

Migratory game birds harvested in Canada during the 1991, 1992, and 1993 hunting seasons

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Introduction

The Harvest Questionnaire Survey (HQS) and the Species Composition Survey (SCS) are conducted annually to estimate the number of migratory game birds killed by hunters in Canada. Together, they make up the National Harvest Survey (NHS). This Progress Note reports on the harvest for the following hunting seasons: September 1991 to 10 March 1992 ("1991"), September 1992 to 10 March 1993 ("1992"), and September 1993 to 10 March 1994 ("1993"). Note that the 1991 data reported here are revised and replace data published earlier in Progress Note No. 204.

Methods

The HQS is based on a questionnaire that asks hunters to provide information on the number, location, and timing of their hunting trips and on the number and type of migratory game birds killed (for nine species groups). The questionnaire was mailed in December of each year, 1991, 1992, and 1993, to a sample selected from the lists of purchasers of migratory game bird hunting permits for the current and previous years. A reminder was mailed to nonrespondents in February of each year (1992, 1993, and 1994).

The SCS asks hunters to send in a wing from each duck killed and the tail feathers from each goose killed, along with the hunting details. This allows the species group harvest estimates from the HQS to be partitioned by species. Wing/tail envelopes were mailed in August of each year (1991, 1992, and 1993) to hunters selected from lists of permit purchasers in previous years.

Additional wing envelopes for the SCS were sent in late December of each year (1991, 1992, and 1993) to the hunters selected in Newfoundland, as they have been since 1983. This extra mailing increases the reliability of the estimate of species composition for Newfoundland, by ensuring that wings from the late harvest of sea ducks are adequately represented. The recent trend in kill estimates by species for this province is not comparable with the results prior to 1983. Murres are also legally taken by hunters in Newfoundland, but that kill is addressed by separate surveys (Collins et al. 1991; Elliot et al. 1991).

Hunters in eastern Canada were asked to send a wing from any woodcock shot. The results of this additional wing

collection can be obtained from the Canadian Wildlife Service, Atlantic region office, P.O. Box 6227, Sackville, New Brunswick E4L 1G6; and the Québec office, 1141 route de l'Église, Sainte-Foy, Québec, G1V 4H5.

The results of the NHS do not include estimates of illegal kill, legal hunting without permits by native people or crippling loss. Cooch et al. (1978) give a full description of the survey methods.

Data processing and analysis

In 1992, the processing and analysis of the survey data were transferred from a mainframe to microcomputers. This transfer was done to reduce costs, streamline operations, and update the analysis programs.

The estimates presented here for the 1991, 1992, and 1993 seasons were all calculated using the same new analysis programs (written in SAS). Also, all estimates for 1990 presented for comparison in Tables 18–30 have been recalculated using the same new programs, as well as the Table 7 estimates for 1988, 1989, and 1990.

Use of the new data analysis programs on data from previous years results in harvest estimates that are slightly different from those published previously (Progress Note No. 197 and earlier). There are several sources for these differences: i) different decision rules for inputting missing values or excluding observations with missing values; ii) different algorithms used for the calculations; and iii) differences caused by rounding. However, differences in the estimates obtained with the two analytical approaches were small, generally less than 1%. More details on the new estimation procedures, including variance for the NHS, are available in Collins (1991).

In the case of the 1991 data, differences between estimates published in Progress Note No. 204 and this publication are due to a revision to the prototype matching procedure of the permit file on the microcomputer platform. The revision of this data processing procedure ensured that as many renewing hunters as possible were identified. Estimates therefore had to be recalculated, since the weight of the renewing hunters stratum increased slightly. Again, the differences in the estimates obtained with the two procedures are small; the total harvest estimates of duck and geese, for example, have been revised to a figure about 1% larger. Since this revision, the data processing functions on the new platform are considered to be stabilized.

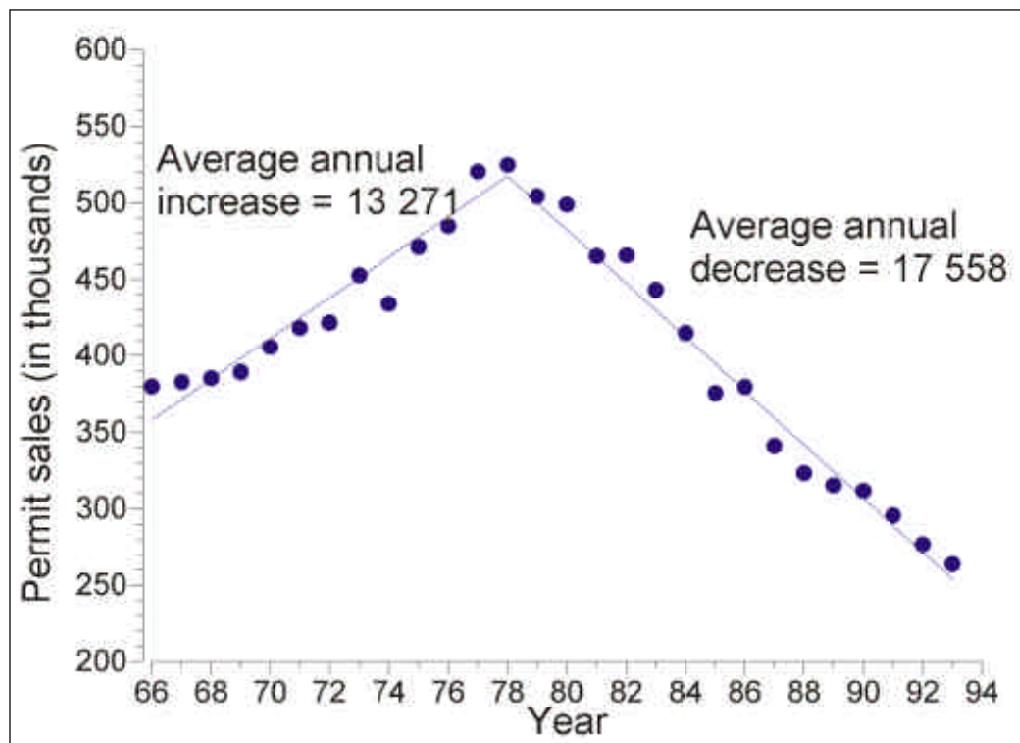
Results

In the past 28 years, the number of permits sold has changed markedly (Fig. 1). The decrease in sales since 1978 should be noted by those who use kill statistics as indices of trends in migratory game bird populations and harvest

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Figure 1

Total sales of migratory game bird hunting permits in Canada, 1966–1993 (based on permit stubs received)



characteristics. The permit sale totals for each province are given in Table 1. The total sales are derived from the number of permit stubs received and exclude stubs lost in the mail or not properly returned by permit outlets. The number of lost stubs is assumed to be minimal.

The survey results are summarized for the same 23 geographic zones for which the survey sample selection is stratified (Fig. 2).

The distribution of permit sales between those who purchased a permit the previous year (renewals) and those who did not, and between resident and nonresident (non-Canadian) purchasers, is shown in Table 2 for 1991, 1992, and 1993.

Table 3 gives the number of permit purchasers who were sampled and who responded to the 1991, 1992, and 1993 HQS. This is compared with earlier years in Table 4. Tables 5 through 16 present the results of the HQS questionnaire. Indications of the amount of recreational activity provided by hunting are presented in Tables 6 and 15.

Table 17 shows the number of permit purchasers who were sampled and who responded to the 1991, 1992, and 1993 SCS. Results of the SCS are used to assign species-specific proportions to the estimated duck and goose kills. The most recent four years of estimated harvests for each species are summarized for Canada (Table 18) and by province/territory and zone (Tables 19 through 30), based on data from both the HQS and the SCS.

In some areas, Canada Geese are further identified to groups of subspecies based on size differences. For some provinces/territories, the tables show kills for large and small Canada Geese; elsewhere, subspecies that could not be

separated are recorded simply as Canada Geese. Note that large and small Canada Geese from different areas of the country may correspond to different geographical subpopulations.

