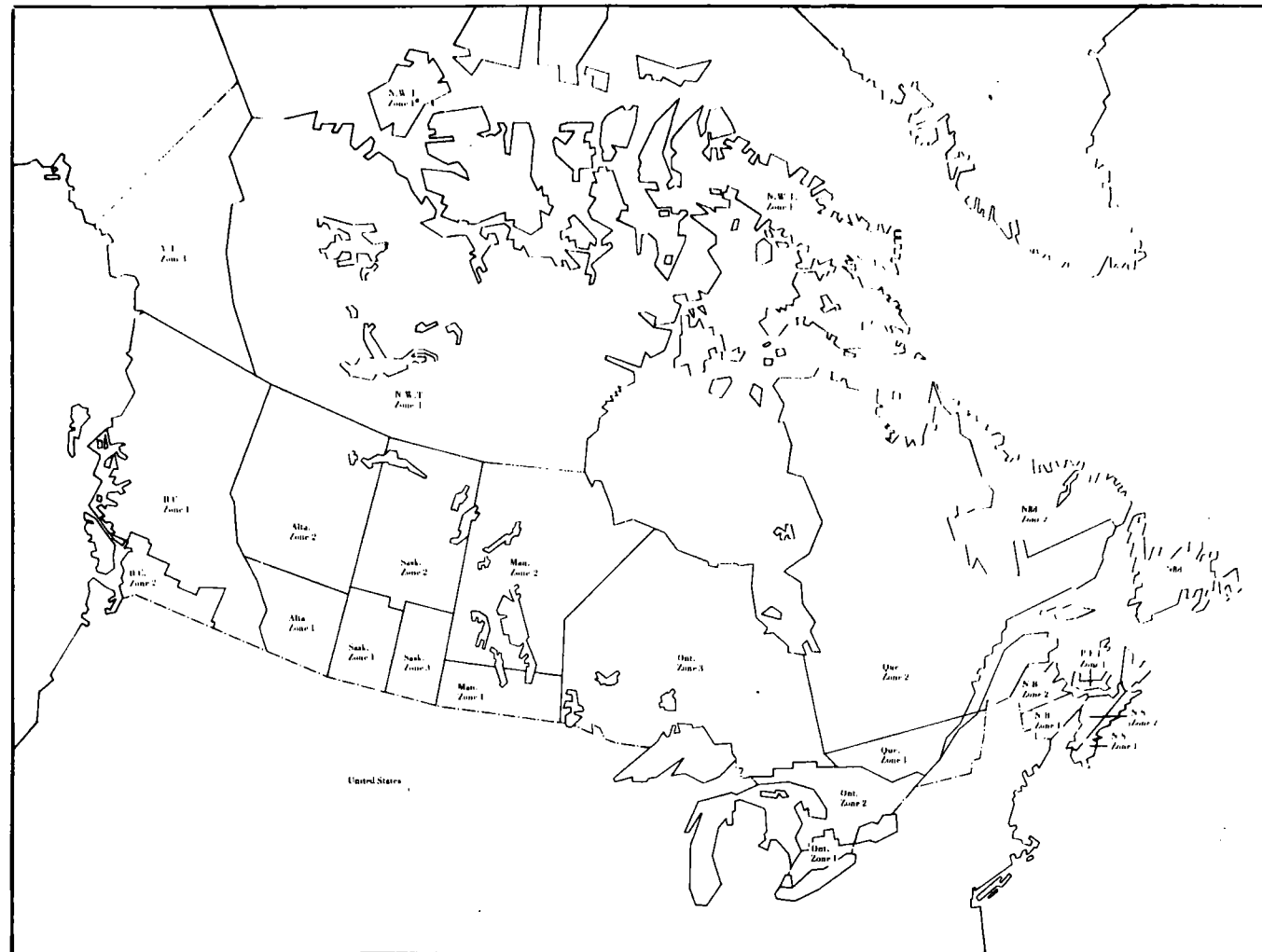


Table 1
Permit sales by province of purchase

Year	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yukon	Total sales
1981	33 220	5 494	13 934	11 979	73 574	133 242	40 090	38 594	63 911	27 744	725	483	465 352
1980	31 362	5 802	14 257	12 471	76 133	147 952	48 340	54 081	79 318	27 943	732	525	498 916
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	46 816	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 1981

Prov.	Zone	Total permit sales			Renewals			Non-renewals		
		Total	Res.	Non-res.	Total	Res.	Non-res.	Total	Res.	Non-res.
Nfld.	01	28 331	28 306	25	22 025	22 003	22	6 306	6 303	3
	02	3 070	3 070	—	2 550	2 550	—	520	520	—
	Total	31 401	31 376	25	24 575	24 553	22	6 826	6 823	3
PEI	Total	5 611	5 584	27	4 657	4 647	10	954	937	17
NS	01	9 339	9 319	20	7 905	7 890	15	1 434	1 429	5
	02	4 791	4 781	10	3 728	3 725	3	1 063	1 056	7
	Total	14 130	14 100	30	11 633	11 615	18	2 494	2 485	12
NB	01	8 336	8 232	104	6 403	6 327	76	1 933	1 905	28
	02	3 951	3 869	82	2 914	2 876	38	1 037	993	44
	Total	12 287	12 101	186	9 317	9 203	114	2 970	2 898	72
Que.	01	58 710	58 370	340	47 136	46 948	188	11 574	11 422	152
	02	16 468	16 356	112	12 132	12 053	79	4 336	4 303	33
	Total	75 178	74 726	452	59 268	59 001	269	15 910	15 725	185
Ont.	01	39 567	36 086	3 481	33 130	30 559	2 571	6 437	5 527	910
	02	77 683	76 936	747	67 464	66 983	481	10 219	9 953	266
	03	24 427	21 554	2 873	18 872	17 101	1 771	5 555	4 453	1 102
	Total	141 677	134 576	7 101	119 466	114 643	4 823	22 211	19 933	2 278
Man.	01	38 291	33 538	4 753	33 370	30 147	3 223	4 921	3 391	1 530
	02	8 237	4 117	1 120	7 140	6 344	796	1 097	773	324
	Total	46 528	40 655	5 873	40 510	36 491	4 019	6 018	4 164	1 854
Sask.	01	16 410	15 338	1 072	13 379	12 824	555	3 031	2 514	517
	02	8 210	7 895	315	6 811	6 621	190	1 399	1 274	125
	03	18 236	16 424	1 812	14 973	13 816	1 157	3 263	2 608	655
	Total	42 856	39 657	3 199	35 163	33 261	1 902	7 693	6 396	1 297
Alta.	01	27 620	27 072	548	20 339	20 045	294	7 281	7 027	254
	02	38 543	38 185	358	30 159	29 968	191	8 384	8 217	167
	Total	66 163	65 257	906	50 498	50 013	485	15 665	15 244	421
BC	01	12 243	12 006	237	8 609	8 522	87	3 634	3 484	150
	02	16 000	15 957	43	12 445	12 429	16	3 555	3 528	27
	Total	28 243	27 963	280	21 054	20 951	103	7 189	7 012	177
NWT	Total	764	756	8	503	500	3	261	256	5
Yukon	Total	514	507	7	299	298	1	215	209	6
Total		465 352	447 258	18 094	376 943	365 176	11 767	88 409	82 082	6 327

Table 3
Sample selection and response to the Harvest Survey
questionnaire, 1981

Prov.	Zone	Sample	Responses	% ^a	Characteristics of sample				
					Permit purchasers	Active hunters	% ^b	Successful hunters	% ^c
Nfld.	01	2 500	646	25.8	638	417	65	302	47
	02	1 000	176	17.6	185	133	72	95	51
	Total	3 500	822	23.5	823	550	67	397	48
PEI	Total	1 100	314	28.6	292	239	82	202	69
NS	01	1 600	527	32.9	556	420	76	349	63
	02	1 400	539	38.5	547	413	76	332	61
	Total	3 000	1 066	35.5	1 103	833	76	681	62
NB	01	1 900	708	37.3	721	568	79	471	65
	02	1 700	498	29.3	489	331	68	261	53
	Total	3 600	1 206	33.5	1 210	899	74	732	60
Que.	01	3 500	1 525	43.6	1 544	1 205	78	1 043	68
	02	1 792	672	37.5	668	459	69	397	59
	Total	5 292	2 197	41.5	2 212	1 664	75	1 440	65
Ont.	01	3 200	1 179	36.8	1 382	1 097	79	881	64
	02	1 700	977	57.5	719	576	80	469	65
	03	2 800	960	34.3	1 050	785	75	661	63
	Total	7 700	3 116	40.5	3 151	2 458	78	2 011	64
Man.	01	2 510	979	39.0	1 007	811	81	730	72
	02	1 480	527	35.6	475	373	79	326	69
	Total	3 990	1 506	37.7	1 482	1 184	80	1 056	71
Sask.	01	1 460	618	42.3	516	402	78	361	70
	02	2 090	557	26.7	585	439	75	385	66
	03	2 210	774	35.0	760	616	81	519	68
	Total	5 760	1 949	33.8	1 861	1 457	78	1 265	68
Alta.	01	2 200	745	33.9	679	521	77	450	66
	02	4 030	1 111	27.6	1 122	838	75	734	65
	Total	6 230	1 856	29.8	1 801	1 359	75	1 184	66
BC	01	1 550	538	34.7	517	369	71	306	59
	02	2 000	661	33.1	765	568	74	499	65
	Total	3 550	1 199	33.8	1 282	937	73	805	63
NWT	Total	494	120	24.3	125	76	61	61	49
Yukon	Total	415	124	29.9	129	69	53	54	42
Total		44 631	15 475	34.7	15 471	11 725	76	9 888	64

^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, 1975-81

Year	Permit sales	Sample ^a	% ^b	Responses ^c	% ^d	Permit purchasers ^e	% ^f	Active hunters	% ^g	Successful hunters	% ^h
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
1980	498 916	44 743	9.0	24 297	54.3	18 364	75.6	14 344	78.1	12 342	67.2
1981	465 352	44 631	9.6	15 475	34.7	15 471	100	11 725	76.0	9 888	64.0
Average	495 756	44 210	8.9	21 880	49.5	17 269	79.9	13 589	78.8	11 578	67.2

- ^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 1981 (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, 1979-81

Species group	Survey stratum	Successful hunters			Birds harvested			Birds harvested/ successful hunter		
		1979	1980	1981	1979	1980	1981	1979	1980	1981
Newfoundland										
Ducks	1	12 569	11 474	12 432	94 219	82 930	94 255	7.50	7.23	7.58
	2	1 830	2 075	1 589	27 981	23 108	20 099	15.29	11.14	12.65
	Total	14 400	13 549	14 021	122 200	106 039	114 354	8.49	7.83	8.16
Geese	1	2 625	2 644	2 203	8 717	7 102	6 747	3.32	2.69	3.06
	2	730	827	721	4 896	3 713	3 329	6.70	4.49	4.62
	Total	3 356	3 471	2 925	13 613	10 816	10 076	4.06	3.12	3.44
Prince Edward Island										
Ducks	Total	2 985	3 465	3 325	20 943	31 862	26 234	7.02	9.19	7.89
	Geese	Total	2 252	2 851	2 426	10 519	18 894	14 347	4.67	6.63
Nova Scotia										
Ducks	1	4 764	5 448	4 949	61 311	86 192	86 389	12.87	15.82	17.46
	2	2 856	3 053	2 953	27 073	38 544	27 213	9.48	12.62	9.22
	Total	7 260	8 502	7 902	88 385	124 737	113 603	11.60	14.67	14.38
Geese	1	1 121	1 305	1 382	4 383	6 033	5 639	3.91	4.62	4.08
	2	514	770	612	1 767	2 404	1 997	3.44	3.12	3.26
	Total	1 636	2 076	1 994	6 151	8 437	7 637	3.76	4.06	3.83
New Brunswick										
Ducks	1	4 766	5 099	4 719	36 613	44 769	42 846			
	2	1 755	1 790	2 045	12 506	15 138	16 155	7.68	8.78	9.08
	Total	6 522	6 890	6 765	49 119	59 907	59 001	7.12	8.45	7.90
Geese	1	335	465	447	1 153	1 493	1 641	7.53	8.69	8.72
	2	424	491	568	1 475	1 579	2 638	3.44	3.21	3.67
	Total	759	956	1 015	2 629	3 072	4 279	3.48	3.22	4.64
Quebec										
Ducks	1	33 920	37 692	35 649	381 355	388 099	408 938			
	2	9 416	10 727	9 363	87 650	112 146	98 983	11.24	10.30	11.47
	Total	43 337	48 420	45 013	469 006	500 245	507 922	9.31	10.45	10.57
Geese	1	13 103	14 928	9 207	61 979	86 291	44 435	10.82	10.33	11.28
	2	3 666	5 609	2 693	17 688	36 738	11 416	4.73	5.78	4.83
	Total	16 770	20 538	11 901	79 668	123 030	55 851	4.82	6.55	4.24
Ontario										
Ducks	1	20 784	20 489	19 796	247 943	250 629	218 847			
	2	49 790	52 188	49 570	417 325	489 964	483 182	11.93	12.23	11.06
	3	16 051	15 823	13 372	180 156	171 542	148 084	8.38	9.39	9.75
	Total	86 626	88 500	82 739	845 425	912 136	850 113	11.22	10.84	11.07
Geese	1	6 318	6 275	6 418	22 074	22 863	18 262	9.76	10.31	10.27
	2	9 318	11 786	6 772	27 902	43 879	19 476	3.49	3.64	2.85
	3	4 821	4 152	2 902	26 065	19 273	15 062	2.99	3.72	2.88
	Total	20 458	22 214	16 093	76 042	86 015	52 801	5.41	4.64	5.19
Manitoba										
Ducks	1	23 558	21 453	20 702	261 798	223 102	205 574			
	2	9 247	8 846	7 976	121 582	112 024	88 355	11.11	10.40	9.93
	Total	32 806	30 299	28 679	383 381	335 126	293 930	13.15	12.66	11.08
Geese	1	21 255	20 141	18 306	153 729	135 677	115 566	11.69	11.06	10.25
	2	6 271	6 050	5 562	41 967	34 470	31 941	7.23	6.74	6.31
	Total	27 526	26 192	23 869	195 696	170 148	147 507	6.69	5.70	5.74
								7.11	6.50	6.18

(cont'd)