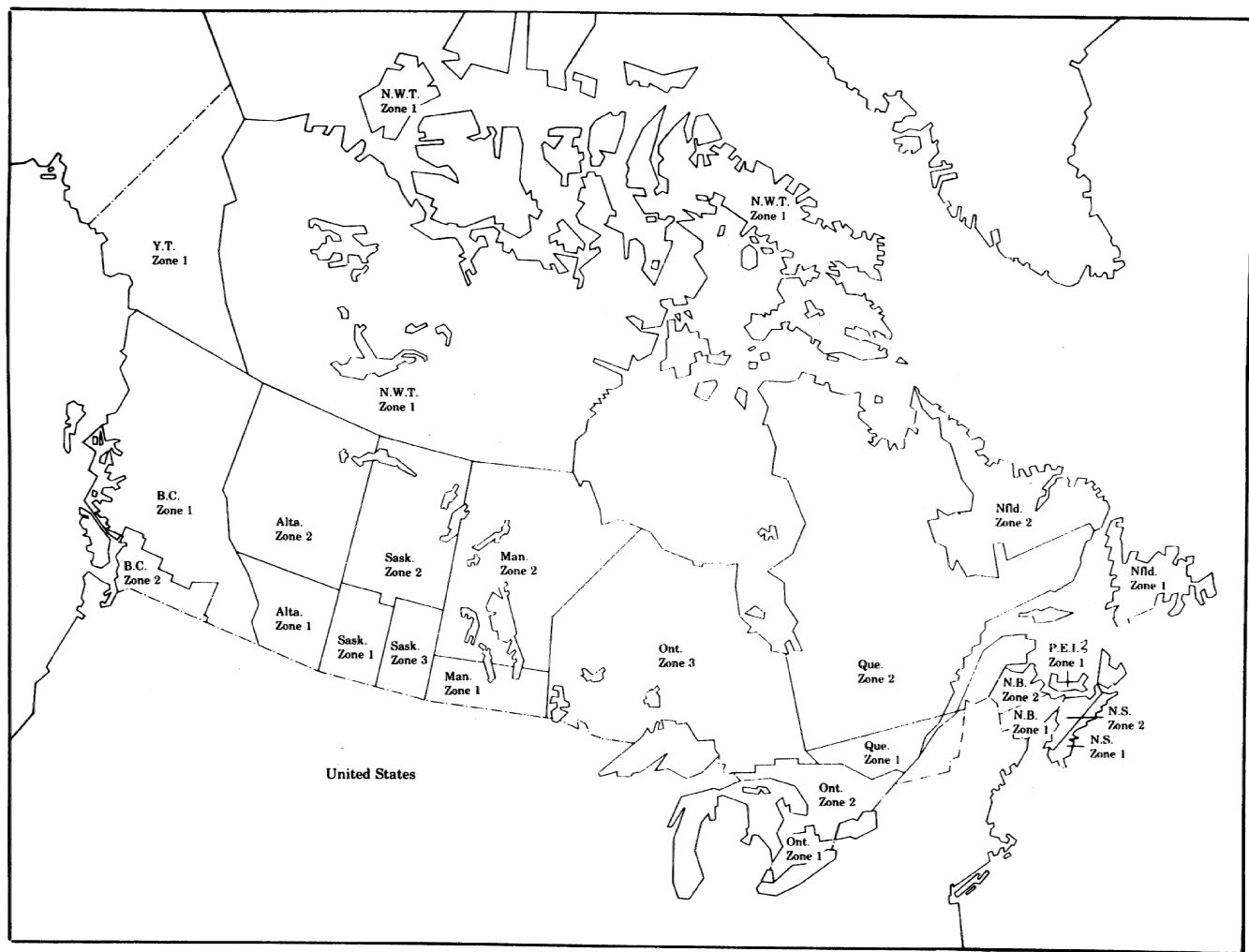
In the process of calculating estimates, rounding to significant digits took place at the last step in the analyses. It should not be expected that rounded column totals will equal the sum of values that have also been rounded.

References

- Collins, B.T. 1991. Estimation procedures for the Migratory Bird Harvest Surveys. Unpublished report, Wildlife Toxicology and Survey Branch, Canadian Wildlife Service.
- Collins, B.T.; Elliot, R.D.; Legris, A. 1991. The harvest of Common Murres in Newfoundland in 1990–91. Unpublished report, Wildlife Toxicology and Survey Branch, Canadian Wildlife Service.
- 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 Boyd, H.; Finney, G.H. (eds.). Migratory game bird hunters and hunting in Canada. Can. Wildl. Serv. Rep. Ser. 43. 127 pp.

Figure 2

Geographic zones used in selecting samples for the HQS and SCS and for reporting their result



Elliot, R.D.; Collins, B.T.; Hayakawa, E.G.; Metras, L. 1991. The harvest of murres in Newfoundland from 1977–78 to 1987–88. Pages 36–44 in Gaston, A.J.; Elliot, R.D. (eds.). Studies of high-latitude seabirds. 2. Conservation biology of Thick-billed Murres in the Northwest Atlantic. Can. Wildl. Serv. Occas. Pap. No. 69.

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Published by Authority of the Minister
of the Environment
©Minister of Public Works and Government
Services Canada, 1999
Catalogue No. CW69-9/214E
ISBN 0-662-28096-2
ISSN 0069-0073

Table 1Migratory game bird hunting permit sales^a by province of purchase, 1966-1993

Year	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	NWT	Yukon	Total Sales
1966	13 269	3 271	7 220	8 535	35 868	144 063	37 784	44 744	52 911	32 394	—	—	380 059
1967	14 863	3 094	7 883	7 739	32 491	146 493	35 620	44 651	55 892	33 195	—	—	383 032
1968	17 645	3 649	9 022	9 558	37 110	139 182	38 712	43 596	53 623	33 301	—	—	385 553
1969	19 089	3 794	8 848	10 110	39 477	134 037	41 611	45 347	53 602	32 764	—	—	389 325
1970	21 347	3 962	9 926	10 293	46 009	135 231	39 230	47 722	59 986	31 350	—	—	405 650
1971	23 460	4 513	11 381	11 146	50 276	133 563	40 960	49 448	62 902	30 225	—	—	418 237
1972	23 682	4 492	12 158	11 336	53 082	131 427	41 133	50 004	63 309	31 032	—	—	421 677
1973	27 919	4 972	15 071	12 869	57 247	141 277	41 711	51 307	67 012	33 456	— ^b	—	452 841
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
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
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
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
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
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
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
1981	31 401	5 611	14 130	12 287	75 178	141 677	46 528	42 856	66 163	28 243	764	514	465 352
1982	31 215	5 461	13 728	12 759	72 850	144 436	45 273	47 236	64 968	26 522	800	572	465 820
1983	30 977	5 898	13 468	12 758	67 700	139 569	40 443	45 383	61 742	24 170	750	474	443 332
1984	31 309	5 525	12 896	11 486	65 308	140 521	35 238	37 720	51 717	21 892	850	496	414 958
1985	25 652	5 171	10 749	10 354	60 823	130 089	31 753	36 445	44 880	18 753	713	361	375 743
1986	25 498	5 300	11 047	11 083	59 685	131 930	33 570	37 692	45 042	17 924	692	358	379 821
1987	21 080	4 959	10 299	9 897	55 124	122 472	30 207	29 930	40 122	16 259	523	391	341 263
1988	23 655	4 906	10 264	10 646	57 206	117 310	25 108	23 258	34 513	15 595	496	367	323 324
1989	24 707	4 838	10 092	9 971	54 605	114 292	23 898	22 916	34 559	14 694	420	308	315 300
1990	24 831	4 625	10 115	9 974	54 700	115 130	22 641	22 964	32 212	13 851	431	240	311 714
1991	20 738	4 209	10 104	9 997	53 739	108 802	22 122	22 414	29 399	13 601	352	300	295 777
1992	20 310	3 753	9 192	9 337	49 262	103 395	20 048	20 620	28 056	12 429	348	256	277 006
1993	20 585	3 609	8 988	9 008	47 675	95 824	19 199	19 771	26 787	11 818	327	287	263 878

^a Derived from the number of permit stubs received.^b No data.

Table 2a

Permit sales (renewals/nonrenewals and resident/nonresident), by province/territory and zone, 1991

Province/territory	Zone	Permit sales			Renewals			Nonrenewals		
		Total	Res. ^a	Nonres.	Total	Res.	Nonres.	Total	Res.	Nonres.
Nfld.	1	18 733	18 691	42	15 051	15 018	33	3 682	3 673	9
	2	2 005	2 005	0	1 797	1 797	0	208	208	0
	Total	20 738	20 696	42	16 848	16 815	33	3 890	3 881	9
PEI	Total	4 209	4 160	49	3 866	3 831	35	343	329	14
NS	1	7 310	7 282	28	6 341	6 328	13	969	954	15
	2	2 794	2 748	46	2 192	2 161	31	602	587	15
	Total	10 104	10 030	74	8 533	8 489	44	1 571	1 541	30
NB	1	6 510	6 336	174	5 100	4 986	114	1 410	1 350	60
	2	3 487	3 380	107	2 738	2 664	74	749	716	33
	Total	9 997	9 716	281	7 838	7 650	188	2 159	2 066	93
Que.	1	41 055	40 121	934	32 871	32 378	493	8 184	7 743	441
	2	12 684	12 582	102	9 598	9 533	65	3 086	3 049	37
	Total	53 739	52 703	1 036	42 469	41 911	558	11 270	10 792	478
Ont.	1	31 273	27 387	3 886	26 365	23 308	3 057	4 908	4 079	829
	2	58 766	57 960	806	50 506	49 888	618	8 260	8 072	188
	3	18 763	15 241	3 522	15 050	12 466	2 584	3 713	2 775	938
Man.	Total	108 802	100 588	8 214	91 921	85 662	6 259	16 881	14 926	1 955
	1	18 395	15 279	3 116	16 229	13 624	2 605	2 166	1 655	511
	2	3 727	2 839	888	3 358	2 601	757	369	238	131
Sask.	Total	22 122	18 118	4 004	19 587	16 225	3 362	2 535	1 893	642
	1	8 522	7 304	1 218	6 672	5 896	776	1 850	1 408	442
	2	4 094	3 772	322	3 257	3 028	229	837	744	93
Alta.	3	9 798	7 965	1 833	7 368	6 173	1 195	2 430	1 792	638
	Total	22 414	19 041	3 373	17 297	15 097	2 200	5 117	3 944	1 173
	1	12 024	11 644	380	9 840	9 576	264	2 184	2 068	116
BC	2	17 375	16 762	613	14 419	13 998	421	2 956	2 764	192
	Total	29 399	28 406	993	24 259	23 574	685	5 140	4 832	308
	1	5 902	5 711	191	4 071	3 967	104	1 831	1 744	87
NWT	2	7 699	7 650	49	5 848	5 821	27	1 851	1 829	22
	Total	13 601	13 361	240	9 919	9 788	131	3 682	3 573	109
	Total	352	350	2	237	237	0	115	113	2
Yukon	Total	300	287	13	165	162	3	135	125	10
Canada	Total	295 777	277 456	18 321	242 939	229 441	13 498	52 838	48 015	4 823

^a Res. = Canadian resident.

Table 2b

Permit sales (renewals/nonrenewals and resident/nonresident), by province/territory and zone, 1992

Province/territory	Zone	Permit sales			Renewals			Nonrenewals		
		Total	Res. ^a	Nonres.	Total	Res.	Nonres.	Total	Res.	Nonres.
Nfld.	1	18 398	18 351	47	14 290	14 253	37	4 108	4 098	10
	2	1 919	1 914	5	1 617	1 614	3	302	300	2
	Total	20 317	20 265	52	15 907	15 867	40	4 410	4 398	12
PEI	Total	3 753	3 685	68	3 402	3 347	55	351	338	13
NS	1	6 546	6 513	33	5 739	5 729	10	807	784	23
	2	2 647	2 604	43	2 131	2 099	32	516	505	11
	Total	9 193	9 117	76	7 870	7 828	42	1 323	1 289	34
NB	1	6 239	6 016	223	4 906	4 775	131	1 333	1 241	92
	2	3 099	2 996	103	2 450	2 393	57	649	603	46
	Total	9 338	9 012	326	7 356	7 168	188	1 982	1 844	138
Que.	1	37 391	36 475	916	29 927	29 575	352	7 464	6 900	564
	2	11 876	11 721	155	8 952	8 908	44	2 924	2 813	111
	Total	49 267	48 196	1 071	38 879	38 483	396	10 388	9 713	675
Ont.	1	30 545	26 651	3 894	25 544	22 415	3 129	5 001	4 236	765
	2	55 523	54 714	809	47 432	46 883	549	8 091	7 831	260
	3	17 335	13 943	3 392	13 333	11 117	2 216	4 002	2 826	1 176
	Total	103 403	95 308	8 095	86 309	80 415	5 894	17 094	14 893	2 201
Man.	1	16 506	13 456	3 050	14 322	11 966	2 356	2 184	1 490	694
	2	3 542	2 518	1 024	2 951	2 226	725	591	292	299
	Total	20 048	15 974	4 074	17 273	14 192	3 081	2 775	1 782	993
Sask.	1	7 867	6 700	1 167	5 940	5 293	647	1 927	1 407	520
	2	3 707	3 366	341	2 755	2 578	177	952	788	164
	3	9 046	7 124	1 922	6 792	5 618	1 174	2 254	1 506	748
	Total	20 620	17 190	3 430	15 487	13 489	1 998	5 133	3 701	1 432
Alta.	1	12 713	12 145	568	9 639	9 351	288	3 074	2 794	280
	2	15 347	14 774	573	11 907	11 559	348	3 440	3 215	225
	Total	28 060	26 919	1 141	21 546	20 910	636	6 514	6 009	505
BC	1	5 479	5 316	163	3 819	3 749	70	1 660	1 567	93
	2	6 950	6 895	55	5 372	5 341	31	1 578	1 554	24
	Total	12 429	12 211	218	9 191	9 090	101	3 238	3 121	117
NWT	Total	348	332	16	216	216	0	132	116	16
Yukon	Total	256	246	10	135	134	1	121	112	9
Canada	Total	277 035	258 456	18 579	223 574	211 140	12 434	53 461	47 316	6 145

^a Res. = Canadian resident.

Table 2c

Permit sales (renewals/nonrenewals and resident/nonresident), by province/territory and zone, 1993

Province/territory	Zone	Permit sales			Renewals			Nonrenewals		
		Total	Res. ^a	Nonres.	Total	Res.	Nonres.	Total	Res.	Nonres.
Nfld.	1	18 509	18 441	68	14 415	14 359	56	4 094	4 082	12
	2	2 076	2 073	3	1 722	1 722	0	354	351	3
	Total	20 585	20 514	71	16 137	16 081	56	4 448	4 433	15
PEI	Total	3 609	3 522	87	3 247	3 181	66	362	341	21
NS	1	6 451	6 414	37	5 616	5 599	17	835	815	20
	2	2 537	2 496	41	1 982	1 955	27	555	541	14
	Total	8 988	8 910	78	7 598	7 554	44	1 390	1 356	34
NB	1	6 041	5 839	202	4 746	4 638	108	1 295	1 201	94
	2	2 967	2 839	128	2 276	2 218	58	691	621	70
	Total	9 008	8 678	330	7 022	6 856	166	1 986	1 822	164
Que.	1	36 464	35 460	1 004	28 862	28 370	492	7 602	7 090	512
	2	11 211	11 101	110	8 583	8 535	48	2 628	2 566	62
	Total	47 675	46 561	1 114	37 445	36 905	540	10 230	9 656	574
Ont.	1	28 466	24 432	4 034	23 956	20 695	3 261	4 510	3 737	773
	2	51 036	50 174	862	43 544	42 959	585	7 492	7 215	277
	3	16 322	12 903	3 419	12 212	10 134	2 078	4 110	2 769	1 341
Man.	Total	95 824	87 509	8 315	79 712	73 788	5 924	16 112	13 721	2 391
	1	16 074	12 855	3 219	13 968	11 402	2 566	2 106	1 453	653
	2	3 125	2 264	861	2 675	2 020	655	450	244	206
Sask.	Total	19 199	15 119	4 080	16 643	13 422	3 221	2 556	1 697	859
	1	7 778	6 443	1 335	5 818	5 017	801	1 960	1 426	534
	2	3 406	2 981	425	2 536	2 322	214	870	659	211
Alta.	3	8 587	6 491	2 096	6 375	5 166	1 209	2 212	1 325	887
	Total	19 771	15 915	3 856	14 729	12 505	2 224	5 042	3 410	1 632
	1	12 082	11 572	510	9 028	8 775	253	3 054	2 797	257
BC	2	14 705	14 042	663	11 096	10 760	336	3 609	3 282	327
	Total	26 787	25 614	1 173	20 124	19 535	589	6 663	6 079	584
	1	5 139	4 971	168	3 540	3 469	71	1 599	1 502	97
NWT	2	6 679	6 632	47	5 121	5 099	22	1 558	1 533	25
	Total	11 818	11 603	215	8 661	8 568	93	3 157	3 035	122
	Total	327	314	13	212	203	9	115	111	4
Yukon	Total	287	275	12	152	150	2	135	125	10
Canada	Total	263 878	244 534	19 344	211 682	198 748	12 934	52 196	45 786	6 410

^a Res. = Canadian resident.