Table 5 (concl'd)
Number of successful hunters and birds harvested, 1979-81

Species group	Survey stratum	Successful hunters			Birds harvested			Birds harvested/ successful hunter		
		1979	1980	1981	1979	1980	1981	1979	1980	1981
Saskatchewan										
Ducks	1	12 793	12 814	9 056	173 335	144 447	82 305	13.55	11.27	9.09
	2	8 922	8 065	5 218	154 398	129 775	70 474	17.30	16.09	13.51
	3	18 017	14 965	10 579	254 962	169 331	120 472	14.15	11.31	11.39
	Total	39 732	35 845	24 853	582 696	443 553	273 252	14.67	12.37	10.99
Geese	1	10 897	12 318	9 866	80 784	102 439	19 544	7.41	8.32	7.77
	2	4 252	3 400	2 686	22 553	18 008	76 624	5.30	5.30	7.28
	3	8 872	9 616	7 437	49 097	50 942	45 220	5.53	5.30	6.08
	Total	24 022	25 334	19 990	152 435	170 391	141 389	6.35	6.77	7.07
Alberta										
Ducks	1	16 701	16 264	15 723	199 444	182 523	200 604	11.94	11.22	12.76
	2	32 408	34 625	22 988	479 896	506 278	324 961	14.81	14.62	14.14
	Total	49 109	50 890	38 712	679 340	688 801	525 566	13.83	13.54	13.58
Geese	1	9 136	10 472	10 450	53 008	69 771	70 411	5.80	6.66	6.74
	2	9 350	10 588	8 600	51 709	63 425	55 112	5.53	5.99	6.41
	Total	18 486	21 061	19 050	104 718	133 197	125 523	5.66	6.32	6.59
British Columbia										
Ducks	1	6 313	6 770	6 482	67 931	73 756	64 504	10.76	10.89	9.95
	2	7 502	7 203	7 680	136 462	112 518	123 816	18.19	15.62	16.12
	Total	13 815	13 974	14 162	204 394	186 275	188 320	14.79	13.33	13.30
Geese	1	2 324	2 677	2 397	9 204	9 798	8 826	3.96	3.66	3.68
	2	1 646	2 353	3 004	7 908	8 951	10 959	4.80	3.80	3.65
	Total	3 970	5 030	5 402	17 113	18 749	19 786	4.31	3.73	3.66
Northwest Territories										
Ducks	Total	924	966	583	9 420	11 548	5 019	10.19	11.95	8.61
Geese	Total	267	180	132	1 125	989	380	4.21	5.47	2.88
Yukon Territory										
Ducks	Total	286	293	225	2 979	3 017	1 542	10.42	10.27	6.85
Geese	Total	127	117	88	518	533	262	4.05	4.56	2.98
Canada										
Ducks	Total	298 167	301 599	266 985	3 457 293	3 403 251	2 958 862	11.60	11.28	11.08
Geese	Total	119 634	130 027	104 888	660 232	745 276	579 843	5.52	5.73	5.53

Table 6
Recreational activity provided by the hunting of ducks and geese, 1981

Area	Survey stratum	Total permit sales ^a	Active hunters	Successful hunters	Retrieved kill	Recreation days	S. bag ^b (av.)	D. bag ^b (av.)	R. days ^b (av.)
Nfld.	1	28 331	17 961	12 592	101 002	218 315	5.6	0.5	12.2
	2	3 070	2 243	1 605	23 428	30 332	10.4	0.8	13.5
	Total	31 401	20 204	14 197	124 430	248 647	6.2	0.5	12.3
PEI	Total	5 611	4 803	4 035	40 581	48 479	8.4	0.8	10.1
NS	1	9 339	5 918	4 964	92 029	64 320	15.6	1.4	10.9
	2	4 791	3 982	3 013	29 210	36 735	7.3	0.8	9.2
	Total	14 130	9 900	7 977	121 239	101 055	12.2	1.2	10.2
NB	1	8 336	5 819	4 719	44 487	34 168	7.6	1.3	5.9
	2	3 951	2 866	2 160	18 793	22 404	6.6	0.8	7.8
	Total	12 287	8 685	6 879	63 280	56 572	7.3	1.1	6.5
Que.	1	58 710	43 628	36 753	453 373	405 602	10.4	1.1	9.3
	2	16 468	11 567	9 730	110 400	99 925	9.5	1.1	8.6
	Total	75 178	55 195	46 483	563 773	505 527	10.2	1.1	9.2
Ont.	1	39 567	25 959	20 572	237 109	213 154	9.1	1.1	8.2
	2	77 683	63 264	49 715	502 658	477 151	7.9	1.1	7.5
	3	24 427	17 114	13 772	163 146	133 440	9.5	1.2	7.8
	Total	141 677	106 337	84 059	902 913	823 745	8.5	1.1	7.7
Man.	1	38 291	28 916	24 854	321 140	189 049	11.1	1.7	6.5
	2	8 237	9 983	8 856	120 297	68 382	12.1	1.8	6.8
	Total	46 528	38 899	33 710	441 437	257 431	11.3	1.7	6.6
Sask.	1	16 410	14 322	12 734	158 929	83 385	11.1	1.9	5.8
	2	8 210	6 691	5 690	90 018	40 788	13.5	2.2	6.1
	3	18 236	14 185	12 003	165 693	87 599	11.7	1.9	6.2
	Total	42 856	35 198	30 427	414 640	211 772	11.8	2.0	6.0
Alta.	1	27 620	22 268	18 779	271 016	148 877	12.2	1.8	6.7
	2	38 543	27 660	24 217	380 073	200 990	13.7	1.9	7.3
	Total	66 163	49 928	42 996	651 089	349 867	13.0	1.9	7.0
BC	1	12 243	8 764	6 853	73 331	57 506	8.4	1.3	6.6
	2	16 000	9 322	8 016	134 775	96 647	14.5	1.4	10.4
	Total	28 243	18 086	14 869	208 106	154 153	11.5	1.3	8.5
NWT	Total	764	750	588	5 400	4 380	7.2	1.2	5.8
Yukon	Total	514	310	256	1 804	2 114	5.8	0.9	6.8
Canada	Total	465 352	348 295	286 476	3 538 692	2 763 742	10.2	1.3	7.9

^a Migratory game bird hunting permits.

^b *S. bag, seasonal bag per active hunter; D. bag, daily bag per active hunter; R. days, recreation days per active hunter.

Table 7

Estimated retrieved kill of migratory game birds other than waterfowl in Canada, 1976-81

Species	1976	1977	1978	1979	1980	1981	1976-81 average
American Woodcock	159 094	125 530	139 396	106 771	127 521	113 336	128 608
Common Snipe	106 977	84 711	100 011	82 265	63 385	59 482	82 805
American Coot	47 981	26 941	35 011	30 073	23 937	22 783	31 121
Sandhill Crane	1 636	367	876	3 798	5 582	2 961	2 537
Mourning Dove	3 700	5 388	1 575	1 100	772	1 474	2 334
Band-tailed Pigeon	3 286	4 736	3 836	4 240	3 257	2 864	3 703
Total	322 668	247 673	280 705	228 247	224 454	202 900	251 108

Table 8

Estimated number of successful hunters of Woodcock and of their retrieved kill, 1979-81

Area	Survey stratum	Successful hunters			Birds killed			Average kill/successful hunter		
		1979	1980	1981	1979	1980	1981	1979	1980	1981
PEI	Total	106	115	36	327	316	237	3.1	2.7	6.6
NS	1	469	654	632	4 984	6 646	4 965	10.6	10.2	7.9
	2	211	361	302	1 361	2 133	1 177	6.5	5.9	3.9
	Total	680	1 015	934	6 345	8 780	6 142	9.3	8.6	6.6
NB	1	696	1 066	866	6 837	8 840	6 729	9.8	8.3	7.8
	2	370	265	350	4 217	4 323	2 552	11.4	16.3	7.3
	Total	1 066	1 332	1 216	11 055	13 163	9 281	10.4	9.9	7.6
Que.	1	5 069	5 799	5 447	28 856	40 161	24 968	5.7	6.9	4.6
	2	796	838	749	3 256	7 013	2 923	4.1	8.4	3.9
	Total	5 865	6 637	6 196	32 112	47 175	27 891	5.5	7.1	4.5
Ont.	1	3 422	3 381	3 123	20 390	22 450	24 016	6.0	6.6	7.7
	2	6 208	5 499	7 629	28 219	26 672	40 237	4.6	4.9	5.3
	3	1 269	1 115	1 096	8 322	8 963	5 505	6.6	8.0	5.0
	Total	10 901	9 996	11 849	56 932	58 087	6 975	5.2	5.8	5.9
Canada	Total	18 620	19 098	20 232	106 773	127 523	113 331	5.7	6.7	5.6
No. sampled		643	750	645						
% sampled		3.45	3.93	3.19						

Table 9

Estimated number of successful hunters of Common Snipe and of their retrieved kill, 1979-81

Area	Survey stratum	Successful hunters			Birds killed			Average kill/successful hunter		
		1979	1980	1981	1979	1980	1981	1979	1980	1981
Nfld.	1	3 234	2 310	3 084	16 875	13 014	15 854	5.2	5.6	5.1
	2	113	207	120	388	741	855	3.4	3.6	7.1
	Total	3 347	2 518	3 204	17 264	13 756	16 709	5.2	5.5	5.2
PEI	Total	179	199	257	432	824	2 025	2.4	4.1	7.9
NS	1	380	429	353	2 424	2 264	2 723	6.4	5.3	7.7
	2	297	372	244	2 692	2 106	913	9.1	5.7	3.7
	Total	677	802	597	5 117	4 370	3 636	7.6	5.5	6.1
NB	1	226	261	243	726	793	649	3.2	3.0	2.7
	2	119	138	131	578	639	669	4.8	4.6	5.1
	Total	345	399	374	1 305	1 433	1 318	3.8	3.6	3.5
Que.	1	4 903	4 247	3 475	26 631	22 022	16 986	5.4	5.2	4.9
	2	740	923	823	3 486	4 951	3 390	4.7	5.4	4.1
	Total	5 643	5 170	4 298	30 117	26 973	20 376	5.3	5.2	4.7
Ont.	1	702	386	454	2 972	1 373	1 386	4.2	3.6	3.1
	2	2 046	1 426	1 240	7 570	3 470	2 134	3.7	2.4	1.7
	3	563	430	175	2 186	1 220	915	3.9	2.8	5.2
	Total	3 312	2 243	1 869	12 730	6 065	4 435	3.8	2.7	2.4
Man.	1	230	70	399	1 255	562	1 565	5.5	8.0	3.9
	2	271	128	162	2 429	662	1 789	9.0	5.2	11.0
	Total	501	198	561	3 684	1 224	3 354	7.4	6.2	6.0
Sask.	1	114	146	77	620	261	714	5.4	1.8	9.2
	2	138	91	65	710	210	768	5.1	2.3	11.7
	3	136	229	153	481	486	466	3.5	2.1	3.0
	Total	390	467	295	1 812	958	1 948	4.7	2.1	6.6
Alta.	1	518	356	313	1 937	876	481	3.7	2.5	1.5
	2	747	828	565	6 008	5 119	2 477	8.0	6.2	4.4
	Total	1 266	1 185	878	7 945	5 995	2 958	6.3	5.1	3.4
BC	1	154	186	235	529	799	837	3.4	4.3	3.6
	2	359	345	299	1 318	845	1 845	3.7	2.5	6.2
	Total	514	532	534	1 847	1 644	2 682	3.6	3.1	5.0
NWT	Total	5	85	—	9	131	—	1.7	1.5	—
Yukon	Total	1	12	—	3	12	—	2.0	1.0	—
Canada	Total	16 186	13 815	12 867	82 271	63 390	59 441	5.1	4.6	4.6
No. sampled		545	539	443						
% sampled		3.37	3.90	3.44						

Table 10

Estimated number of successful hunters of American Coot and of their retrieved kill, 1979-81

Area	Survey stratum	Successful hunters			Birds killed			Average kill/ successful hunter		
		1979	1980	1981	1979	1980	1981	1979	1980	1981
Que.	1	1 201	2 531	1 681	3 782	6 536	7 019	3.2	2.6	4.2
	2	313	256	241	1 201	932	976	3.8	3.6	4.0
	Total	1 515	2 787	1 922	4 983	7 469	7 995	3.3	2.7	4.2
Ont.	1	563	361	363	1 449	696	1 166	2.6	1.9	3.2
	2	1 634	1 433	646	5 971	3 890	2 373	3.7	2.7	3.7
	3	563	345	204	3 237	1 380	786	5.8	4.0	3.8
	Total	2 761	2 140	1 213	10 657	5 967	4 325	3.9	2.8	3.6
Man.	1	429	113	379	1 470	311	1 084	3.4	2.8	2.9
	2	172	234	64	2 149	1 353	209	12.4	5.8	3.3
	Total	602	347	443	3 619	1 665	1 293	6.0	4.8	2.9
Sask.	1	314	292	86	853	1 630	1 157	2.7	5.6	13.3
	2	303	159	169	3 170	1 052	1 290	10.4	6.6	7.6
	3	507	270	162	1 554	2 430	1 036	3.1	9.0	6.4
	Total	1 125	722	417	5 578	5 113	3 483	5.0	7.1	8.3
Alta.	1	254	128	338	780	128	1 455	3.1	1.0	4.3
	2	998	675	575	3 440	2 871	2 265	3.5	4.3	3.9
	Total	1 252	803	913	4 220	3 000	3 720	3.4	3.7	4.1
BC	1	208	114	139	713	228	1 699	3.4	2.0	12.2
	2	78	87	82	233	174	232	3.0	2.0	2.8
	Total	287	201	221	946	402	1 931	3.3	2.0	8.7
NWT	Total	24	81	24	70	318	24	2.9	3.9	1.0
Yukon	Total	—	1	2	—	3	6	—	2.0	3.0
Canada	Total	7 569	7 086	5 155	30 077	23 940	22 777	4.0	3.4	4.4
No. sampled		231	225							
% sampled		3.05	3.18							

Table 11

Estimated number of successful hunters of Sandhill Crane and of their retrieved kill, 1979-81

Area	Survey stratum	Successful hunters			Birds killed			Average kill/ successful hunter		
		1979	1980	1981	1979	1980	1981	1979	1980	1981
Man.	Total	372	344	296	977	892	508	2.6	2.6	1.7
Sask.	Total	862	1 446	845	2 821	4 690	2 451	3.3	3.2	2.9
	Total	1 234	1 790	1 141	3 798	5 583	2 959	3.1	3.1	2.6
No. sampled		49	73	46						
% sampled		3.97	4.08	4.03						

Table 12

Estimated number of successful hunters of Mourning Dove and of their retrieved kill, 1979-81

Area	Survey stratum	Successful hunters			Birds killed			Average kill/ successful hunter		
		1979	1980	1981	1979	1980	1981	1979	1980	1981
BC	1	66	85	55	380	494	202	5.7	5.8	3.7
	2	61	87	84	719	277	1 271	11.8	3.2	15.0
	Total	139	172	139	1 100	772	1 473	8.6	4.5	10.6
No. sampled		9	9	8						
% sampled		7.03	5.23	5.76						