Table 3a

Characteristics of the sample of the HQS, by province/territory and zone, 1991

Province/territory	Zone	Sample ^a	Responses ^b	Response rate ^c	Permit Purchasers ^d	% ^e	Active Hunters ^f	% ^g	Successful Hunters ^h	% ⁱ
Nfld.	1	2 448	930	38.0	614	66.0	366	59.6	255	69.7
	2	686	191	27.8	123	64.4	81	65.9	62	76.5
	Total	3 134	1 121	35.8	737	65.7	447	60.7	317	70.9
PEI	Total	544	190	34.9	150	78.9	117	78.0	104	88.9
NS	1	1 490	579	38.9	391	67.5	281	71.9	244	86.8
	2	463	251	54.2	149	59.4	120	80.5	95	79.2
	Total	1 953	830	42.5	540	65.1	401	74.3	339	84.5
NB	1	621	340	54.8	247	72.6	200	81.0	173	86.5
	2	332	150	45.2	113	75.3	82	72.6	69	84.1
	Total	953	490	51.4	360	73.5	282	78.3	242	85.8
Que.	1	3 985	2 316	58.1	1 682	72.6	1 269	75.4	1 119	88.2
	2	1 705	971	57.0	669	68.9	467	69.8	426	91.2
	Total	5 690	3 287	57.8	2 351	71.5	1 736	73.8	1 545	89.0
Ont.	1	2 782	1 534	55.1	1 256	81.9	934	74.4	803	86.0
	2	6 036	3 465	57.4	2 786	80.4	2 001	71.8	1 648	82.4
	3	3 738	1 865	49.9	1 593	85.4	1 218	76.5	1 085	89.1
	Total	12 556	6 864	54.7	5 635	82.1	4 153	73.7	3 536	85.1
Man.	1	3 068	1 633	53.2	1 361	83.3	1 233	90.6	1 171	95.0
	2	1 240	567	45.7	457	80.6	397	86.9	378	95.2
	Total	4 308	2 200	51.1	1 818	82.6	1 630	89.7	1 549	95.0
Sask.	1	1 421	669	47.1	504	75.3	417	82.7	392	94.0
	2	970	424	43.7	307	72.4	248	80.8	223	89.9
	3	1 546	782	50.6	622	79.5	551	88.6	516	93.6
	Total	3 937	1 875	47.6	1 433	76.4	1 216	84.9	1 131	93.0
Alta.	1	4 584	2 364	51.6	1 370	58.0	1 036	75.6	947	91.4
	2	3 642	1 960	53.8	1 498	76.4	1 168	78.0	1 057	90.5
	Total	8 226	4 324	52.6	2 868	66.3	2 204	76.8	2 004	90.9
BC	1	960	584	60.8	377	64.6	259	68.7	228	88.0
	2	1 593	867	54.4	590	68.1	422	71.5	380	90.0
	Total	2 553	1 451	56.8	967	66.6	681	70.4	608	89.3
NWT	Total	227	104	45.8	57	54.8	40	70.2	38	95.0
Yukon	Total	122	63	51.6	30	47.6	20	66.7	14	70.0
Canada	Total	44 203	22 799	51.6	16 946	74.3	12 927	76.3	11 427	88.4

^a Number of questionnaires sent out.^b Number of questionnaires completed and returned.^c Percentage of sample for which responses were received.^d Number of respondents who purchased a permit in 1991.^e Percentage of respondents who purchased a permit.^f Respondents who hunted.^g Percentage of permit purchasers who hunted.^h Respondents who hunted successfully.ⁱ Percentage of active hunters who harvested migratory birds.

Table 3b

Characteristics of the sample of the HQS, by province/territory and zone, 1992

Province/territory	Zone	Sample ^a	Active Responses ^b	Successful rate ^c	Purchasers ^d	% ^e	Hunters ^f	% ^g	Hunters ^h	% ⁱ
Nfld.	1	2 448	1 117	45.6	761	68.1	475	62.4	325	68.4
	2	686	234	34.1	163	69.7	111	68.1	83	74.8
	Total	3 134	1 351	43.1	924	68.4	586	63.4	408	69.6
PEI	Total	544	242	44.5	197	81.4	156	79.2	130	83.3
NS	1	1 490	705	47.3	525	74.5	401	76.4	353	88.0
	2	463	262	56.6	155	59.2	117	75.5	99	84.6
	Total	1 953	967	49.5	680	70.3	518	76.2	452	87.3
NB	1	621	333	53.6	257	77.2	222	86.4	189	85.1
	2	332	181	54.5	142	78.5	107	75.4	92	86.0
	Total	953	514	53.9	399	77.6	329	82.5	281	85.4
Que.	1	3 985	2 362	59.3	1 775	75.1	1 363	76.8	1 186	87.0
	2	1 705	964	56.5	684	71.0	472	69.0	424	89.8
	Total	5 690	3 326	58.5	2 459	73.9	1 835	74.6	1 610	87.7
Ont.	1	2 782	1 669	60.0	1 386	83.0	1 098	79.2	950	86.5
	2	6 036	3 660	60.6	2 943	80.4	2 152	73.1	1 715	79.7
	3	3 738	1 955	52.3	1 710	87.5	1 360	79.5	1 168	85.9
	Total	12 556	7 284	58.0	6 039	82.9	4 610	76.3	3 833	83.1
Man.	1	3 068	1 584	51.6	1 283	81.0	1 154	89.9	1 045	90.6
	2	1 240	578	46.6	476	82.4	436	91.6	412	94.5
	Total	4 308	2 162	50.2	1 759	81.4	1 590	90.4	1 457	91.6
Sask.	1	1 421	686	48.3	527	76.8	437	82.9	406	92.9
	2	970	433	44.6	315	72.7	259	82.2	239	92.3
	3	1 546	754	48.8	615	81.6	533	86.7	496	93.1
	Total	3 937	1 873	47.6	1 457	77.8	1 229	84.4	1 141	92.8
Alta.	1	4 433	2 282	51.5	1 427	62.5	1 106	77.5	978	88.4
	2	3 642	1 919	52.7	1 430	74.5	1 113	77.8	983	88.3
	Total	8 075	4 201	52.0	2 857	68.0	2 219	77.7	1 961	88.4
BC	1	960	567	59.1	379	66.8	278	73.4	243	87.4
	2	1 593	918	57.6	630	68.6	474	75.2	411	86.7
	Total	2 553	1 485	58.2	1 009	67.9	752	74.5	654	87.0
NWT	Total	190	88	46.3	52	59.1	38	73.1	35	92.1
Yukon	Total	122	76	62.3	43	56.6	27	62.8	25	92.6
Canada	Total	44 015	23 569	53.5	17 875	75.8	13 889	77.7	11 987	86.3

^a Number of questionnaires sent out.^b Number of questionnaires completed and returned.^c Percentage of sample for which responses were received.^d Number of respondents who purchased a permit in 1991.^e Percentage of respondents who purchased a permit.^f Respondents who hunted.^g Percentage of permit purchasers who hunted.^h Respondents who hunted successfully.ⁱ Percentage of active hunters who harvested migratory birds.

Table 3c

Characteristics of the sample of the HQS, by province/territory and zone, 1993

Province/territory	Zone	Sample ^a	Active Responses ^b	Successful rate ^c	Purchasers ^d	% ^e	Hunters ^f	% ^g	Hunters ^h	% ⁱ
Nfld.	1	2 448	1 022	41.7	702	68.7	463	66.0	328	70.8
	2	686	216	31.5	167	77.3	105	62.9	90	85.7
	Total	3 134	1 238	39.5	869	70.2	568	65.4	418	73.6
PEI	Total	544	195	35.8	154	79.0	120	77.9	106	88.3
NS	1	1 383	530	38.3	395	74.5	313	79.2	277	88.5
	2	463	230	49.7	132	57.4	106	80.3	93	87.7
	Total	1 846	760	41.2	527	69.3	419	79.5	370	88.3
NB	1	621	331	53.3	258	77.9	216	83.7	195	90.3
	2	332	145	43.7	114	78.6	91	79.8	74	81.3
	Total	953	476	49.9	372	78.2	307	82.5	269	87.6
Que.	1	3 953	2 228	56.4	1 659	74.5	1 334	80.4	1 242	93.1
	2	1 694	887	52.4	615	69.3	467	75.9	427	91.4
	Total	5 647	3 115	55.2	2 274	73.0	1 801	79.2	1 669	92.7
Ont.	1	2 782	1 509	54.2	1 217	80.6	929	76.3	808	87.0
	2	6 036	3 397	56.3	2 665	78.5	2 016	75.6	1 700	84.3
	3	3 252	1 545	47.5	1 270	82.2	1 005	79.1	883	87.9
	Total	12 070	6 451	53.4	5 152	79.9	3 950	76.7	3 391	85.8
Man.	1	3 068	1 509	49.2	1 256	83.2	1 161	92.4	1 085	93.5
	2	1 240	530	42.7	424	80.0	383	90.3	369	96.3
	Total	4 308	2 039	47.3	1 680	82.4	1 544	91.9	1 454	94.2
Sask.	1	1 421	637	44.8	497	78.0	416	83.7	376	90.4
	2	970	401	41.3	290	72.3	228	78.6	207	90.8
	3	1 546	739	47.8	583	78.9	494	84.7	461	93.3
	Total	3 937	1 777	45.1	1 370	77.1	1 138	83.1	1 044	91.7
Alta.	1	4 584	2 305	50.3	1 472	63.9	1 131	76.8	1 004	88.8
	2	3 539	1 853	52.4	1 389	75.0	1 068	76.9	938	87.8
	Total	8 123	4 158	51.2	2 861	68.8	2 199	76.9	1 942	88.3
BC	1	935	526	56.3	308	58.6	218	70.8	192	88.1
	2	1 593	859	53.9	606	70.5	452	74.6	401	88.7
	Total	2 528	1 385	54.8	914	66.0	670	73.3	593	88.5
NWT	Total	182	85	46.7	58	68.2	43	74.1	34	79.1
Yukon	Total	147	83	56.5	57	68.7	38	66.7	31	81.6
Canada	Total	43 419	21 762	50.1	16 288	74.8	12 797	78.6	11 321	88.5

^a Number of questionnaires sent out.^b Number of questionnaires completed and returned.^c Percentage of sample for which responses were received.^d Number of respondents who purchased a permit in 1991.^e Percentage of respondents who purchased a permit.^f Respondents who hunted.^g Percentage of permit purchasers who hunted.^h Respondents who hunted successfully.ⁱ Percentage of active hunters who harvested migratory birds.

Table 4
Characteristics of the sample of the HQS, 1975–1993

Year	Permit sales	Sample ^a	% ^b	Response rate	% ^c	Permit purchasers	% ^d	Active hunters	% ^e	Successful hunters	% ^f
1975	471 320	40 400	8.6	20 648	51.1	15 872	76.9	12 980	81.1	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	524 596	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	65.5
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	21 269	47.7	15 471	72.7	11 760	76.0	9 886	63.9
1982	465 820	41 559	8.9	19 542	47.0	14 701	75.2	11 376	77.0	9 636	65.5
1983	443 332	40 612	9.2	19 080	47.0	14 629	76.7	11 515	78.7	9 883	67.6
1984	414 958	40 502	9.8	19 157	47.3	14 793	76.0	11 425	77.0	10 076	68.1
1985	375 743	40 502	10.8	19 371	47.8	14 253	73.6	11 373	80.0	9 821	68.9
1986	379 821	40 502	10.7	20 210	49.9	15 312	75.8	12 264	80.1	10 536	68.8
1987	341 263	37 607	11.0	17 407	46.3	13 034	74.9	10 479	80.4	9 083	69.7
1988	323 324	38 010	11.8	23 455	61.7	17 599	75.0	13 308	75.6	11 718	66.6
1989	315 300	43 770	13.9	21 703	49.6	16 476	75.9	12 909	78.4	11 557	70.1
1990	311 714	44 222	14.2	23 025	52.1	17 414	75.6	13 719	78.8	12 318	70.7
1991	295 777	44 203	14.9	22 799	51.6	16 946	74.3	12 927	76.3	11 427	67.4
1992	277 006	44 015	15.9	23 569	53.5	17 875	75.8	13 889	77.7	11 987	67.1
1993	263 878	43 419	16.5	21 762	50.1	16 288	74.8	12 797	78.6	11 321	69.4
Average	404 099	42 547	10.5	21 581	50.7	16 326	75.6	12 797	78.4	11 074	67.9

^a Number of questionnaires sent out.

^b Sample as a percentage of permit sales.

^c Percentage of sample for which responses were received.

^d Percentage of respondents who purchased a permit.

^e Percentage of permit purchasers who hunted.

^f Percentage of permit purchasers who hunted successfully.

Table 5

Estimated number of successful hunters and of waterfowl harvested, by province/territory, species group, and zone, 1991–1993

Province/territory species group	Zone	Successful hunters			Birds harvested			Birds harvested/successful hunter		
		1991	1992	1993	1991	1992	1993	1991	1992	1993
Newfoundland										
Ducks	1	7 075	7 372	8 188	45 116	51 285	54 753	6.38	6.96	6.69
	2	1 012	1 053	1 064	10 315	11 484	11 860	10.19	10.90	11.14
	Total	8 087	8 426	9 253	55 431	62 769	66 613	6.85	7.45	7.20
Geese	1	1 585	1 586	2 069	4 021	4 632	6 618	2.54	2.92	3.20
	2	398	541	585	1 863	1 805	3 141	4.69	3.34	5.37
	Total	1 982	2 127	2 654	5 885	6 437	9 759	2.97	3.03	3.68
Prince Edward Island										
Ducks	Total	2 570	1 984	2 148	28 054	15 055	22 756	10.92	7.59	10.59
Geese	Total	2 600	2 084	2 036	21 459	11 640	19 168	8.25	5.59	9.41
Nova Scotia										
Ducks	1	2 894	3 873	3 784	50 305	79 131	74 311	17.38	20.43	19.64
	2	2 644	1 643	2 110	26 283	16 577	20 837	9.94	10.09	9.87
	Total	5 538	5 516	5 894	76 588	95 707	95 149	13.83	17.35	16.14
Geese	1	950	861	1 212	7 490	3 392	9 932	7.88	3.94	8.19
	2	609	432	604	2 409	954	3 412	3.96	2.21	5.65
	Total	1 559	1 292	1 817	9 900	4 346	13 344	6.35	3.36	7.35
New Brunswick										
Ducks	1	3 778	3 863	3 894	32 479	33 977	33 437	8.60	8.80	8.59
	2	1 721	1 863	1 881	14 797	18 304	17 652	8.60	9.83	9.39
	Total	5 499	5 726	5 775	47 276	52 282	51 089	8.60	9.13	8.85
Geese	1	453	459	254	2 326	1 770	901	5.13	3.86	3.54
	2	588	566	863	2 903	3 875	6 015	4.94	6.85	6.97
	Total	1 041	1 024	1 118	5 229	5 646	6 916	5.02	5.51	6.19
Quebec										
Ducks	1	23 057	20 891	21 507	286 902	264 781	300 577	12.44	12.67	13.98
	2	7 784	7 524	7 787	70 076	78 193	95 884	9.00	10.39	12.31
	Total	30 841	28 414	29 294	356 978	342 974	396 461	11.57	12.07	13.53
Geese	1	12 634	9 606	13 727	80 884	44 240	122 733	6.40	4.61	8.94
	2	3 193	2 780	3 499	22 699	12 087	23 926	7.11	4.35	6.84
	Total	15 827	12 386	17 226	103 583	56 327	146 659	6.54	4.55	8.51
Ontario										
Ducks	1	14 185	15 779	15 484	188 639	183 916	202 041	13.30	11.66	13.05
	2	32 236	30 259	31 238	313 385	258 576	290 158	9.72	8.55	9.29
	3	10 448	9 212	8 737	118 321	99 062	89 834	11.33	10.75	10.28
Geese	Total	56 870	55 250	55 459	620 345	541 554	582 033	10.91	9.80	10.49
	1	7 769	8 254	6 800	30 142	34 045	32 947	3.88	4.12	4.85
	2	11 467	10 294	9 765	42 319	39 793	39 833	3.69	3.87	4.08
Geese	3	3 425	2 401	3 526	14 683	7 637	14 416	4.29	3.18	4.09
	Total	22 662	20 949	20 090	87 143	81 474	87 196	3.85	3.89	4.34
Manitoba										
Ducks	1	9 806	8 562	8 116	79 820	84 014	65 471	8.14	9.81	8.07
	2	2 554	3 152	2 668	27 008	34 687	28 193	10.58	11.00	10.57
	Total	12 360	11 714	10 784	106 827	118 701	93 664	8.64	10.13	8.69
Geese	1	13 260	9 330	10 579	121 168	65 209	93 336	9.14	6.99	8.82
	2	2 341	3 005	3 092	18 928	22 070	33 553	8.08	7.34	10.85
	Total	15 602	12 335	13 671	140 097	87 279	126 889	8.98	7.08	9.28
Saskatchewan										
Ducks	1	4 236	4 522	3 768	29 642	33 119	27 507	7.00	7.32	7.30
	2	2 192	1 986	1 725	21 568	17 056	16 241	9.84	8.59	9.42
	3	6 091	5 261	4 419	51 670	42 381	32 982	8.48	8.06	7.46
Geese	Total	12 519	11 770	9 912	102 879	92 556	76 730	8.22	7.86	7.74
	1	6 216	6 059	6 225	61 881	52 492	58 491	9.95	8.66	9.40
	2	2 583	2 848	2 368	24 035	26 429	20 664	9.30	9.28	8.72
Geese	3	6 635	5 809	5 132	61 309	46 970	45 929	9.24	8.09	8.95
	Total	15 434	14 715	13 725	147 225	125 892	125 083	9.54	8.56	9.11
Alberta										
Ducks	1	7 785	7 212	6 495	76 409	59 682	54 775	9.82	8.28	8.43
	2	9 158	7 836	7 625	89 904	69 452	68 937	9.82	8.86	9.04
	Total	16 943	15 048	14 120	166 313	129 134	123 712	9.82	8.58	8.76

(Continued)

Table 5 (cont'd)

Estimated number of successful hunters and of waterfowl harvested, by province/territory, species group, and zone, 1991–1993

Province/territory species group	Zone	Successful hunters			Birds harvested			Birds harvested/successful hunter		
		1991	1992	1993	1991	1992	1993	1991	1992	1993
Geese	1	7 206	6 758	6 030	56 979	44 710	43 911	7.91	6.62	7.28
	2	8 741	8 414	8 167	73 292	65 815	62 949	8.39	7.82	7.71
	Total	15 946	15 172	14 197	130 271	110 525	106 861	8.17	7.28	7.53
British Columbia										
Ducks	1	3 056	2 927	2 262	26 588	24 725	22 435	8.70	8.45	9.92
	2	3 350	3 215	2 996	53 818	57 559	50 399	16.07	17.90	16.82
	Total	6 406	6 142	5 258	80 406	82 284	72 835	12.55	13.40	13.85
Geese	1	2 010	2 026	1 598	10 211	10 278	7 310	5.08	5.07	4.57
	2	1 759	1 480	1 490	10 666	6 174	8 295	6.06	4.17	5.57
	Total	3 769	3 506	3 089	20 877	16 452	15 604	5.54	4.69	5.05
Northwest Territories										
Ducks	Total	128	163	147	737	1 230	1 780	5.73	7.55	12.14
Geese	Total	54	72	57	275	204	215	5.10	2.84	3.80
Yukon										
Ducks	Total	125	80	131	1 100	828	1 339	8.82	10.38	10.24
Geese	Total	71	52	31	510	154	94	7.14	2.94	3.00
Canada										
Ducks	Total	157 885	150 233	148 176	1 642 933	1 535 071	1 584 161	10.41	10.22	10.69
Geese	Total	96 548	85 716	89 710	672 453	506 375	657 788	6.96	5.91	7.33