Table 13

Estimated number of successful hunters of Band-tailed Pigeon and of their retrieved kill, 1979-81

Area	Survey stratum	Successful hunters			Birds killed			Average kill/ successful hunter		
		1979	1980	1981	1979	1980	1981	1979	1980	1981
BC	1	15	64	58	15	672	149	1.0	10.4	2.6
	2	604	333	485	4 225	2 585	2 714	7.0	7.8	5.6
	Total	619	397	543	4 240	3 257	2 863	6.8	8.2	5.3
No. sampled		34	25	27						
% sampled		5.49	6.30	4.97						

Table 14

Estimated recreation activity provided by the hunting of migratory game birds other than waterfowl in 1981

Area	Survey stratum	Total permit sales ^a	Active hunters	Successful hunters	Retrieved kill	Recreation days	S. bag ^b (av.)	D. bag ^b (av.)	R. days ^b (av.)
Nfld.	1	28 331	5 590	3 084	15 854	58 030	2.8	0.3	10.4
	2	3 070	545	120	855	10 138	1.6	0.1	18.6
	Total	31 401	6 135	3 204	16 709	68 168	2.7	0.2	11.1
PEI	Total	5 611	625	275	2 263	2 905	3.6	0.8	4.6
NS	1	9 339	2 317	843	7 689	20 740	3.3	0.4	9.0
	2	4 791	1 124	447	2 091	8 213	1.9	0.3	7.3
	Total	14 130	3 441	1 290	9 780	28 953	2.8	0.3	8.4
NB	1	8 336	1 545	1 001	7 378	8 321	4.8	0.9	5.4
	2	3 951	805	424	3 222	7 142	4.0	0.5	8.9
	Total	12 287	2 350	1 425	10 600	15 463	4.5	0.7	6.6
Que.	1	58 710	11 415	8 003	48 973	64 321	4.3	0.8	5.6
	2	16 468	2 286	1 376	7 289	18 065	3.2	0.4	7.9
	Total	75 178	13 701	9 379	56 262	82 386	4.1	0.7	6.0
Ont.	1	39 567	5 517	3 486	26 569	29 308	4.8	0.9	5.3
	2	77 683	15 911	8 502	44 745	83 353	2.8	0.5	5.2
	3	24 427	3 035	1 353	7 206	20 589	2.4	0.3	6.8
	Total	141 677	24 463	13 341	78 520	133 250	3.2	0.6	5.4
Man.	1	38 291	3 476	961	3 111	15 622	0.9	0.2	4.5
	2	8 237	1 056	226	2 047	5 599	1.9	0.4	5.3
	Total	46 528	4 532	1 187	5 158	21 221	1.1	0.2	4.7
Sask.	1	16 410	1 531	331	2 542	5 018	1.7	0.5	3.3
	2	8 210	929	272	2 132	4 070	2.3	0.5	4.4
	3	18 236	1 864	792	3 210	8 618	1.7	0.4	4.6
	Total	42 856	4 324	1 395	7 884	17 706	1.8	0.4	4.1
Alta.	1	27 620	2 428	652	1 936	11 995	0.8	0.2	4.9
	2	38 543	3 235	972	4 742	19 097	1.5	0.2	5.9
	Total	66 163	5 663	1 624	6 678	31 092	1.2	0.2	5.5
BC	1	12 243	1 113	447	2 889	4 618	2.6	0.6	4.1
	2	16 000	1 525	803	6 064	9 674	4.0	0.6	6.3
	Total	28 243	2 638	1 250	8 953	14 292	3.4	0.6	5.4
NWT	Total	764	111	24	24	1 127	0.2	—	10.2
Yukon	Total	514	49	4	29	192	0.6	0.2	3.9
Canada	Total	465 352	68 032	34 398	202 860	416 755	3.0	0.5	6.1

^a Migratory game bird hunting permits.

^b S. bag, seasonal bag per active hunter; D. bag, daily bag per active hunter; R. days, recreation days per active hunter.

Table 15

Precision of estimates at 95% confidence of duck and goose kill from the NHS, 1980-81

Area	Zone	Year	Active hunter(± %)	Duck harvest (± %)	Goose harvest (± %)
Nfld.	01	1980	16 645 ± 5.55	82 930 ± 11.76	7 102 ± 25.85
		1981	16 905 ± 6.29	90 438 ± 18.09	6 189 ± 35.58
	02	1980	2 689 ± 12.29	23 108 ± 18.19	3 713 ± 28.19
		1981	2 048 ± 13.23	16 948 ± 27.38	2 891 ± 41.32
PEI	01	1980	4 647 ± 5.75	31 862 ± 14.08	18 894 ± 19.48
		1981	4 605 ± 6.96	25 041 ± 16.78	13 745 ± 23.23
NS	01	1980	6 624 ± 5.96	86 192 ± 14.62	6 033 ± 28.23
		1981	5 759 ± 7.26	80 924 ± 15.35	5 521 ± 25.04
	02	1980	4 131 ± 7.35	38 544 ± 19.17	2 404 ± 29.24
		1981	3 824 ± 8.53	25 605 ± 17.13	1 937 ± 28.88
NB	01	1980	6 175 ± 5.16	44 769 ± 10.69	1 493 ± 33.79
		1981	5 937 ± 6.11	41 826 ± 11.62	1 641 ± 46.40
	02	1980	2 632 ± 7.40	15 138 ± 13.95	1 579 ± 28.37
		1981	2 727 ± 9.94	15 487 ± 15.38	2 567 ± 52.58
Que.	01	1980	43 840 ± 3.91	388 099 ± 7.83	86 291 ± 11.64
		1981	40 134 ± 4.42	379 671 ± 8.87	42 109 ± 25.30
	02	1980	12 451 ± 7.03	112 046 ± 13.28	36 738 ± 20.22
		1981	10 843 ± 7.98	93 212 ± 16.51	10 340 ± 27.84
Ont.	01	1980	26 105 ± 5.20	250 629 ± 9.53	22 863 ± 19.76
		1981	24 950 ± 5.23	202 692 ± 10.54	17 748 ± 16.73
	02	1980	64 537 ± 4.23	489 964 ± 9.59	43 879 ± 24.69
		1981	60 957 ± 4.87	447 958 ± 11.07	18 887 ± 27.44
	03	1980	20 081 ± 5.79	171 542 ± 11.58	19 273 ± 22.25
		1981	16 277 ± 6.28	141 298 ± 12.12	14 476 ± 21.50
Man.	01	1980	29 627 ± 3.72	223 102 ± 9.75	135 677 ± 8.85
		1981	28 002 ± 4.08	200 016 ± 9.36	108 661 ± 9.36
	02	1980	10 889 ± 6.76	112 024 ± 11.50	34 470 ± 15.64
		1981	9 652 ± 7.90	86 591 ± 13.01	30 531 ± 15.74
Sask.	01	1980	17 367 ± 5.76	144 447 ± 11.44	102 439 ± 10.19
		1981	13 819 ± 6.47	79 295 ± 11.84	73 405 ± 10.99
	02	1980	9 325 ± 6.92	129 775 ± 12.54	18 008 ± 16.57
		1981	6 514 ± 8.26	67 370 ± 13.83	18 226 ± 18.50
	03	1980	18 853 ± 4.60	169 331 ± 9.01	50 942 ± 10.46
		1981	13 740 ± 5.35	116 440 ± 9.74	43 364 ± 12.38
Alta.	01	1980	22 646 ± 5.23	182 523 ± 10.16	69 771 ± 14.42
		1981	21 632 ± 5.84	195 056 ± 21.01	68 205 ± 13.63
	02	1980	38 290 ± 3.90	506 278 ± 7.04	63 425 ± 14.80
		1981	26 437 ± 4.84	314 094 ± 8.89	52 981 ± 14.92
	01	1980	9 146 ± 7.05	73 756 ± 14.61	9 798 ± 22.22
		1981	8 528 ± 7.37	61 129 ± 13.29	8 556 ± 25.35
02	1980	8 231 ± 7.21	112 518 ± 13.14	8 951 ± 23.32	
	1981	7 700 ± 7.83	118 548 ± 13.05	10 393 ± 20.22	
NWT	01	1980	1 098 ± 23.18	11 548 ± 38.36	989 ± 77.52
		1981	669 ± 34.43	4 920 ± 47.01	353 ± —
Yukon	01	1980	356 ± 20.48	3 017 ± 45.69	533 ± 57.29
		1981	278 ± 27.79	1 337 ± 40.92	258 ± 59.27

Table 16
Net intensity of the Species Composition Survey, 1981

Area	Zone	Permit sales	Mailing size	Return rate	Est. resp. rate from suc. hunt.	Net cov. of hunt. population	Parts received
Nfld.	01	28 331	2 500	0.040	0.13	0.0079	260
	02	3 070	1 000	0.030	0.04	0.0187	107
PEI		5 611	1 100	0.115	0.16	0.0031	654
NS	01	9 339	1 600	0.145	0.34	0.0467	1 130
	02	4 791	1 400	0.171	0.38	0.0797	1 017
NB	01	8 336	1 900	0.110	0.22	0.0443	1 032
	02	3 951	1 700	0.058	0.14	0.0454	385
Que.	01	58 710	3 500	0.232	0.41	0.0221	3 183
	02	16 468	1 792	0.148	0.36	0.0272	1 154
Ont.	01	39 567	3 200	0.114	0.25	0.0177	1 963
	02	77 683	1 700	0.365	0.68	0.0125	3 231
	03	24 427	2 800	0.136	0.30	0.0276	1 861
Man.	01	38 291	2 510	0.142	0.24	0.0144	2 086
	02	8 237	1 480	0.073	0.11	0.0122	490
Sask.	01	16 410	1 460	0.097	0.17	0.0111	738
	02	8 210	2 090	0.044	0.09	0.0160	371
	03	18 236	2 210	0.074	0.13	0.0136	929
Alta.	01	27 620	2 200	0.089	0.16	0.0104	1 076
	02	38 543	4 030	0.057	0.12	0.0095	1 417
BC	01	12 243	1 550	0.151	0.32	0.0341	1 130
	02	16 000	2 000	0.123	0.28	0.0306	1 666
NWT		764	494	0.032	0.08	0.0272	75
Yukon		514	415	0.022	0.05	0.0352	26
Canada		465 352	44 631	0.118	0.24	0.0184	25 981

Table 17
Total waterfowl harvest in Canada

	Retrieved kill							
	1978		1979		1980		1981	
	Harvest	%	Harvest	%	Harvest	%	Harvest	%
Common Merganser	34 113	1.0	26 151	0.8	30 276	0.9	30 172	1.0
Red-breasted Merganser	7 347	0.2	11 783	0.3	14 417	0.4	13 419	0.5
Hooded Merganser	35 493	1.0	30 451	0.9	31 893	0.9	35 266	1.2
Mallard	1 529 404	43.4	1 612 464	46.8	1 534 150	45.1	1 294 122	43.7
Black Duck	378 785	10.8	316 627	9.2	365 229	10.7	325 874	11.0
Gadwall	108 081	3.1	103 568	3.0	93 719	2.8	54 063	1.8
American Wigeon	137 363	3.9	122 143	3.5	95 496	2.8	77 200	2.6
Green-winged Teal	228 260	6.5	162 731	4.7	175 798	5.2	177 345	6.0
Blue-winged Teal	136 477	3.9	109 007	3.3	89 397	2.6	74 015	2.5
Shoveler	45 467	1.3	48 291	1.4	49 893	1.5	33 530	1.1
Pintail	135 366	3.8	146 300	4.2	129 348	3.8	111 161	3.8
Wood Duck	143 271	4.1	113 528	3.3	118 054	3.5	124 151	4.2
Redhead	41 659	1.2	66 384	1.9	52 018	1.5	28 880	1.0
Canvasback	28 465	0.8	35 522	1.0	27 443	0.8	19 299	0.7
Greater Scaup	43 825	1.2	50 459	1.5	56 287	1.7	50 114	1.7
Lesser Scaup	96 403	2.7	99 103	2.9	138 098	4.1	126 895	4.3
Ring-necked Duck	120 392	3.4	126 370	3.7	128 889	3.8	118 660	4.0
Goldeneye	122 518	3.5	100 380	2.9	113 789	3.3	111 623	3.8
Bufflehead	69 492	2.0	61 762	1.8	55 386	1.6	51 387	1.7
Ruddy Duck	1 201	0.0	8 300	0.2	2 714	0.1	3 260	0.1
Total sport ducks	3 443 382	97.8	3 351 324	97.2	3 302 294	97.0	2 860 436	96.7
Oldsquaw	11 288	0.3	21 048	0.6	17 228	0.5	15 445	0.5
Common Eider	30 882	0.9	25 053	0.7	24 339	0.7	23 668	0.8
Common Scoter	11 296	0.3	17 295	0.5	16 119	0.5	22 868	0.8
White-winged Scoter	10 634	0.3	17 291	0.5	20 477	0.6	13 801	0.5
Surf Scoter	14 558	0.4	15 403	0.4	22 345	0.7	22 330	0.8
Total sea ducks	78 658	2.2	96 090	2.8	100 508	3.0	98 112	3.3
Total ducks	3 522 040	85.6	3 447 414	83.9	3 402 802	82.0	2 958 548	83.6
Canada Goose	406 469	68.4	431 462	65.4	462 146	62.0	363 709	62.7
Snow Goose	120 638	20.3	159 012	24.1	195 270	26.2	159 880	27.6
White-fronted Goose	62 128	10.5	60 938	9.2	79 011	10.6	52 532	9.1
Ross' Goose	4 809	0.8	8 283	1.3	4 816	0.6	3 082	0.5
Brant	0	0.0	524	0.1	4 018	0.5	556	0.1
Total geese	594 044	14.4	660 219	16.1	745 261	18.0	579 759	16.4
Total waterfowl	4 116 084	100.0	4 107 633	100.0	4 148 063	100.0	3 538 307	100.0