Table 6a

Estimated recreational activity provided by the hunting of ducks and geese, by province/territory and zone, 1991

Province/territory	Zone	Permit sales	Active hunters	Successful hunters	Birds harvested	Recreation days	S. bag ^a (avg.)	D. bag ^b (avg.)	R. days ^c (avg.)
Nfld.	1	18 733	10 770	7 315	49 137	130 364	4.6	0.4	12.1
	2	2 005	1 364	1 082	12 178	14 661	8.9	0.8	10.7
	Total	20 738	12 135	8 397	61 315	145 025	5.1	0.4	12.0
PEI	Total	4 209	3 848	3 494	49 512	49 593	12.9	1.0	12.9
NS	1	7 310	3 480	3 068	57 795	47 251	16.6	1.2	13.6
	2	2 794	3 315	2 716	28 693	25 812	8.7	1.1	7.8
	Total	10 104	6 794	5 784	86 488	73 063	12.7	1.2	10.8
NB	1	6 510	4 452	3 816	34 805	31 294	7.8	1.1	7.0
	2	3 487	2 423	1 896	17 700	22 224	7.3	0.8	9.2
	Total	9 997	6 875	5 713	52 505	53 518	7.6	1.0	7.8
Que.	1	41 055	29 578	26 025	367 729	268 845	12.4	1.4	9.1
	2	12 684	9 242	8 445	92 709	89 169	10.0	1.0	9.6
	Total	53 739	38 820	34 470	460 438	358 014	11.9	1.3	9.2
Ont.	1	31 273	19 145	16 112	218 549	159 491	11.4	1.4	8.3
	2	58 766	42 479	34 847	355 704	308 615	8.4	1.2	7.3
	3	18 763	12 970	11 117	133 004	94 705	10.3	1.4	7.3
	Total	108 802	74 595	62 076	707 257	562 811	9.5	1.3	7.5
Man.	1	18 395	16 187	15 160	200 962	93 972	12.4	2.1	5.8
	2	3 727	3 652	3 390	45 936	19 899	12.6	2.3	5.4
	Total	22 122	19 840	18 549	246 898	113 871	12.4	2.2	5.7
Sask.	1	8 522	7 454	7 075	91 479	40 488	12.3	2.3	5.4
	2	4 094	3 542	3 222	45 603	21 129	12.9	2.2	6.0
	3	9 798	8 466	8 019	112 970	53 487	13.3	2.1	6.3
	Total	22 414	19 462	18 316	250 053	115 105	12.8	2.2	5.9
Alta.	1	12 024	10 613	9 893	133 388	62 803	12.6	2.1	5.9
	2	17 375	13 008	11 945	163 196	81 748	12.5	2.0	6.3
	Total	29 399	23 621	21 838	296 583	144 551	12.6	2.1	6.1
BC	1	5 902	4 184	3 570	36 798	23 960	8.8	1.5	5.7
	2	7 699	4 076	3 787	64 484	39 624	15.8	1.6	9.7
	Total	13 601	8 261	7 357	101 283	63 584	12.3	1.6	7.7
NWT	Total	352	150	143	958	643	6.4	1.5	4.3
Yukon	Total	300	195	131	1 610	863	8.2	1.9	4.4
Canada	Total	295 777	214 596	186 268	2 314 899	1 680 639	10.8	1.4	7.8

^a Mean seasonal bag per active hunter.^b Mean daily bag per active hunter.^c Mean recreation days per active hunter.

Table 6b

Estimated recreational activity provided by the hunting of ducks and geese, by provincial/territory and zone, 1992

Province/territory	Zone	Permit sales	Active hunters	Successful hunters	Birds harvested	Recreation days	S. bag ^a (avg.)	D. bag ^b (avg.)	R. days ^c (avg.)
Nfld.	1	18 398	11 204	7 564	55 917	137 180	5.0	0.4	12.2
	2	1 919	1 431	1 163	13 289	13 796	9.3	1.0	9.6
	Total	20 317	12 635	8 728	69 206	150 976	5.5	0.5	11.9
PEI	Total	3 753	3 305	2 884	26 695	36 225	8.1	0.7	11.0
NS	1	6 546	4 312	3 974	82 523	56 895	19.1	1.5	13.2
	2	2 647	2 131	1 788	17 530	20 744	8.2	0.8	9.7
	Total	9 193	6 443	5 762	100 053	77 639	15.5	1.3	12.1
NB	1	6 239	4 620	3 918	35 748	31 781	7.7	1.1	6.9
	2	3 099	2 396	1 947	22 180	23 868	9.3	0.9	10.0
	Total	9 338	7 016	5 865	57 927	55 649	8.3	1.0	7.9
Que.	1	37 391	26 486	22 957	309 021	232 345	11.7	1.3	8.8
	2	11 876	8 727	7 873	90 280	98 406	10.3	0.9	11.3
	Total	49 267	35 213	30 830	399 301	330 750	11.3	1.2	9.4
Ont.	1	30 545	21 736	18 276	217 960	171 885	10.0	1.3	7.9
	2	55 523	40 507	32 720	298 369	282 938	7.4	1.1	7.0
	3	17 335	11 798	9 832	106 699	82 343	9.0	1.3	7.0
	Total	103 403	74 040	60 828	623 028	537 165	8.4	1.2	7.3
Man.	1	16 506	13 064	11 749	149 223	82 293	11.4	1.8	6.3
	2	3 542	4 483	4 215	56 756	26 923	12.7	2.1	6.0
	Total	20 048	17 547	15 965	205 980	109 215	11.7	1.9	6.2
Sask.	1	7 867	7 122	7 029	85 612	40 622	12.0	2.1	5.7
	2	3 707	3 550	3 399	43 485	21 138	12.2	2.1	6.0
	3	9 046	7 657	7 201	89 351	47 084	11.7	1.9	6.1
	Total	20 620	18 330	17 629	218 447	108 844	11.9	2.0	5.9
Alta.	1	12 713	10 326	9 396	104 392	59 292	10.1	1.8	5.7
	2	15 347	11 893	10 650	135 267	73 250	11.4	1.8	6.2
	Total	28 060	22 219	20 047	239 659	132 543	10.8	1.8	6.0
BC	1	5 479	4 100	3 516	35 003	22 809	8.5	1.5	5.6
	2	6 950	4 041	3 477	63 733	39 890	15.8	1.6	9.9
	Total	12 429	8 141	6 992	98 736	62 699	12.1	1.6	7.7
NWT	Total	348	209	200	1 434	1 424	6.8	1.0	6.8
Yukon	Total	256	116	112	982	884	8.5	1.1	7.6
Canada	Total	277 032	205 215	175 841	2 041 447	1 604 014	9.9	1.3	7.8

^a Mean seasonal bag per active hunter.^b Mean daily bag per active hunter.^c Mean recreation days per active hunter.

Table 6c

Estimated recreational activity provided by the hunting of ducks and geese, by province/territory and zone, 1993

Province/territory	Zone	Permit sales	Active hunters	Successful hunters	Birds harvested	Recreation days	S. bag ^a (avg.)	D. bag ^b (avg.)	R. days ^c (avg.)
Nfld.	1	18 509	11 885	8 443	61 372	162 858	5.2	0.4	13.7
	2	2 076	1 406	1 197	15 001	12 228	10.7	1.2	8.7
	Total	20 585	13 291	9 641	76 372	175 086	5.7	0.4	13.2
PEI	Total	3 609	3 119	2 913	41 924	36 561	13.4	1.1	11.7
NS	1	6 451	4 406	3 982	84 243	58 853	19.1	1.4	13.4
	2	2 537	2 517	2 277	24 249	22 122	9.6	1.1	8.8
	Total	8 988	6 924	6 260	108 493	80 974	15.7	1.3	11.7
NB	1	6 041	4 575	3 933	34 338	29 807	7.5	1.2	6.5
	2	2 967	2 424	1 996	23 667	29 664	9.8	0.8	12.2
	Total	9 008	6 999	5 930	58 005	59 472	8.3	1.0	8.5
Que.	1	36 464	26 958	25 240	423 310	242 149	15.7	1.7	9.0
	2	11 211	9 263	8 405	119 809	93 017	12.9	1.3	10.0
	Total	47 675	36 221	33 645	543 120	335 166	15.0	1.6	9.3
Ont.	1	28 466	19 664	17 076	234 988	180 357	12.0	1.3	9.2
	2	51 036	38 940	33 347	329 990	278 682	8.5	1.2	7.2
	3	16 322	10 692	9 710	104 250	81 291	9.8	1.3	7.6
	Total	95 824	69 296	60 134	669 229	540 330	9.7	1.2	7.8
Man.	1	16 074	13 471	12 573	158 807	83 319	11.8	1.9	6.2
	2	3 125	4 153	3 847	61 746	24 281	14.9	2.5	5.8
	Total	19 199	17 624	16 421	220 553	107 600	12.5	2.0	6.1
Sask.	1	7 778	7 366	6 992	85 998	42 471	11.7	2.0	5.8
	2	3 406	3 082	2 988	36 905	17 533	12.0	2.1	5.7
	3	8 587	6 796	6 272	78 910	36 937	11.6	2.1	5.4
	Total	19 771	17 244	16 252	201 813	96 941	11.7	2.1	5.6
Alta.	1	12 082	9 163	8 400	98 686	52 822	10.8	1.9	5.8
	2	14 705	11 727	10 607	131 886	68 900	11.2	1.9	5.9
	Total	26 787	20 889	19 007	230 572	121 722	11.0	1.9	5.8
BC	1	5 139	3 337	2 847	29 720	21 278	8.9	1.4	6.4
	2	6 679	3 610	3 267	58 694	36 889	16.3	1.6	10.2
	Total	11 818	6 947	6 114	88 414	58 167	12.7	1.5	8.4
NWT	Total	327	208	157	1 995	1 492	9.6	1.3	7.2
Yukon	Total	287	179	150	1 433	938	8.0	1.5	5.2
Canada	Total	263 878	198 941	176 623	2 241 924	1 614 450	11.3	1.4	8.1