Table 18
Estimated retrieved kill of waterfowl in Newfoundland

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	8 584	7.4	5 666	6.0	3 342	4.0	6 372	6.8
	02	2 441	8.9	805	2.9	634	2.7	677	3.4
	Total	11 025	7.7	6 471	5.3	3 976	3.7	7 049	6.2
Red-breasted Merganser	01	4 441	3.9	1 344	1.4	6 713	8.1	2 513	2.7
	02	0	0.0	2 851	10.2	616	2.7	960	4.8
	Total	4 441	3.1	4 195	3.4	7 329	6.9	3 473	3.0
Hooded Merganser	01	0	0.0	45	0.0	519	0.6	168	0.2
	02	0	0.0	0	0.0	634	2.7	123	0.6
	Total	0	0.0	45	0.0	1 153	1.1	291	0.3
Mallard	01	200	0.2	0	0.0	0	0.0	2 398	2.5
	02	582	2.1	456	1.6	0	0.0	0	0.0
	Total	782	0.5	456	0.4	0	0.0	2 398	2.1
Black Duck	01	41 464	36.0	33 398	35.4	28 813	34.7	34 661	36.8
	02	4 780	17.5	8 274	29.6	2 483	10.7	6 586	32.8
	Total	46 244	32.4	41 672	34.1	31 296	29.5	41 247	36.1
Gadwall	02	138	0.5	0	0.0	0	0.0	0	0.0
	Total	138	0.1	0	0.0	0	0.0	0	0.0
	01	552	0.5	140	0.1	0	0.0	0	0.0
American Wigeon	02	0	0.0	0	0.0	0	0.0	282	1.4
	Total	552	0.4	140	0.1	0	0.0	282	0.2
	01	27 549	23.9	13 362	14.2	11 717	14.1	16 773	17.8
Green-winged Teal	02	3 283	12.0	4 283	15.3	771	3.3	901	4.5
	Total	30 832	21.6	17 645	14.4	12 488	11.8	17 674	15.5
	01	895	0.8	230	0.2	0	0.0	413	0.4
Blue-winged Teal	02	582	2.1	95	0.3	0	0.0	0	0.0
	Total	1 477	1.0	325	0.3	0	0.0	413	0.4
	01	619	0.5	370	0.4	688	0.8	798	0.8
Pintail	02	275	1.0	1 428	5.1	248	1.1	282	1.4
	Total	894	0.6	1 798	1.5	936	0.9	1 080	0.9
	01	0	0.0	2 169	2.3	0	0.0	0	0.0
Wood Duck	02	0	0.0	0	0.0	385	1.7	0	0.0
	Total	0	0.0	2 169	1.8	385	0.4	0	0.0
	01	276	0.2	642	0.7	2 880	3.5	0	0.0
Greater Scaup	02	1 479	5.4	0	0.0	368	1.6	443	2.2
	Total	1 755	1.2	642	0.5	3 248	3.1	443	0.4
	01	0	0.0	0	0.0	1 862	2.2	0	0.0
Lesser Scaup	02	1 314	4.8	267	1.0	1 541	6.7	2 206	11.0
	Total	1 314	0.9	267	0.2	3 403	3.2	2 206	1.9
	01	7 664	6.6	12 555	13.3	3 726	4.5	7 559	8.0
Ring-necked Duck	02	1 287	4.7	0	0.0	3 058	13.2	281	1.4
	Total	8 951	6.3	12 555	10.3	6 784	6.4	7 840	6.9
	01	12 338	10.7	11 227	11.9	10 502	12.7	14 497	15.4
Goldeneye	02	5 704	20.9	6 054	21.6	6 750	29.2	4 722	23.5
	Total	18 042	12.6	17 281	14.1	17 252	16.3	19 219	16.8
	Total sport ducks	126 447	88.6	105 661	86.5	88 250	83.2	103 615	90.6

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Oldsquaw	01	0	0.0	0	0.0	2 010	2.4	0	0.0
	02	0	0.0	0	0.0	0	0.0	1 921	9.6
	Total	0	0.0	0	0.0	2 010	1.9	1 921	1.7
Common Eider	01	9 846	8.5	11 205	11.9	6 545	7.9	2 612	2.8
	02	4 719	17.3	1 463	5.2	2 562	11.1	0	0.0
	Total	14 565	10.2	12 668	10.4	9 107	8.6	2 612	2.3
Common Scoter	01	395	0.3	1 504	1.6	111	0.1	3 564	3.8
	02	0	0.0	358	1.3	1 793	7.8	359	1.8
	Total	395	0.3	1 862	1.5	1 904	1.8	3 923	3.4
White-winged Scoter	01	514	0.4	0	0.0	2 725	3.3	906	1.0
	02	0	0.0	1 202	4.3	368	1.6	0	0.0
	Total	514	0.4	1 202	1.0	3 093	2.9	906	0.8
Surf Scoter	01	0	0.0	362	0.4	778	0.9	1 020	1.1
	02	739	2.7	446	1.6	896	3.9	355	1.8
	Total	739	0.5	808	0.7	1 674	1.6	1 375	1.2
Total sea ducks		16 213	11.4	16 540	13.5	17 788	16.8	10 737	9.4
Total ducks		142 660	91.6	122 201	90.0	106 038	90.7	114 352	91.9
Canada Goose	01	8 441	100.0	8 717	100.0	7 102	100.0	6 747	100.0
	02	4 603	100.0	4 896	100.0	3 713	100.0	3 329	100.0
	Total	13 044	100.0	13 613	100.0	10 815	100.0	10 076	100.0
Total geese		13 044	8.4	13 613	10.0	10 815	9.3	10 076	8.1
Waterfowl		155 704	100.0	135 814	100.0	116 853	100.0	124 428	100.0

(cont'd)

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

Species	1978		1979		1980		1981	
	Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	150	0.5	327	1.6	0	0.0	0	0.0
Red-breasted Merganser	45	0.1	269	1.3	0	0.0	118	0.4
Hooded Merganser	0	0.0	0	0.0	0	0.0	125	0.5
Mallard	297	1.0	450	2.1	1 001	3.1	1 398	5.3
Black Duck	20 008	66.6	12 667	60.5	21 532	67.6	16 044	61.2
Gadwall	0	0.0	0	0.0	0	0.0	68	0.3
American Wigeon	268	0.9	202	1.0	319	1.0	394	1.5
Green-winged Teal	6 093	20.3	5 302	25.3	7 049	22.1	6 304	24.0
Blue-winged Teal	1 071	3.6	817	3.9	394	1.2	569	2.2
Pintail	771	2.6	576	2.8	508	1.6	811	3.1
Wood Duck	45	0.1	0	0.0	0	0.0	87	0.3
Greater Scaup	0	0.0	0	0.0	150	0.5	0	0.0
Lesser Scaup	45	0.1	0	0.0	75	0.2	0	0.0
Ring-necked Duck	357	1.2	180	0.9	305	1.0	229	0.9
Goldeneye	348	1.2	90	0.4	399	1.3	44	0.2
Bufflehead	0	0.0	0	0.0	0	0.0	42	0.2
Ruddy Duck	0	0.0	64	0.3	0	0.0	0	0.0
Total sport ducks	29 498	98.2	20 944	100.0	31 732	99.6	26 233	100.0
Oldsquaw	309	1.0	0	0.0	68	0.2	0	0.0
Common Eider	45	0.1	0	0.0	61	0.2	0	0.0
White-winged Scoter	117	0.4	0	0.0	0	0.0	0	0.0
Surf Scoter	75	0.2	0	0.0	0	0.0	0	0.0
Total sea ducks	546	1.8	0	0.0	129	0.4	0	0.0
Total ducks	30 044	71.8	20 944	66.6	31 861	62.8	26 233	64.6
Canada Goose	11 823	100.0	10 157	96.6	18 894	100.0	14 347	100.0
Large Canada Goose	0	0.0	362	3.4	0	0.0	0	0.0
Total geese	11 823	28.2	10 519	33.4	18 894	37.2	14 347	35.4
Waterfowl	41 867	100.0	31 463	100.0	50 755	100.0	40 580	100.0

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	1 291	1.7	1 116	1.8	702	0.8	2 002	2.3
	02	1 095	3.2	427	1.6	1 298	3.4	404	1.5
	Total	2 386	2.2	1 543	1.7	2 000	1.6	2 406	2.1
Red-breasted Merganser	01	432	0.6	1 828	3.0	1 436	1.7	3 844	4.4
	02	361	1.1	177	0.7	726	1.9	467	1.7
	Total	793	0.7	2 005	2.3	2 162	1.7	4 311	3.8
Hooded Merganser	01	256	0.3	402	0.7	0	0.0	238	0.3
	02	64	0.2	276	1.0	22	0.1	193	0.7
	Total	320	0.3	678	0.8	22	0.0	431	0.4
Mallard	01	850	1.1	512	0.8	2 066	2.4	1 534	1.8
	02	326	1.0	259	1.0	1 150	3.0	845	3.1
	Total	1 176	1.1	771	0.9	3 216	2.6	2 379	2.1
Black Duck	01	42 016	55.6	28 456	46.4	44 425	51.5	40 683	47.1
	02	22 723	67.0	15 462	57.1	24 244	62.9	17 228	63.3
	Total	64 739	59.1	43 918	49.7	68 669	55.1	57 911	51.0
Gadwall	01	58	0.1	0	0.0	0	0.0	31	0.0
	02	0	0.0	0	0.0	0	0.0	17	0.1
	Total	58	0.1	0	0.0	0	0.0	48	0.0
American Wigeon	01	88	0.1	147	0.2	38	0.0	94	0.1
	02	132	0.4	168	0.6	224	0.6	103	0.4
	Total	220	0.2	315	0.4	262	0.2	197	0.2
Green-winged Teal	01	6 855	9.1	5 480	8.9	8 545	9.9	7 556	8.7
	02	5 326	15.7	3 525	13.0	4 911	12.7	3 486	12.8
	Total	12 181	11.1	9 005	10.2	13 456	10.8	11 042	9.7
Blue-winged Teal	01	634	0.8	520	0.8	579	0.7	662	0.8
	02	599	1.8	1 084	4.0	830	2.2	483	1.8
	Total	1 233	1.1	1 604	1.8	1 409	1.1	1 145	1.0
Shoveler	01	29	0.0	0	0.0	0	0.0	217	0.3
	Total	29	0.0	0	0.0	0	0.0	217	0.2
Pintail	01	476	0.6	392	0.6	546	0.6	760	0.9
	02	197	0.6	111	0.4	184	0.5	266	1.0
	Total	673	0.6	503	0.6	730	0.6	1 026	0.9
Wood Duck	01	478	0.6	703	1.1	229	0.3	359	0.4
	02	296	0.9	240	0.9	348	0.9	132	0.5
	Total	774	0.7	943	1.1	577	0.5	491	0.4
Redhead	02	0	0.0	16	0.1	0	0.0	51	0.2
	Total	0	0.0	16	0.0	0	0.0	51	0.0
Greater Scaup	01	760	1.0	88	0.1	611	0.7	167	0.2
	02	0	0.0	211	0.8	196	0.5	35	0.1
	Total	760	0.7	299	0.3	807	0.6	202	0.2
Lesser Scaup	01	0	0.0	46	0.1	295	0.3	401	0.5
	02	0	0.0	161	0.6	261	0.7	251	0.9
	Total	0	0.0	207	0.2	556	0.4	652	0.6

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Ring-necked Duck	01	2 060	2.7	2 068	3.4	2 325	2.7	1 555	1.8
	02	683	2.0	1 897	7.0	784	2.0	678	2.5
	Total	2 743	2.5	3 965	4.5	3 109	2.5	2 233	2.0
Goldeneye	01	6 111	8.1	2 103	3.4	3 557	4.1	1 471	1.7
	02	1 621	4.8	1 039	3.8	2 676	6.9	1 358	5.0
	Total	7 732	7.1	3 142	3.6	6 233	5.0	2 829	2.5
Bufflehead	01	599	0.8	1 377	2.2	1 213	1.4	608	0.7
	02	0	0.0	447	1.7	109	0.3	338	1.2
	Total	599	0.5	1 824	2.1	1 322	1.1	946	0.8
Total sport ducks		96 416	88.0	70 738	80.0	104 530	83.8	88 517	77.9
Oldsquaw	01	1 183	1.6	4 597	7.5	4 188	4.9	1 543	1.8
	02	289	0.9	865	3.2	321	0.8	358	1.3
	Total	1 472	1.3	5 462	6.2	4 509	3.6	1 901	1.7
Common Eider	01	7 657	10.1	6 235	10.2	7 886	9.1	11 150	12.9
	02	145	0.4	80	0.3	44	0.1	61	0.2
	Total	7 802	7.1	6 315	7.1	7 930	6.4	11 211	9.9
King Eider	01	0	0.0	93	0.2	0	0.0	0	0.0
	Total	0	0.0	93	0.1	0	0.0	0	0.0
Harlequin Duck	01	0	0.0	108	0.2	0	0.0	0	0.0
	Total	0	0.0	108	0.1	0	0.0	0	0.0
Common Scoter	01	2 233	3.0	2 144	3.5	1 130	1.3	4 574	5.3
	02	0	0.0	62	0.2	0	0.0	61	0.2
	Total	2 233	2.0	2 206	2.5	1 130	0.9	4 635	4.1
White-winged Scoter	01	292	0.4	665	1.1	3 072	3.6	1 416	1.6
	02	72	0.2	406	1.5	192	0.5	0	0.0
	Total	364	0.3	1 071	1.2	3 264	2.6	1 416	1.2
Surf Scoter	01	1 255	1.7	2 230	3.6	3 347	3.9	5 525	6.4
	02	0	0.0	161	0.6	26	0.1	396	1.5
	Total	1 255	1.1	2 391	2.7	3 373	2.7	5 921	5.2
Total sea ducks		13 126	12.8	17 646	20.0	20 206	16.2	25 084	22.1
Total ducks		109 542	94.1	88 384	93.5	124 736	93.7	113 601	93.7
Canada Goose	01	4 280	100.0	4 383	100.0	6 033	100.0	5 639	100.0
	02	2 529	100.0	1 767	100.0	2 346	97.6	1 982	99.2
	Total	6 809	100.0	6 150	100.0	8 379	99.3	7 621	99.8
Snow Goose	02	0	0.0	0	0.0	58	2.4	0	0.0
	Total	0	0.0	0	0.0	58	0.7	0	0.0
Greater Snow Goose	02	0	0.0	0	0.0	0	0.0	15	0.8
	Total	0	0.0	0	0.0	0	0.0	15	0.2
Total geese		6 809	5.9	6 150	6.5	8 437	6.3	7 636	6.3
Waterfowl		116 351	100.0	94 534	100.0	133 173	100.0	121 237	100.0