^a Mean seasonal bag per active hunter.^b Mean daily bag per active hunter.^c Mean recreation days per active hunter.**Table 7**

Estimated number of migratory game birds, other than waterfowl, harvested in Canada, 1988–1993

Species	1988	1989	1990	1991	1992	1993	Average, 1988–1993
American Woodcock	115 497	103 903	100 071	96 330	80 097	89 541	97 573
Common Snipe	36 785	49 585	39 700	31 116	30 749	31 047	36 497
American Coot	11 519	9 914	8 875	7 727	6 590	7 390	8 669
Sandhill Crane	6 949	4 975	4 835	5 318	5 941	2 915	5 156
Mourning Dove	295	850	580	363	1 040	307	572
Band-tailed Pigeon	1 805	1 038	677	459	1 061	399	906
Rail ^a	—	1 221	836	393	489	304	649 ^b
Total	172 850	171 485	155 569	141 705	125 967	131 904	149 913

^a Rail harvest has been surveyed by the HQS only since 1989.^b Average for 1989–1993.

Table 8

Estimated number of successful hunters of American Woodcock and of birds harvested, by province and zone, 1991–1993

Province	Zone	Successful hunters			Birds harvested			Birds harvested/successful hunter		
		1991 (n=591) ^a	1992 (n=672)	1993 (n=638)	1991	1992	1993	1991	1992	1993
PEI	Total	0	170	165	0	543	341	—	3.20	2.07
NS	1	235	326	555	3 524	2 023	4 031	14.97	6.20	7.26
	2	344	151	259	2 127	561	801	6.18	3.70	3.10
	Total	580	478	814	5 651	2 584	4 832	9.75	5.41	5.94
NB	1	584	784	929	6 191	6 208	6 484	10.60	7.92	6.98
	2	289	350	495	3 272	4 017	3 923	11.32	11.48	7.93
	Total	873	1 134	1 424	9 463	10 224	10 407	10.84	9.02	7.31
Que.	1	3 455	3 571	3 827	24 258	21 653	29 073	7.02	6.06	7.60
	2	678	597	873	2 745	3 344	3 937	4.05	5.60	4.51
	Total	4 133	4 168	4 700	27 003	24 997	33 010	6.53	6.00	7.02
Ont.	1	2 524	2 627	2 118	19 450	18 713	17 053	7.71	7.12	8.05
	2	4 258	3 647	3 138	30 757	19 794	19 660	7.22	5.43	6.27
	3	673	524	688	4 006	3 242	4 239	5.95	6.18	6.16
	Total	7 455	6 798	5 944	54 212	41 749	40 952	7.27	6.14	6.89
Canada	Total	13 041	12 746	13 046	96 330	80 097	89 541	7.39	6.28	6.86

^a n = number of successful hunters sampled.

Table 9

Estimated number of successful hunters of Common Snipe and of birds harvested, by province and zone, 1991–1993

Province	Zone	Successful hunters			Birds harvested			Birds harvested/successful hunter		
		1991 (n=328) ^a	1992 (n=357)	1993 (n=345)	1991	1992	1993	1991	1992	1993
Nfld.	1	1 404	1 305	1 282	6 385	5 442	6 432	4.55	4.17	5.02
	2	98	46	14	168	132	14	1.72	2.86	1.00
	Total	1 502	1 351	1 296	6 552	5 573	6 446	4.36	4.12	4.97
PEI	1	79	124	102	449	325	408	5.68	2.63	4.00
	Total	79	124	102	449	325	408	5.68	2.63	4.00
NS	1	160	206	158	906	1 212	1 072	5.65	5.87	6.80
	2	126	154	81	366	405	125	2.90	2.63	1.54
	Total	287	360	239	1 272	1 616	1 198	4.44	4.49	5.01
NB	1	70	191	344	203	476	1 308	2.89	2.49	3.80
	2	37	97	25	397	360	38	10.63	3.73	1.57
	Total	108	288	369	601	836	1 346	5.58	2.91	3.65
Que.	1	2 567	2 249	2 151	12 923	10 612	9 486	5.03	4.72	4.41
	2	514	717	582	2 581	4 469	4 676	5.02	6.23	8.03
	Total	3 082	2 967	2 733	15 504	15 081	14 162	5.03	5.08	5.18
Ont.	1	457	218	372	934	990	1 262	2.04	4.55	3.40
	2	772	856	1 025	2 281	2 926	3 014	2.95	3.42	2.94
	3	276	135	184	944	730	783	3.42	5.39	4.25
	Total	1 506	1 209	1 581	4 159	4 646	5 059	2.76	3.84	3.20
Man.	1	94	64	114	176	534	308	1.87	8.36	2.71
	2	20	33	112	57	141	584	2.94	4.32	5.20
	Total	114	96	226	234	675	891	2.06	7.00	3.94
Sask.	1	0	0	30	0	0	30	—	—	1.00
	2	24	30	52	67	55	190	2.77	1.83	3.62
	3	76	20	71	505	40	71	6.61	2.00	1.00
	Total	100	50	153	572	95	290	5.69	1.89	1.90
Alta.	1	125	76	75	625	563	162	5.00	7.39	2.16
	2	109	111	120	603	606	945	5.52	5.47	7.85
	Total	234	187	196	1 228	1 169	1 108	5.24	6.25	5.66
BC	1	47	45	12	72	145	12	1.54	3.25	1.00
	2	89	105	58	472	586	127	5.28	5.60	2.20
	Total	136	149	70	544	731	139	3.99	4.90	1.99
Canada	Total	7 147	6 782	6 965	31 116	30 749	31 047	4.35	4.53	4.46

^a n = number of successful hunters sampled.

Table 10

Estimated number of successful hunters of American Coot and of birds harvested, by province and zone, 1991–1993

Province	Zone	Successful hunters			Birds harvested			Bird harvested/successful hunter		
		1991 (n=144) ^a	1992 (n=136)	1993 (n=119)	1991	1992	1993	1991	1992	1993
Que.	1	876	731	861	3 248	1 639	1 767	3.71	2.24	2.05
	2	108	141	141	404	433	1 119	3.74	3.08	7.96
	Total	984	872	1 001	3 653	2 072	2 886	3.71	2.38	2.88
Ont.	1	200	184	217	452	501	227	2.26	2.72	1.05
	2	415	399	382	1 021	802	1 075	2.46	2.01	2.81
	3	198	131	60	697	388	90	3.52	2.97	1.50
	Total	813	714	659	2 170	1 692	1 392	2.67	2.37	2.11
Man.	1	113	74	97	399	208	1 150	3.53	2.79	11.88
	2	30	49	41	117	259	103	3.94	5.33	2.54
	Total	143	123	138	516	467	1 253	3.61	3.79	9.11
Sask.	1	50	43	16	68	138	16	1.37	3.24	1.00
	2	23	37	24	35	331	149	1.50	8.85	6.19
	3	101	78	40	423	417	80	4.20	5.36	2.00
	Total	174	158	80	526	886	245	3.03	5.62	3.06
Alta.	1	107	64	42	349	276	122	3.26	4.34	2.87
	2	119	64	105	260	547	976	2.19	8.59	9.30
	Total	226	127	147	610	823	1 098	2.69	6.46	7.45
BC	1	44	46	72	227	333	372	5.15	7.24	5.17
	2	11	69	46	22	317	145	2.00	4.57	3.15
	Total	55	115	118	250	650	517	4.51	5.63	4.38
Canada	Total	2 399	2 110	2 143	7 727	6 590	7 390	3.22	3.12	3.45