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	415	0.8	179	0.5	491	1.1	331	0.8
	02	92	0.6	590	4.7	194	1.3	606	3.8
	Total	507	0.8	769	1.6	685	1.1	937	1.6
Red-breasted Merganser	01	65	0.1	46	0.1	0	0.0	68	0.2
	02	0	0.0	248	2.0	129	0.9	263	1.6
	Total	65	0.1	294	0.6	129	0.2	331	0.6
Hooded Merganser	01	828	1.6	431	1.2	168	0.4	254	0.6
	02	39	0.3	82	0.7	337	2.2	374	2.3
	Total	867	1.3	513	1.0	505	0.8	628	1.1
Mallard	01	1 433	2.8	896	2.4	993	2.2	1 791	4.2
	02	92	0.6	708	5.7	395	2.6	695	4.3
	Total	1 525	2.3	1 604	3.3	1 388	2.3	2 486	4.2
Black Duck	01	19 249	37.5	12 531	34.2	19 368	43.3	17 024	39.7
	02	7 010	48.3	4 842	38.7	8 904	58.8	9 913	61.4
	Total	26 259	39.9	17 373	35.4	28 272	47.2	26 937	45.7
Gadwall	01	0	0.0	0	0.0	31	0.1	0	0.0
	Total	0	0.0	0	0.0	31	0.1	0	0.0
American Wigeon	01	1 421	2.8	1 328	3.6	1 540	3.4	827	1.9
	02	0	0.0	334	2.7	143	0.9	133	0.8
	Total	1 421	2.2	1 662	3.4	1 683	2.8	960	1.6
Green-winged Teal	01	9 989	19.5	5 049	13.8	4 832	10.8	6 886	16.1
	02	4 513	31.1	2 272	18.2	1 255	8.3	1 745	10.8
	Total	14 502	22.0	7 321	14.9	6 087	10.2	8 631	14.6
Blue-winged Teal	01	4 914	9.6	4 558	12.4	3 429	7.7	2 480	5.8
	02	474	3.3	1 162	9.3	513	3.4	222	1.4
	Total	5 388	8.2	5 720	11.6	3 942	6.6	2 702	4.6
Shoveler	01	98	0.2	46	0.1	131	0.3	59	0.1
	Total	98	0.1	46	0.1	131	0.2	59	0.1
Pintail	01	728	1.4	775	2.1	658	1.5	737	1.7
	02	685	4.7	307	2.5	592	3.9	440	2.7
	Total	1 413	2.1	1 082	2.2	1 250	2.1	1 177	2.0
Wood Duck	01	2 079	4.1	1 268	3.5	2 573	5.7	2 386	5.6
	02	298	2.1	164	1.3	380	2.5	199	1.2
	Total	2 377	3.6	1 432	2.9	2 953	4.9	2 585	4.4
Redhead	01	0	0.0	0	0.0	31	0.1	34	0.1
	Total	0	0.0	0	0.0	31	0.1	34	0.1
Greater Scaup	01	270	0.5	472	1.3	159	0.4	512	1.2
	02	193	1.3	0	0.0	196	1.3	400	2.5
	Total	463	0.7	472	1.0	355	0.6	912	1.5
Lesser Scaup	01	173	0.3	294	0.8	548	1.2	430	1.0
	02	539	3.7	83	0.7	233	1.5	215	1.3
	Total	712	1.1	377	0.8	781	1.3	645	1.1
Ring-necked Duck	01	2 740	5.3	3 184	8.7	5 003	11.2	4 574	10.7
	02	316	2.2	342	2.7	485	3.2	181	1.1
	Total	3 056	4.6	3 526	7.2	5 488	9.2	4 755	8.1

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Goldeneye	01	5 374	10.5	4 395	12.0	3 826	8.5	3 065	7.2
	02	153	1.1	1 037	8.3	439	2.9	162	1.0
	Total	5 527	8.4	5 432	11.1	4 265	7.1	3 227	5.5
Bufflehead	01	333	0.6	357	1.0	256	0.6	85	0.2
	Total	333	0.5	357	0.7	256	0.4	85	0.1
Total sport ducks		64 513	98.0	47 980	97.7	58 232	97.2	57 091	96.8
Oldsquaw	01	0	0.0	237	0.6	38	0.1	508	1.2
	02	0	0.0	259	2.1	305	2.0	487	3.0
	Total	0	0.0	496	1.0	343	0.6	995	1.7
Common Eider	01	448	0.9	244	0.7	399	0.9	415	1.0
	Total	448	0.7	244	0.5	399	0.7	415	0.7
Common Scoter	01	0	0.0	46	0.1	0	0.0	169	0.4
	02	0	0.0	27	0.2	0	0.0	0	0.0
	Total	0	0.0	73	0.1	0	0.0	169	0.3
White-winged Scoter	01	293	0.6	149	0.4	99	0.2	118	0.3
	02	0	0.0	0	0.0	104	0.7	0	0.0
	Total	293	0.4	149	0.3	203	0.3	118	0.2
Surf Scoter	01	481	0.9	126	0.3	193	0.4	93	0.2
	02	106	0.7	49	0.4	534	3.5	122	0.8
	Total	587	0.9	175	0.4	727	1.2	215	0.4
Total sea ducks		1 328	2.0	1 137	2.3	1 672	2.8	1 912	3.2
Total ducks		65 841	95.3	49 117	94.9	59 904	95.1	59 003	93.2
Canada Goose	01	1 455	100.0	1 153	100.0	1 493	100.0	1 641	100.0
	02	1 760	97.5	1 475	100.0	1 422	90.1	2 638	100.0
	Total	3 215	98.6	2 628	100.0	2 915	94.9	4 279	100.0
Large Canada Goose	02	0	0.0	0	0.0	157	9.9	0	0.0
	Total	0	0.0	0	0.0	157	5.1	0	0.0
Blue Goose	02	46	2.5	0	0.0	0	0.0	0	0.0
	Total	46	1.4	0	0.0	0	0.0	0	0.0
Total geese		3 261	4.7	2 628	5.1	3 072	4.9	4 279	6.8
Waterfowl		69 102	100.0	51 745	100.0	62 976	100.0	63 282	100.0

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	11 652	2.8	10 309	2.8	11 152	2.9	9 189	2.2
	02	2 737	2.4	1 578	1.8	4 659	4.2	4 310	4.4
	Total	14 389	2.7	11 887	2.6	15 811	3.2	13 499	2.7
Red-breasted Merganser	01	1 196	0.3	2 229	0.6	2 624	0.7	2 525	0.6
	02	337	0.3	1 106	1.3	814	0.7	1 192	1.2
	Total	1 533	0.3	3 335	0.7	3 438	0.7	3 717	0.7
Hooded Merganser	01	10 349	2.5	7 273	2.0	7 445	1.9	8 382	2.0
	02	886	0.8	3 074	3.5	1 213	1.1	1 697	1.7
	Total	11 235	2.1	10 347	2.2	8 658	1.7	10 079	2.0
Mallard	01	56 426	13.6	58 278	15.6	71 247	18.4	83 240	20.4
	02	6 023	5.2	9 972	11.4	10 057	9.0	9 594	9.7
	Total	62 449	11.8	68 250	14.8	81 304	16.3	92 834	18.3
Black Duck	01	89 955	21.7	82 441	22.1	78 521	20.2	74 375	18.2
	02	40 888	35.6	30 617	35.0	41 878	37.3	31 173	31.5
	Total	130 843	24.7	113 058	24.6	120 399	24.1	105 548	20.8
Gadwall	01	7 484	1.8	9 528	2.6	10 283	2.6	6 075	1.5
	02	0	0.0	231	0.3	420	0.4	43	0.0
	Total	7 484	1.4	9 759	2.1	10 703	2.1	6 118	1.2
American Wigeon	01	6 272	1.5	7 688	2.1	6 173	1.6	5 595	1.4
	02	598	0.5	1 436	1.6	1 040	0.9	557	0.6
	Total	6 870	1.3	9 124	2.0	7 213	1.4	6 152	1.2
Green-winged Teal	01	44 818	10.8	27 241	7.3	31 454	8.1	36 400	8.9
	02	15 755	13.7	8 375	9.6	14 279	12.7	11 514	11.6
	Total	60 573	11.4	35 616	7.7	45 733	9.1	47 914	9.4
Blue-winged Teal	01	33 218	8.0	12 617	3.4	8 297	2.1	6 648	1.6
	02	2 790	2.4	1 367	1.6	2 027	1.8	2 100	2.1
	Total	36 008	6.8	13 984	3.0	10 324	2.1	8 748	1.7
Shoveler	01	2 714	0.7	2 320	0.6	4 943	1.3	5 482	1.3
	02	40	0.0	210	0.2	192	0.2	85	0.1
	Total	2 754	0.5	2 530	0.5	5 135	1.0	5 567	1.1
Pintail	01	16 597	4.0	13 213	3.5	12 395	3.2	14 539	3.6
	02	3 953	3.4	2 100	2.4	4 704	4.2	2 923	3.0
	Total	20 550	3.9	15 313	3.3	17 099	3.4	17 462	3.4
Wood Duck	01	17 620	4.3	17 585	4.7	16 450	4.2	23 972	5.9
	02	399	0.3	928	1.1	1 160	1.0	1 242	1.3
	Total	18 019	3.4	18 513	4.0	17 610	3.5	25 214	5.0
Redhead	01	3 664	0.9	3 300	0.9	2 582	0.7	978	0.2
	02	0	0.0	0	0.0	0	0.0	85	0.1
	Total	3 664	0.7	3 300	0.7	2 582	0.5	1 063	0.2
Canvasback	01	3 680	0.9	3 980	1.1	3 035	0.8	578	0.1
	Total	3 680	0.7	3 980	0.9	3 035	0.6	578	0.1
Greater Scaup	01	18 577	4.5	19 673	5.3	17 898	4.6	20 029	4.9
	02	0	0.0	741	0.8	1 386	1.2	2 574	2.6
	Total	18 577	3.5	20 414	4.4	19 284	3.9	22 603	4.5
Lesser Scaup	01	17 739	4.3	24 395	6.5	25 910	6.7	29 340	7.2
	02	4 282	3.7	2 171	2.5	2 836	2.5	4 028	4.1
	Total	22 021	4.2	26 566	5.8	28 746	5.7	33 368	6.6

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Ring-necked Duck	01	18 075	4.4	15 669	4.2	16 419	4.2	16 447	4.0
	02	6 483	5.6	2 259	2.6	4 778	4.3	4 227	4.3
	Total	24 558	4.6	17 928	3.9	21 197	4.2	20 674	4.1
Goldeneye	01	26 250	6.3	21 669	5.8	22 401	5.8	23 070	5.6
	02	13 660	11.9	5 223	6.0	6 374	5.7	5 326	5.4
	Total	39 910	7.5	26 892	5.8	28 775	5.8	28 396	5.6
Bufflehead	01	8 414	2.0	7 157	1.9	4 985	1.3	8 007	2.0
	02	668	0.6	578	0.7	100	0.1	975	1.0
	Total	9 082	1.7	7 735	1.7	5 085	1.0	8 982	1.8
Ruddy Duck	01	0	0.0	1 398	0.4	0	0.0	107	0.0
	Total	0	0.0	1 398	0.3	0	0.0	107	0.0
Total sport ducks		494 199	93.4	419 929	91.2	452 131	90.4	458 623	90.3
Oldsquaw	01	3 410	0.8	7 786	2.1	6 057	1.6	2 929	0.7
	02	3 984	3.5	3 685	4.2	1 880	1.7	4 840	4.9
	Total	7 394	1.4	11 471	2.5	7 937	1.6	7 769	1.5
Common Eider	01	2 093	0.5	506	0.1	686	0.2	2 961	0.7
	02	5 709	5.0	4 762	5.4	6 156	5.5	6 469	6.5
	Total	7 802	1.5	5 268	1.1	6 842	1.4	9 430	1.9
King Eider	01	0	0.0	280	0.1	0	0.0	296	0.1
	Total	0	0.0	280	0.1	0	0.0	296	0.1
Common Scoter	01	5 273	1.3	9 836	2.6	10 742	2.8	9 520	2.3
	02	1 239	1.1	983	1.1	1 529	1.4	1 860	1.9
	Total	6 512	1.2	10 819	2.4	12 271	2.5	11 380	2.2
White-winged Scoter	01	3 830	0.9	6 407	1.7	10 002	2.6	7 391	1.8
	02	972	0.8	2 025	2.3	809	0.7	632	0.6
	Total	4 802	0.9	8 432	1.8	10 811	2.2	8 023	1.6
Surf Scoter	01	4 872	1.2	0	0.0	6 398	1.6	10 864	2.7
	02	3 501	3.0	4 155	4.7	3 855	3.4	1 539	1.6
	Total	8 373	1.6	4 155	0.9	10 253	2.0	12 403	2.4
Total sea ducks		34 883	6.6	40 425	8.8	48 114	9.6	49 301	9.7
Total ducks		529 082	83.0	460 354	85.2	500 245	80.3	507 924	90.1
Canada Goose	01	44 839	52.1	38 144	61.5	28 750	33.3	14 942	33.6
	02	20 427	90.8	14 550	82.3	22 636	61.6	9 859	86.4
	Total	65 266	60.1	52 694	66.1	51 386	41.8	24 801	44.4
Snow Goose	01	0	0.0	3 556	5.7	8 454	9.8	0	0.0
	02	0	0.0	1 219	6.9	4 596	12.5	0	0.0
	Total	0	0.0	4 775	6.0	13 050	10.6	0	0.0
Blue Goose	01	549	0.6	0	0.0	0	0.0	478	1.1
	02	0	0.0	0	0.0	114	0.3	97	0.8
	Total	549	0.5	0	0.0	114	0.1	575	1.0
Greater Snow Goose	01	40 666	47.3	19 863	32.0	45 993	53.3	29 015	65.3
	02	2 082	9.2	1 919	10.8	9 392	25.6	1 461	12.8
	Total	42 748	39.4	21 782	27.3	55 385	45.0	30 476	54.6
Brant	01	0	0.0	416	0.7	3 093	3.6	0	0.0
	Total	0	0.0	416	0.5	3 093	2.5	0	0.0
Total geese		108 563	17.0	79 667	14.8	123 028	19.7	55 852	9.9
Waterfowl		637 645	100.0	540 021	100.0	623 273	100.0	563 776	100.0

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	1 400	0.5	610	0.2	420	0.2	349	0.2
	02	1 024	0.2	2 053	0.5	4 860	1.0	1 989	0.4
	03	2 826	1.6	2 249	1.2	2 123	1.2	2 963	2.0
	Total	5 250	0.6	4 912	0.6	7 403	0.8	5 301	0.6
Red-breasted Merganser	01	0	0.0	245	0.1	360	0.1	838	0.4
	02	182	0.0	726	0.2	253	0.1	463	0.1
	03	288	0.2	478	0.3	0	0.0	168	0.1
	Total	470	0.0	1 449	0.2	613	0.1	1 469	0.2
Hooded Merganser	01	2 218	0.8	1 257	0.5	1 136	0.5	852	0.4
	02	15 584	3.1	12 624	3.0	14 310	2.9	17 222	3.6
	03	4 191	2.4	4 534	2.5	5 301	3.1	4 280	2.9
	Total	21 993	2.3	18 415	2.2	20 747	2.3	22 354	2.6
Mallard	01	113 713	41.9	93 235	37.6	91 001	36.3	92 068	42.1
	02	158 047	31.9	122 844	29.4	149 601	30.5	144 656	29.9
	03	50 663	28.7	49 518	27.5	49 870	29.1	44 658	30.2
	Total	322 423	34.2	265 597	31.4	290 472	31.8	281 382	33.1
Black Duck	01	18 774	6.9	16 714	6.7	19 306	7.7	17 906	8.2
	02	45 149	9.1	44 132	10.6	46 366	9.5	43 321	9.0
	03	26 303	14.9	25 905	14.4	26 982	15.7	16 364	11.1
	Total	90 226	9.6	86 751	10.3	92 654	10.2	77 591	9.1
Gadwall	01	7 152	2.6	3 788	1.5	3 611	1.4	2 286	1.0
	02	3 226	0.7	2 161	0.5	3 331	0.7	4 007	0.8
	03	402	0.2	433	0.2	510	0.3	86	0.1
	Total	10 780	1.1	6 382	0.8	7 452	0.8	6 379	0.8
American Wigeon	01	10 616	3.9	13 861	5.6	5 601	2.2	7 582	3.5
	02	7 013	1.4	6 911	1.7	7 533	1.5	3 466	0.7
	03	4 162	2.4	4 479	2.5	2 990	1.7	1 871	1.3
	Total	21 791	2.3	25 251	3.0	16 124	1.8	12 919	1.5
Green-winged Teal	01	14 253	5.3	10 418	4.2	10 931	4.4	11 023	5.0
	02	19 275	3.9	14 033	3.4	20 293	4.1	27 129	5.6
	03	4 845	2.7	6 440	3.6	12 098	7.1	5 406	3.7
	Total	38 373	4.1	30 891	3.7	43 322	4.7	43 558	5.1
Blue-winged Teal	01	12 794	4.7	8 511	3.4	4 188	1.7	4 864	2.2
	02	27 102	5.5	16 943	4.1	15 669	3.2	18 547	3.8
	03	7 314	4.1	6 447	3.6	5 890	3.4	4 075	2.8
	Total	47 210	5.0	31 901	3.8	25 747	2.8	27 486	3.2
Shoveler	01	797	0.3	1 071	0.4	216	0.1	956	0.4
	02	345	0.1	595	0.1	828	0.2	1 967	0.4
	03	0	0.0	304	0.2	273	0.2	298	0.2
	Total	1 142	0.1	1 970	0.2	1 317	0.1	3 221	0.4
Pintail	01	4 862	1.8	3 947	1.6	5 804	2.3	5 487	2.5
	02	5 200	1.0	3 045	0.7	5 282	1.1	3 531	0.7
	03	3 165	1.8	2 115	1.2	2 188	1.3	2 605	1.8
	Total	13 227	1.4	9 107	1.1	13 274	1.5	11 623	1.4
Wood Duck	01	18 406	6.8	13 919	5.6	12 902	5.1	13 789	6.3
	02	96 194	19.4	64 781	15.5	73 172	14.9	69 419	14.4
	03	6 953	3.9	10 167	5.6	7 089	4.1	8 606	5.8
	Total	121 553	12.9	88 867	10.5	93 163	10.2	91 814	10.8

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Redhead	01	10 174	3.8	19 455	7.8	20 317	8.1	8 227	3.8
	02	5 090	1.0	6 061	1.5	10 001	2.0	2 562	0.5
	03	1 395	0.8	1 991	1.1	1 481	0.9	896	0.6
	Total	16 659	1.8	27 507	3.3	31 799	3.5	11 685	1.4
Canvasback	01	9 597	3.5	10 969	4.4	8 600	3.4	5 821	2.7
	02	1 437	0.3	2 768	0.7	1 887	0.4	588	0.1
	03	1 577	0.9	969	0.5	828	0.5	1 489	1.0
	Total	12 611	1.3	14 706	1.7	11 315	1.2	7 898	0.9
Greater Scaup	01	7 890	2.9	8 009	3.2	13 666	5.5	9 333	4.3
	02	7 408	1.5	15 282	3.7	15 139	3.1	12 506	2.6
	03	4 688	2.7	3 155	1.8	2 098	1.2	2 086	1.4
	Total	19 986	2.1	26 446	3.1	30 903	3.4	23 925	2.8
Lesser Scaup	01	3 451	1.3	10 259	4.1	23 391	9.3	15 390	7.0
	02	14 613	2.9	13 303	3.2	21 785	4.4	26 743	5.5
	03	9 516	5.4	11 541	6.4	10 351	6.0	15 338	10.4
	Total	27 580	2.9	35 103	4.2	55 527	6.1	57 471	6.8
Ring-necked Duck	01	7 125	2.6	5 227	2.1	5 815	2.3	5 859	2.7
	02	39 733	8.0	37 607	9.0	47 567	9.7	48 032	9.9
	03	22 862	12.9	29 873	16.6	24 231	14.1	20 580	13.9
	Total	69 720	7.4	72 707	8.6	77 613	8.5	74 471	8.8
Goldeneye	01	5 613	2.1	4 726	1.9	10 093	4.0	2 963	1.4
	02	23 268	4.7	21 219	5.1	26 302	5.4	32 155	6.7
	03	13 452	7.6	9 474	5.3	9 135	5.3	7 735	5.2
	Total	42 333	4.5	35 419	4.2	45 530	5.0	42 853	5.0
Bufflehead	01	19 882	7.3	14 881	6.0	11 088	4.4	9 638	4.4
	02	18 587	3.8	18 569	4.4	19 360	4.0	19 733	4.1
	03	9 636	5.5	5 639	3.1	4 472	2.6	6 876	4.6
	Total	48 105	5.1	39 089	4.6	34 920	3.8	36 247	4.3
Ruddy Duck	01	966	0.4	2 533	1.0	1 081	0.4	1 944	0.9
	02	0	0.0	329	0.1	0	0.0	0	0.0
	03	0	0.0	0	0.0	376	0.2	0	0.0
	Total	966	0.1	2 862	0.3	1 457	0.2	1 944	0.2
Total sport ducks		932 398	98.9	825 332	97.6	901 352	98.8	841 591	99.0
Oldsquaw	01	207	0.1	563	0.2	369	0.1	190	0.1
	02	1 464	0.3	2 472	0.6	1 395	0.3	1 606	0.3
	03	82	0.0	584	0.3	355	0.2	0	0.0
	Total	1 753	0.2	3 619	0.4	2 119	0.2	1 796	0.2
Common Eider	02	220	0.0	558	0.1	0	0.0	0	0.0
	Total	220	0.0	558	0.1	0	0.0	0	0.0
King Eider	03	82	0.0	0	0.0	0	0.0	0	0.0
	Total	82	0.0	0	0.0	0	0.0	0	0.0
Harlequin Duck	03	0	0.0	146	0.1	0	0.0	0	0.0
	Total	0	0.0	146	0.0	0	0.0	0	0.0

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Scoter	01	0	0.0	0	0.0	252	0.1	338	0.2
	02	1 495	0.3	1 384	0.3	253	0.1	1 634	0.3
	03	566	0.3	624	0.3	309	0.2	733	0.5
	Total	2 061	0.2	2 008	0.2	814	0.1	2 705	0.3
White-winged Scoter	01	1 363	0.5	2 402	1.0	271	0.1	536	0.2
	02	1 476	0.3	1 851	0.4	2 015	0.4	1 488	0.3
	03	598	0.3	1 632	0.9	707	0.4	523	0.4
	Total	3 437	0.4	5 885	0.7	2 993	0.3	2 547	0.3
Surf Scoter	01	0	0.0	1 345	0.5	212	0.1	606	0.3
	02	2 232	0.5	5 071	1.2	2 761	0.6	417	0.1
	03	977	0.6	1 458	0.8	1 885	1.1	447	0.3
	Total	3 209	0.3	7 874	0.9	4 858	0.5	1 470	0.2
Total sea ducks		10 762	1.1	20 090	2.4	10 784	1.2	8 518	1.0
Total ducks		943 160	93.6	845 422	91.7	912 136	91.4	850 109	94.2
Canada Goose	01	18 197	93.4	21 174	95.9	22 143	96.9	13 915	76.2
	02	29 231	99.5	27 121	97.2	43 235	98.5	15 342	78.8
	03	7 496	47.7	17 657	67.7	12 350	64.1	7 594	50.4
	Total	54 924	85.0	65 952	86.7	77 728	90.4	36 851	69.8
Small Canada Goose	03	0	0.0	0	0.0	0	0.0	139	0.9
	Total	0	0.0	0	0.0	0	0.0	139	0.3
Large Canada Goose	01	1 286	6.6	0	0.0	0	0.0	3 454	18.9
	02	0	0.0	0	0.0	0	0.0	4 093	21.0
	03	0	0.0	0	0.0	158	0.8	649	4.3
	Total	1 286	2.0	0	0.0	158	0.2	8 196	15.5
Snow Goose	01	0	0.0	804	3.6	720	3.1	132	0.7
	02	0	0.0	673	2.4	209	0.5	21	0.1
	03	1 707	10.9	4 959	19.0	6 268	32.5	2 505	16.6
	Total	1 707	2.6	6 436	8.5	7 197	8.4	2 658	5.0
Blue Goose	01	0	0.0	96	0.4	0	0.0	392	2.1
	02	147	0.5	0	0.0	0	0.0	21	0.1
	03	5 151	32.8	3 449	13.2	402	2.1	3 850	25.6
	Total	5 298	8.2	3 545	4.7	402	0.5	4 263	8.1
Greater Snow Goose	03	1 367	8.7	0	0.0	94	0.5	139	0.9
	Total	1 367	2.1	0	0.0	94	0.1	139	0.3
Brant	01	0	0.0	0	0.0	0	0.0	369	2.0
	02	0	0.0	108	0.4	434	1.0	0	0.0
	03	0	0.0	0	0.0	0	0.0	187	1.2
	Total	0	0.0	108	0.1	434	0.5	556	1.1
Total geese		64 582	6.4	76 041	8.3	86 013	8.6	52 802	5.8
Waterfowl		1 007 742	100.0	921 463	100.0	998 149	100.0	902 911	100.0

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	02	311	0.3	0	0.0	0	0.0	0	0.0
	Total	311	0.1	0	0.0	0	0.0	0	0.0
Hooded Merganser	01	154	0.1	0	0.0	339	0.2	183	0.1
	02	292	0.3	453	0.4	171	0.2	938	1.1
	Total	446	0.1	453	0.1	510	0.2	1 121	0.4
Mallard	01	153 529	62.8	155 003	59.2	125 766	56.4	123 419	60.0
	02	86 059	73.7	90 114	74.1	84 226	75.2	51 147	57.9
	Total	239 588	66.3	245 117	63.9	209 992	62.7	174 566	59.4
Black Duck	01	400	0.2	0	0.0	1 591	0.7	119	0.1
	02	0	0.0	260	0.2	551	0.5	241	0.3
	Total	400	0.1	260	0.1	2 142	0.6	360	0.1
Gadwall	01	10 565	4.3	13 324	5.1	9 520	4.3	9 290	4.5
	02	2 670	2.3	2 893	2.4	1 616	1.4	4 990	5.6
	Total	13 235	3.7	16 217	4.2	11 136	3.3	14 280	4.9
American Wigeon	01	8 838	3.6	8 066	3.1	7 123	3.2	6 293	3.1
	02	4 174	3.6	2 024	1.7	2 106	1.9	1 444	1.6
	Total	13 012	3.6	10 090	2.6	9 229	2.8	7 737	2.6
Green-winged Teal	01	10 503	4.3	5 467	2.1	7 810	3.5	10 243	5.0
	02	3 941	3.4	5 374	4.4	5 137	4.6	4 166	4.7
	Total	14 444	4.0	10 841	2.8	12 947	3.9	14 409	4.9
Blue-winged Teal	01	6 505	2.7	11 581	4.4	8 800	3.9	7 897	3.8
	02	2 412	2.1	3 898	3.2	2 695	2.4	4 074	4.6
	Total	8 917	2.5	15 479	4.0	11 495	3.4	11 971	4.1
Shoveler	01	6 892	2.8	8 359	3.2	5 419	2.4	7 390	3.6
	02	1 023	0.9	646	0.5	890	0.8	250	0.3
	Total	7 915	2.2	9 005	2.3	6 309	1.9	7 640	2.6
Pintail	01	16 511	6.8	15 136	5.8	8 698	3.9	10 117	4.9
	02	4 234	3.6	5 178	4.3	3 980	3.6	4 979	5.6
	Total	20 745	5.7	20 314	5.3	12 678	3.8	15 096	5.1
Wood Duck	01	154	0.1	757	0.3	1 616	0.7	1 033	0.5
	02	0	0.0	0	0.0	559	0.5	828	0.9
	Total	154	0.0	757	0.2	2 175	0.6	1 861	0.6
Redhead	01	5 891	2.4	8 189	3.1	3 211	1.4	4 676	2.3
	02	2 433	2.1	3 862	3.2	1 956	1.7	3 211	3.6
	Total	8 324	2.3	12 051	3.1	5 167	1.5	7 887	2.7
Canvasback	01	4 353	1.8	6 526	2.5	4 502	2.0	3 619	1.8
	02	247	0.2	362	0.3	341	0.3	317	0.4
	Total	4 600	1.3	6 888	1.8	4 843	1.4	3 936	1.3
Greater Scaup	01	1 880	0.8	375	0.1	763	0.3	540	0.3
	02	0	0.0	322	0.3	0	0.0	938	1.1
	Total	1 880	0.5	697	0.2	763	0.2	1 478	0.5
Lesser Scaup	01	8 501	3.5	13 000	5.0	24 687	11.1	12 628	6.1
	02	6 387	5.5	3 144	2.6	2 772	2.5	5 847	6.6
	Total	14 888	4.1	16 144	4.2	27 459	8.2	18 475	6.3

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Ring-necked Duck	01	5 706	2.3	9 395	3.6	9 324	4.2	5 877	2.9
	02	1 097	0.9	2 209	1.8	3 295	2.9	1 104	1.2
	Total	6 803	1.9	11 604	3.0	12 619	3.8	6 981	2.4
Goldeneye	01	1 866	0.8	1 490	0.6	1 771	0.8	1 065	0.5
	02	862	0.7	843	0.7	856	0.8	2 146	2.4
	Total	2 728	0.8	2 333	0.6	2 627	0.8	3 211	1.1
Bufflehead	01	2 186	0.9	3 005	1.1	1 572	0.7	747	0.4
	02	496	0.4	0	0.0	388	0.3	216	0.2
	Total	2 682	0.7	3 005	0.8	1 960	0.6	963	0.3
Ruddy Duck	01	0	0.0	2 127	0.8	384	0.2	439	0.2
	Total	0	0.0	2 127	0.6	384	0.1	439	0.1
Total sport ducks		361 072	100.0	383 382	100.0	334 435	99.8	292 411	99.5
Oldsquaw	02	123	0.1	0	0.0	242	0.2	938	1.1
	Total	123	0.0	0	0.0	242	0.1	938	0.3
King Eider	01	0	0.0	0	0.0	203	0.1	0	0.0
	02	0	0.0	0	0.0	121	0.1	0	0.0
	Total	0	0.0	0	0.0	324	0.1	0	0.0
Surf Scoter	02	0	0.0	0	0.0	121	0.1	581	0.7
	Total	0	0.0	0	0.0	121	0.0	581	0.2
Total sea ducks		123	0.0	0	0.0	687	0.2	1 519	0.5
Total ducks		361 195	74.4	383 382	66.2	335 122	66.3	293 930	66.5
Canada Goose	01	278	0.3	390	0.3	4 103	3.0	864	0.7
	02	179	0.6	1 172	2.8	3 487	10.1	571	1.8
	Total	457	0.4	1 562	0.8	7 590	4.5	1 435	1.0
Small Canada Goose	01	9 040	9.5	28 722	18.7	14 386	10.6	12 314	10.6
	02	3 640	12.3	9 823	23.4	6 833	19.8	2 736	8.6
	Total	12 680	10.2	38 545	19.7	21 219	12.5	15 050	10.2
Large Canada Goose	01	51 324	54.2	36 233	23.6	32 079	23.6	30 396	26.2
	02	18 908	64.1	21 652	51.6	14 502	42.1	10 198	31.9
	Total	70 232	56.5	57 885	29.6	46 581	27.4	40 594	27.5
Snow Goose	01	19 222	20.3	59 619	38.8	68 932	50.8	39 340	34.0
	02	3 679	12.5	6 435	15.3	7 358	21.3	13 625	42.7
	Total	22 901	18.4	66 054	33.8	76 290	44.8	52 965	35.8
Blue Goose	01	14 283	15.1	28 203	18.3	14 194	10.5	32 025	27.6
	02	2 661	9.0	2 677	6.4	612	1.8	3 431	10.7
	Total	16 944	13.6	30 880	15.8	14 806	8.7	35 456	24.0
Greater Snow Goose	01	0	0.0	0	0.0	0	0.0	303	0.3
	Total	0	0.0	0	0.0	0	0.0	303	0.2
White-fronted Goose	01	103	0.1	105	0.1	1 057	0.8	324	0.3
	02	231	0.8	0	0.0	1 679	4.9	984	3.1
	Total	334	0.8	105	0.1	2 736	1.6	1 308	0.9
Ross' Goose	01	484	0.5	456	0.3	925	0.7	303	0.3
	02	179	0.6	208	0.5	0	0.0	396	1.2
	Total	663	0.5	664	0.3	925	0.5	699	0.5
Total geese		124 211	25.6	195 695	33.8	170 147	33.7	147 810	33.5
Waterfowl		485 406	100.0	579 077	100.0	505 269	100.0	441 740	100.0

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	02	0	0.0	0	0.0	0	0.0	168	0.2
	Total	0	0.0	0	0.0	0	0.0	168	0.1
Hooded Merganser	02	417	0.3	0	0.0	152	0.1	0	0.0
	03	215	0.1	0	0.0	0	0.0	0	0.0
	Total	632	0.1	0	0.0	152	0.0	0	0.0
Mallard	01	118 016	79.3	117 330	67.7	116 997	81.0	68 721	83.5
	02	106 978	78.3	119 394	77.3	107 808	83.1	55 082	78.2
	03	171 738	71.1	185 940	72.9	129 841	76.7	106 391	88.3
	Total	396 732	75.2	422 664	72.5	354 646	80.0	230 194	84.2
Black Duck	01	0	0.0	0	0.0	265	0.2	0	0.0
	02	0	0.0	396	0.3	0	0.0	193	0.3
	Total	0	0.0	396	0.1	265	0.1	193	0.1
Gadwall	01	10 268	6.9	15 470	8.9	9 390	6.5	2 495	3.0
	02	6 741	4.9	6 415	4.2	4 269	3.3	4 071	5.8
	03	20 505	8.5	15 875	6.2	8 211	4.8	2 588	2.1
	Total	37 514	7.1	37 760	6.5	21 870	4.9	9 154	3.4
American Wigeon	01	6 435	4.3	5 992	3.5	3 927	2.7	6 617	8.0
	02	5 679	4.2	2 989	1.9	2 817	2.2	2 037	2.9
	03	12 959	5.4	11 067	4.3	6 363	3.8	2 578	2.1
	Total	25 073	4.8	20 048	3.4	13 107	3.0	11 232	4.1
Green-winged Teal	01	1 550	1.0	2 398	1.4	796	0.6	434	0.5
	02	1 688	1.2	4 120	2.7	2 057	1.6	3 478	4.9
	03	3 164	1.3	2 037	0.8	1 128	0.7	1 909	1.6
	Total	6 402	1.2	8 555	1.5	3 981	0.9	5 821	2.1
Blue-winged Teal	01	2 645	1.8	6 438	3.7	2 806	1.9	2 244	2.7
	02	2 416	1.8	4 319	2.8	2 314	1.8	1 220	1.7
	03	8 302	3.4	6 144	2.4	4 282	2.5	1 078	0.9
	Total	13 363	2.5	16 901	2.9	9 402	2.1	4 542	1.7
Shoveler	01	2 557	1.7	3 626	2.1	1 579	1.1	217	0.3
	02	3 210	2.3	2 749	1.8	2 437	1.9	707	1.0
	03	5 319	2.2	8 319	3.3	4 282	2.5	938	0.8
	Total	11 086	2.1	14 694	2.5	8 298	1.9	1 862	0.7
Pintail	01	5 120	3.4	11 915	6.9	4 596	3.2	0	0.0
	02	1 751	1.3	5 211	3.4	4 084	3.1	366	0.5
	03	6 785	2.8	12 457	4.9	9 265	5.5	1 921	1.6
	Total	13 656	2.6	29 583	5.1	17 945	4.0	2 287	0.8
Wood Duck	03	0	0.0	106	0.0	0	0.0	0	0.0
	Total	0	0.0	106	0.0	0	0.0	0	0.0
Redhead	01	700	0.5	4 954	2.9	366	0.3	1 144	1.4
	02	1 769	1.3	2 938	1.9	1 009	0.8	173	0.2
	03	2 085	0.9	4 656	1.8	2 993	1.8	1 314	1.1
	Total	4 554	0.9	12 548	2.2	4 368	1.0	2 631	1.0
Canvasback	01	903	0.6	3 991	2.3	880	0.6	217	0.3
	02	665	0.5	1 283	0.8	152	0.1	336	0.5
	03	3 137	1.3	2 319	0.9	260	0.2	319	0.3
	Total	4 705	0.9	7 593	1.3	1 292	0.3	872	0.3

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Lesser Scaup	01	480	0.3	547	0.3	2 333	1.6	217	0.3
	02	4 201	3.1	2 042	1.3	563	0.4	1 765	2.5
	03	5 721	2.4	4 779	1.9	2 065	1.2	1 435	1.2
	Total	10 402	2.0	7 368	1.3	4 961	1.1	3 417	1.3
Ring-necked Duck	02	0	0.0	354	0.2	608	0.5	0	0.0
	03	1 347	0.6	844	0.3	152	0.1	0	0.0
	Total	1 347	0.3	1 198	0.2	760	0.2	0	0.0
Goldeneye	01	0	0.0	465	0.3	0	0.0	0	0.0
	02	593	0.4	201	0.1	337	0.3	534	0.8
	Total	593	0.1	666	0.1	337	0.1	534	0.2
Bufflehead	01	220	0.1	0	0.0	511	0.4	0	0.0
	02	176	0.1	1 261	0.8	638	0.5	345	0.5
	03	430	0.2	266	0.1	489	0.3	0	0.0
	Total	826	0.2	1 527	0.3	1 638	0.4	345	0.1
Ruddy Duck	01	0	0.0	210	0.1	0	0.0	0	0.0
	02	0	0.0	499	0.3	529	0.4	0	0.0
	Total	0	0.0	709	0.1	529	0.1	0	0.0
Total sport ducks		526 885	99.9	582 316	99.9	443 551	100.0	273 252	100.0
White-winged Scoter	02	417	0.3	226	0.1	0	0.0	0	0.0
	03	0	0.0	151	0.1	0	0.0	0	0.0
	Total	417	0.1	377	0.1	0	0.0	0	0.0
Total sea ducks		417	0.1	377	0.1	0	0.0	0	0.0
Total ducks		527 302	79.2	582 693	79.3	443 551	72.1	273 252	65.9
Canada Goose	01	543	0.7	309	0.4	4 136	4.0	0	0.0
	02	0	0.0	0	0.0	54	0.3	0	0.0
	03	0	0.0	1 179	2.4	449	0.9	78	0.2
	Total	543	0.4	1 488	1.0	4 639	2.7	78	0.1
Small Canada Goose	01	15 511	21.4	22 751	28.2	31 865	31.1	19 555	25.5
	02	522	3.2	2 697	12.0	2 009	11.2	2 285	11.7
	03	5 060	10.2	2 930	6.0	6 400	12.6	3 702	8.2
	Total	21 093	15.2	28 378	18.6	40 274	23.5	25 542	18.1
Large Canada Goose	01	13 003	17.9	10 239	12.7	16 441	16.0	22 503	29.4
	02	12 855	77.8	17 338	76.9	10 030	55.7	14 636	74.9
	03	25 979	52.5	26 065	53.1	22 873	44.9	24 292	53.7
	Total	51 837	37.4	53 642	35.2	49 344	28.8	61 431	43.4
Snow Goose	01	4 815	6.6	8 526	10.6	7 714	7.5	7 718	10.1
	03	2 556	5.2	3 057	6.2	7 195	14.1	5 579	12.3
	Total	7 371	5.3	11 583	7.6	14 909	8.7	13 297	9.4
Blue Goose	01	673	0.9	679	0.8	1 415	1.4	464	0.6
	02	0	0.0	0	0.0	0	0.0	214	1.1
	03	3 640	7.4	883	1.8	177	0.3	1 747	3.9
	Total	4 313	3.1	1 562	1.0	1 592	0.9	2 425	1.7
Greater Snow Goose	01	0	0.0	0	0.0	0	0.0	76	0.1
	Total	0	0.0	0	0.0	0	0.0	76	0.1
White-fronted Goose	01	35 549	49.0	32 494	40.2	38 768	37.8	24 599	32.1
	02	2 620	15.9	1 941	8.6	4 978	27.6	2 409	12.3
	03	11 521	23.3	14 744	30.0	13 676	26.8	9 548	21.1
	Total	49 690	35.9	49 179	32.3	57 422	33.5	36 556	25.9
Ross' Goose	01	2 424	3.3	5 786	7.2	1 877	1.8	1 710	2.2
	02	519	3.1	578	2.6	937	5.2	0	0.0
	03	725	1.5	238	0.5	171	0.3	273	0.6
	Total	3 668	2.6	6 602	4.3	2 985	1.7	1 983	1.4
Brant	01	0	0.0	0	0.0	223	0.2	0	0.0
	Total	0	0.0	0	0.0	223	0.1	0	0.0
Total geese		138 515	20.8	152 434	20.7	171 388	27.9	141 388	34.1
Waterfowl		665 817	100.0	735 127	100.0	614 939	100.0	414 640	100.0

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	02	0	0.0	175	0.0	0	0.0	386	0.1
	Total	0	0.0	175	0.0	0	0.0	386	0.1
Mallard	01	118 886	58.6	130 023	65.2	108 112	59.2	138 470	69.0
	02	260 721	68.9	356 450	74.3	374 268	73.9	249 779	76.9
	Total	379 607	65.3	486 473	71.6	482 380	70.0	388 249	73.9
Black Duck	01	0	0.0	251	0.1	0	0.0	0	0.0
	Total	0	0.0	251	0.0	0	0.0	0	0.0
Gadwall	01	13 841	6.8	15 009	7.5	12 153	6.7	5 547	2.8
	02	23 268	6.1	17 418	3.6	29 663	5.9	11 724	3.6
	Total	37 109	6.4	32 427	4.8	41 816	6.1	17 271	3.3
American Wigeon	01	15 012	7.4	11 416	5.7	11 840	6.5	8 112	4.0
	02	19 113	5.0	14 378	3.0	11 812	2.3	10 587	3.3
	Total	34 125	5.9	25 794	3.8	23 652	3.4	18 699	3.6
Green-winged Teal	01	6 344	3.1	3800	1.9	7 280	4.0	4 066	2.0
	02	13 109	3.5	13 468	2.8	6 207	1.2	4 327	1.3
	Total	19 453	3.3	17 268	2.5	13 487	2.0	8 393	1.6
Blue-winged Teal	01	9 394	4.6	4 874	2.4	9 025	4.9	4 734	2.4
	02	10 791	2.9	15 207	3.2	16 314	3.2	7 851	2.4
	Total	20 185	3.5	20 081	3.0	25 339	3.7	12 585	2.4
Shoveler	01	6 969	3.4	4 700	2.4	6 934	3.8	3 804	1.9
	02	12 806	3.4	13 097	2.7	18 744	3.7	8 622	2.7
	Total	19 775	3.4	17 797	2.6	25 678	3.7	12 426	2.4
Pintail	01	21 298	10.5	20 595	10.3	20 161	11.0	19 120	9.5
	02	16 759	4.4	27 666	5.8	23 713	4.7	21 841	6.7
	Total	38 057	6.5	48 261	7.1	43 874	6.4	40 961	7.8
Wood Duck	01	0	0.0	0	0.0	0	0.0	318	0.2
	Total	0	0.0	0	0.0	0	0.0	318	0.1
Redhead	01	2 604	1.3	2 393	1.2	2 679	1.5	3 305	1.6
	02	5 180	1.4	8 211	1.7	5 266	1.0	1 787	0.5
	Total	7 784	1.3	10 604	1.6	7 945	1.2	5 092	1.0
Canvasback	01	412	0.2	783	0.4	719	0.4	2 537	1.3
	02	2 208	0.6	1 572	0.3	4 883	1.0	2 927	0.9
	Total	2 620	0.5	2 355	0.3	5 602	0.8	5 464	1.0
Lesser Scaup	01	5 871	2.9	3 634	1.8	2 246	1.2	5 148	2.6
	02	9 597	2.5	6 339	1.3	10 904	2.2	3 317	1.0
	Total	15 468	2.7	9 973	1.5	13 150	1.9	8 465	1.6
Ring-necked Duck	01	0	0.0	0	0.0	262	0.1	359	0.2
	02	746	0.2	475	0.1	303	0.1	0	0.0
	Total	746	0.1	475	0.1	565	0.1	359	0.1

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Goldeneye	01	1 112	0.5	278	0.1	438	0.2	4 059	2.0
	02	1 319	0.3	1 168	0.2	1 643	0.3	549	0.2
	Total	2 431	0.4	1 446	0.2	2 081	0.3	4 608	0.9
Bufflehead	01	1 297	0.6	1 103	0.6	586	0.3	867	0.4
	02	2 657	0.7	2 954	0.6	2 300	0.5	954	0.3
	Total	3 954	0.7	4 057	0.6	2 886	0.4	1 821	0.3
Ruddy Duck	01	0	0.0	0	0.0	86	0.0	158	0.1
	02	0	0.0	1 140	0.2	258	0.1	307	0.1
	Total	0	0.0	1 140	0.2	344	0.0	465	0.1
Total sport ducks		581 314	99.9	678 577	99.9	688 799	100.0	525 562	100.0
Harlequin Duck	01	0	0.0	583	0.3	0	0.0	0	0.0
	Total	0	0.0	583	0.1	0	0.0	0	0.0
White-winged Scoter	02	339	0.1	175	0.0	0	0.0	0	0.0
	Total	339	0.1	175	0.0	0	0.0	0	0.0
Total sea ducks		339	0.1	758	0.1	0	0.0	0	0.0
Total ducks		581 653	84.3	679 335	86.6	688 799	83.8	525 562	80.7
Canada Goose	01	164	0.3	728	1.4	1 844	2.6	625	0.9
	02	0	0.0	250	0.5	1 813	2.9	526	1.0
	Total	164	0.2	978	0.9	3 657	2.7	1 151	0.9
Small Canada Goose	01	9 419	15.2	11 284	21.3	11 456	16.4	12 802	16.2
	02	9 244	20.1	17 796	34.4	14 911	23.5	19 527	35.4
	Total	18 663	17.3	29 080	27.8	26 367	19.8	32 329	25.8
Large Canada Goose	01	29 662	47.9	24 043	45.4	37 987	54.4	39 280	55.8
	02	32 136	69.8	28 710	55.5	35 700	56.3	24 074	43.7
	Total	61 798	57.2	52 753	50.4	73 687	55.3	63 354	50.5
Snow Goose	01	15 373	24.8	8 787	16.6	6 829	9.8	10 148	14.4
	02	0	0.0	684	1.3	2 974	4.7	3 778	6.9
	Total	15 373	14.2	9 471	9.0	9 803	7.4	13 926	11.1
White-fronted Goose	01	6 857	11.1	7 311	13.8	11 205	16.1	7 556	10.7
	02	4 642	10.1	4 108	7.9	7 571	11.9	6 806	12.3
	Total	11 499	10.6	11 419	10.9	18 776	14.1	14 362	11.4
Ross' Goose	01	478	0.8	856	1.6	450	0.6	0	0.0
	02	0	0.0	161	0.3	456	0.7	400	0.7
	Total	478	0.4	1 017	1.0	906	0.7	400	0.3
Total geese		107 975	15.7	104 718	13.4	133 196	16.2	125 522	19.3
Waterfowl		689 628	100.0	784 053	100.0	821 995	100.0	651 084	100.0

(cont'd)

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	01	0	0.0	0	0.0	0	0.0	190	0.3
	02	66	0.0	67	0.0	55	0.0	236	0.2
	Total	66	0.0	67	0.0	55	0.0	426	0.2
Red-breasted Merganser	02	0	0.0	236	0.2	0	0.0	0	0.0
	Total	0	0.0	236	0.1	0	0.0	0	0.0
Hooded Merganser	01	0	0.0	0	0.0	89	0.1	44	0.1
	02	0	0.0	0	0.0	57	0.1	193	0.2
	Total	0	0.0	0	0.0	146	0.1	237	0.1
Mallard	01	40 770	61.6	40 195	59.2	41 884	56.8	39 821	61.7
	02	76 013	52.7	76 315	55.9	61 467	54.6	75 159	60.7
	Total	116 783	55.5	116 510	57.0	103 351	55.5	114 980	61.1
Black Duck	01	0	0.0	281	0.4	0	0.0	0	0.0
	02	66	0.0	0	0.0	0	0.0	43	0.0
	Total	66	0.0	281	0.1	0	0.0	43	0.0
Gadwall	01	350	0.5	152	0.2	159	0.2	175	0.3
	02	1 413	1.0	853	0.6	552	0.5	570	0.5
	Total	1 763	0.8	1 005	0.5	711	0.4	745	0.4
American Wigeon	01	4 821	7.3	5 818	8.6	6 979	9.5	3 298	5.1
	02	24 516	17.0	21 909	16.1	16 268	14.5	14 175	11.4
	Total	29 337	13.9	27 727	13.6	23 247	12.5	17 473	9.3
Green-winged Teal	01	5 544	8.4	4 881	7.2	7 043	9.5	2 662	4.1
	02	18 009	12.5	13 945	10.2	9 217	8.2	10 692	8.6
	Total	23 553	11.2	18 826	9.2	16 260	8.7	13 354	7.1
Blue-winged Teal	01	1 312	2.0	1 880	2.8	991	1.3	3 682	5.7
	02	272	0.2	315	0.2	222	0.2	172	0.1
	Total	1 584	0.8	2 195	1.1	1 213	0.7	3 854	2.0
Shoveler	01	880	1.3	560	0.8	666	0.9	807	1.3
	02	1 414	1.0	939	0.7	1 668	1.5	1 616	1.3
	Total	2 294	1.1	1 499	0.7	2 334	1.3	2 423	1.3
Pintail	01	6 448	9.7	1 838	2.7	5 270	7.1	3 638	5.6
	02	16 552	11.5	16 034	11.7	15 645	13.9	15 569	12.6
	Total	23 000	10.9	17 872	8.7	20 915	11.2	19 207	10.2
Wood Duck	01	142	0.2	0	0.0	221	0.3	290	0.4
	02	207	0.1	741	0.5	970	0.9	1 491	1.2
	Total	349	0.2	741	0.4	1 191	0.6	1 781	0.9
Redhead	01	674	1.0	358	0.5	0	0.0	296	0.5
	02	0	0.0	0	0.0	126	0.1	141	0.1
	Total	674	0.3	358	0.2	126	0.1	437	0.2
Canvasback	01	103	0.2	0	0.0	487	0.7	477	0.7
	02	146	0.1	0	0.0	869	0.8	74	0.1
	Total	249	0.1	0	0.0	1 356	0.7	551	0.3
Greater Scaup	01	180	0.3	134	0.2	243	0.3	379	0.6
	02	137	0.1	1 355	1.0	534	0.5	172	0.1
	Total	317	0.2	1 489	0.7	777	0.4	551	0.3

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

Species	Zone	1978		1979		1980		1981	
		Kill	%	Kill	%	Kill	%	Kill	%
Lesser Scaup	01	1 100	1.7	1 338	2.0	1 640	2.2	1 174	1.8
	02	1 834	1.3	569	0.4	436	0.4	0	0.0
	Total	2 934	1.4	1 907	0.9	2 076	1.1	1 174	0.6
Ring-necked Duck	01	757	1.1	1 878	2.8	317	0.4	945	1.5
	02	636	0.4	336	0.2	0	0.0	152	0.1
	Total	1 393	0.7	2 214	1.1	317	0.2	1 097	0.6
Goldeneye	01	575	0.9	6 464	9.5	3 825	5.2	3 814	5.9
	02	1 039	0.7	935	0.7	1 122	1.0	2 888	2.3
	Total	1 614	0.8	7 399	3.6	4 947	2.7	6 702	3.6
Bufflehead	01	2 129	3.2	2 153	3.2	3 837	5.2	1 679	2.6
	02	1 606	1.1	1 913	1.4	3 085	2.7	277	0.2
	Total	3 735	1.8	4 066	2.0	6 922	3.7	1 956	1.0
Ruddy Duck	01	161	0.2	0	0.0	0	0.0	305	0.5
	Total	161	0.1	0	0.0	0	0.0	305	0.2
Total sport ducks		209 872	99.7	204 392	100.0	185 944	99.8	187 296	99.5
Harlequin Duck	01	0	0.0	0	0.0	106	0.1	0	0.0
	Total	0	0.0	0	0.0	106	0.1	0	0.0
Common Scoter	01	95	0.1	0	0.0	0	0.0	56	0.1
	Total	95	0.0	0	0.0	0	0.0	56	0.0
White-winged Scoter	01	113	0.2	0	0.0	0	0.0	660	1.0
	02	238	0.2	0	0.0	113	0.1	0	0.0
	Total	351	0.2	0	0.0	113	0.1	660	0.4
Surf Scoter	01	77	0.1	0	0.0	0	0.0	111	0.2
	02	143	0.1	0	0.0	111	0.1	193	0.2
	Total	220	0.1	0	0.0	111	0.1	304	0.2
Total sea ducks		666	0.3	0	0.0	330	0.2	1 020	0.5
Total ducks		210 538	94.4	204 392	92.3	186 274	90.9	188 316	90.5
Canada Goose	01	176	2.5	919	10.0	9 506	97.0	83	0.9
	02	0	0.0	404	5.1	7 040	78.7	0	0.0
	Total	176	1.4	1 323	7.7	16 546	88.3	83	0.4
Small Canada Goose	01	1 353	19.4	1 816	19.7	0	0.0	2 342	26.5
	02	733	13.0	463	5.9	0	0.0	1 753	16.0
	Total	2 086	16.6	2 279	13.3	0	0.0	4 095	20.7
Large Canada Goose	01	5 138	73.8	6 469	70.3	48	0.5	6 219	70.5
	02	4 513	80.3	5 152	65.2	240	2.7	5 787	52.8
	Total	9 651	76.7	11 621	67.9	288	1.5	12 006	60.7
Snow Goose	01	0	0.0	0	0.0	0	0.0	159	1.8
	02	374	6.7	1 799	22.8	1 570	17.5	3 147	28.7
	Total	374	3.0	1 799	10.5	1 570	8.4	3 306	16.7
White-fronted Goose	01	292	4.2	0	0.0	77	0.8	23	0.3
	02	0	0.0	89	1.1	0	0.0	272	2.5
	Total	292	2.3	89	0.5	77	0.4	295	1.5
Brant	01	0	0.0	0	0.0	167	1.7	0	0.0
	02	0	0.0	0	0.0	101	1.1	0	0.0
	Total	0	0.0	0	0.0	268	1.4	0	0.0
Total geese		12 579	5.6	17 111	7.7	18 749	9.1	19 785	9.5
Waterfowl		223 117	100.0	221 503	100.0	205 023	100.0	208 101	100.0

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

Species	1978		1979		1980		1981	
	Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	0	0.0	0	0.0	346	3.0	0	0.0
Red-breasted Merganser	0	0.0	0	0.0	746	6.5	0	0.0
Mallard	6 736	37.1	2 715	28.8	4 994	43.2	2 397	47.7
American Wigeon	4 422	24.4	1 473	15.6	554	4.8	1 155	23.0
Green-winged Teal	1 549	8.5	1 261	13.4	441	3.8	245	4.9
Blue-winged Teal	0	0.0	0	0.0	132	1.1	0	0.0
Shoveler	374	2.1	750	8.0	691	6.0	115	2.3
Pintail	2 155	11.9	1 703	18.1	0	0.0	80	1.6
Lesser Scaup	681	3.8	1 191	12.6	1 364	11.8	690	13.7
Ring-necked Duck	718	4.0	0	0.0	132	1.1	21	0.4
Goldeneye	1 162	6.4	0	0.0	524	4.5	0	0.0
Bufflehead	0	0.0	102	1.1	397	3.4	0	0.0
Total sport ducks	17 797	98.1	9 195	97.6	10 321	89.4	4 703	93.7
Oldsquaw	237	1.3	0	0.0	0	0.0	125	2.5
Common Scoter	0	0.0	227	2.4	0	0.0	0	0.0
White-winged Scoter	0	0.0	0	0.0	0	0.0	131	2.6
Surf Scoter	100	0.6	0	0.0	1 228	10.6	61	1.2
Total sea ducks	337	1.9	227	2.4	1 228	10.6	317	6.3
Total ducks	18 134	89.0	9 422	89.3	11 549	92.1	5 020	100.0
Canada Goose	0	0.0	0	0.0	989	100.0	0	0.0
Small Canada Goose	320	14.3	0	0.0	0	0.0	0	0.0
Large Canada Goose	72	3.2	0	0.0	0	0.0	0	0.0
Snow Goose	1 647	73.7	1 125	100.0	0	0.0	0	0.0
White-fronted Goose	196	8.8	0	0.0	0	0.0	0	0.0
Total geese	2 235	11.0	1 125	10.7	989	7.9	0	0.0
Waterfowl	20 369	100.0	10 547	100.0	12 538	100.0	5 020	100.0

(cont'd)

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

Species	1978		1979		1980		1981	
	Kill	%	Kill	%	Kill	%	Kill	%
Common Merganser	29	1.0	0	0.0	0	0.0	0	0.0
Mallard	1 306	44.0	1 857	62.4	1 406	46.6	859	55.7
Gadwall	0	0.0	18	0.6	0	0.0	0	0.0
American Wigeon	272	9.2	317	10.6	106	3.5	0	0.0
Green-winged Teal	305	10.3	200	6.7	547	18.1	0	0.0
Blue-winged Teal	41	1.4	0	0.0	0	0.0	0	0.0
Pintail	225	7.6	188	6.3	139	4.6	351	22.8
Greater Scaup	87	2.9	0	0.0	0	0.0	0	0.0
Lesser Scaup	358	12.0	0	0.0	0	0.0	332	21.5
Ring-necked Duck	0	0.0	18	0.6	0	0.0	0	0.0
Goldeneye	98	3.3	280	9.4	819	27.1	0	0.0
Bufflehead	176	5.9	0	0.0	0	0.0	0	0.0
Ruddy Duck	74	2.5	0	0.0	0	0.0	0	0.0
Total sport ducks	2 971	100.0	2 878	96.6	3 017	100.0	1 542	100.0
Common Scoter	0	0.0	100	3.4	0	0.0	0	0.0
Total sea ducks	0	0.0	100	3.4	0	0.0	0	0.0
Total ducks	2 971	86.9	2 978	85.2	3 017	85.0	1 542	85.5
Canada Goose	0	0.0	0	0.0	521	97.7	0	0.0
Small Canada Goose	269	60.2	146	28.2	0	0.0	141	53.8
Large Canada Goose	61	13.6	226	43.6	12	2.3	110	42.0
White-fronted Goose	117	26.2	146	28.2	0	0.0	11	4.2
Total geese	447	13.1	518	14.8	533	15.0	262	14.5
Waterfowl	3 418	100.0	3 496	100.0	3 550	100.0	1 804	100.0