^a n = number of successful hunters sampled.**Table 11**

Estimated number of successful hunters of Sandhill Crane and of birds harvested, by province and zone, 1991–1993

Province	Zone	Successful hunters			Birds harvested			Birds harvested/successful hunter		
		1991 (n=53) ^a	1992 (n=83)	1993 (n=45)	1991	1992	1993	1991	1992	1993
Man.	1	308	299	116	1 528	941	208	4.96	3.15	1.79
	2	89	114	87	242	280	274	2.74	2.45	3.17
	Total	397	413	203	1 771	1 221	482	4.47	2.96	2.38
Sask.	1	124	215	160	533	1 108	671	4.29	5.15	4.19
	2	0	25	13	0	137	63	5.45	5.00	
	3	511	749	367	3 014	3 474	1 699	5.90	4.64	4.63
	Total	636	989	540	3 547	4 720	2 433	5.58	4.77	4.51
Canada	Total	1 032	1 402	742	5 318	5 941	2 915	5.15	4.24	3.93

^a n = number of successful hunters sampled.**Table 12**

Estimated number of successful hunters of Mourning Dove and of birds harvested, by province and zone, 1991–1993

Province	Zone	Successful hunters			Birds harvested			Birds harvested/successful hunter		
		1991 (n=2) ^a	1992 (n=5)	1993 (n=4)	1991	1992	1993	1991	1992	1993
BC	1	12	72	0	199	284	0	17.00	3.95	—
	2	11	25	53	164	756	307	15.00	29.76	5.81
	Total	23	97	53	363	1 040	307	16.03	10.68	5.81
Canada	Total	23	97	53	363	1 040	307	16.03	10.68	5.81

^a n = number of successful hunters sampled.

Table 13

Estimated number of successful hunters of Band-tailed Pigeon and of birds harvested, by province and zone, 1991–1993

Province	Zone	Successful hunters			Birds harvested			Birds harvested/successful hunter		
		1991 (n=8) ^a	1992 (n=11)	1993 (n=7)	1991	1992	1993	1991	1992	1993
BC	1	12	0	10	12	0	20	1.00	—	2.00
	2	86	109	75	447	1 061	379	5.18	9.73	5.05
	Total	98	109	85	459	1 061	399	4.68	9.73	4.69
Canada	Total	98	109	85	459	1 061	399	4.68	9.73	4.69

^a n = number of successful hunters sampled.**Table 14**

Estimated number of successful hunters of Rail and of birds harvested, by province and zone, 1991–1993

Province	Zone	Successful hunters			Birds harvested			Birds harvested/successful hunter		
		1991 (n=10) ^a	1992 (n=10)	1993 (n=10)	1991	1992	1993	1991	1992	1993
Nfld.	1	0	25	26	0	25	52	—	1.00	2.00
	2	0	14	0	0	57	0	—	4.00	—
	Total	0	39	26	0	82	52	—	2.10	2.00
NS	1	0	27	16	0	120	32	—	4.50	2.00
	2	0	0	0	0	0	0	—	—	—
	Total	0	27	16	0	120	32	—	4.50	2.00
Que.	1	55	0	37	101	0	70	1.84	—	1.91
	2	0	0	17	0	0	17	—	—	1.00
	Total	55	0	54	101	0	87	1.84	—	1.62
Ont.	1	0	35	0	0	69	0	—	2.00	—
	2	44	0	47	132	0	88	3.00	—	1.87
	3	4	0	0	4	0	0	1.00	—	—
	Total	48	35	47	136	69	88	2.82	2.00	1.87
Man.	1	26	0	0	108	0	0	4.19	—	—
	2	4	9	28	4	13	28	1.00	1.42	1.00
	Total	29	9	28	111	13	28	3.79	1.42	1.00
Sask.	1	0	0	0	0	0	0	—	—	—
	2	0	0	0	0	0	0	—	—	—
	3	12	0	9	12	0	18	1.00	—	2.00
	Total	12	0	9	12	0	18	1.00	—	2.00
Alta.	1	6	10	0	34	51	0	6.00	5.00	—
	2	0	0	0	0	0	0	—	—	—
	Total	6	10	0	34	51	0	6.00	5.00	—
BC	1	0	11	0	0	134	0	—	12.00	—
	2	0	10	0	0	20	0	—	2.00	—
	Total	0	21	0	0	154	0	—	7.29	—
Canada	Total	150	141	179	393	489	304	2.63	3.48	1.70

^a n = number of successful hunters sampled.

Table 15a

Estimated recreational activity provided by the hunting of migratory game birds other than waterfowl, by province/territory and zone, 1991

Province/territory	Zone	Permit sales	Active hunters	Successful hunters	Birds harvested	Recreation days	S. bag ^a (avg.)	D. bag ^b (avg.)	R. days ^c (avg.)
Nfld.	1	18 733	3 179	1 404	6 385	38 904	2.0	0.2	12.2
	2	2 005	305	98	168	2 186	0.6	0.1	7.2
	Total	20 738	3 484	1 502	6 552	41 089	1.9	0.2	11.8
PEI	Total	4 209	418	79	449	3 053	1.1	0.1	7.3
NS	1	7 310	1 021	357	4 430	6 084	4.3	0.7	6.0
	2	2 794	841	451	2 493	3 942	3.0	0.6	4.7
	Total	10 104	1 861	807	6 923	10 026	3.7	0.7	5.4
NB	1	6 510	969	648	6 395	6 160	6.6	1.0	6.4
	2	3 487	418	289	3 669	4 590	8.8	0.8	11.0
	Total	9 997	1 386	937	10 064	10 750	7.3	0.9	7.8
Que.	1	41 055	7 638	5 373	40 530	42 770	5.3	0.9	5.6
	2	12 684	1 997	1 082	5 731	13 095	2.9	0.4	6.6
	Total	53 739	9 634	6 454	46 261	55 865	4.8	0.8	5.8
Ont.	1	31 273	4 458	2 788	20 836	24 383	4.7	0.9	5.5
	2	58 766	9 155	4 844	34 191	56 075	3.7	0.6	6.1
	3	18 763	2 134	922	5 651	14 651	2.6	0.4	6.9
	Total	108 802	15 747	8 554	60 677	95 108	3.9	0.6	6.0
Man.	1	18 395	2 023	475	2 211	8 467	1.1	0.3	4.2
	2	3 727	583	129	420	2 238	0.7	0.2	3.8
	Total	22 122	2 607	604	2 632	10 705	1.0	0.2	4.1
Sask.	1	8 522	811	174	601	2 975	0.7	0.2	3.7
	2	4 094	312	47	101	1 317	0.3	0.1	4.2
	3	9 798	1 177	651	3 953	6 708	3.4	0.6	5.7
	Total	22 414	2 300	872	4 656	11 000	2.0	0.4	4.8
Alta.	1	12 024	913	210	1 008	5 105	1.1	0.2	5.6
	2	17 375	1 366	206	864	8 892	0.6	0.1	6.5
	Total	29 399	2 279	416	1 872	13 998	0.8	0.1	6.1
BC	1	5 902	408	103	510	1 377	1.3	0.4	3.4
	2	7 699	562	198	1 105	2 327	2.0	0.5	4.1
	Total	13 601	970	301	1 616	3 704	1.7	0.4	3.8
NWT	Total	352	17	4	4	56	0.2	0.1	3.3
Yukon	Total	300	22	0	0	220	0.0	0.0	10.0
Canada	Total	295 777	40 726	20 530	141 705	255 575	3.5	0.6	6.3

^a Mean seasonal bag per active hunter.^b Mean daily bag per active hunter.^c Mean recreation days per active hunter.

Table 15b

Estimated recreational activity provided by the hunting of migratory game birds other than waterfowl, by province/territory and zone, 1992

Province/territory	Zone	Permit sales	Active hunters	Successful hunters	Birds harvested	Recreation days	S. bag ^a (avg.)	D. bag ^b (avg.)	R. days ^c (avg.)
Nfld.	1	18 398	3 344	1 330	5 466	33 325	1.6	0.2	10.0
	2	1 919	318	46	189	3 595	0.6	0.1	11.3
	Total	20 317	3 662	1 376	5 655	36 920	1.5	0.2	10.1
PEI	Total	3 753	589	226	868	4 595	1.5	0.2	7.8
NS	1	6 546	1 491	449	3 355	12 315	2.3	0.3	8.3
	2	2 647	515	256	966	4 585	1.9	0.2	8.9
	Total	9 193	2 006	705	4 321	16 900	2.2	0.3	8.4
NB	1	6 239	1 271	919	6 683	8 398	5.3	0.8	6.6
	2	3 099	769	374	4 377	5 436	5.7	0.8	7.1
	Total	9 338	2 040	1 293	11 061	13 834	5.4	0.8	6.8
Que.	1	37 391	7 097	5 265	33 903	37 378	4.8	0.9	5.3
	2	11 876	1 725	1 203	8 246	13 605	4.8	0.6	7.9
	Total	49 267	8 822	6 468	42 150	50 983	4.8	0.8	5.8
Ont.	1	30 545	4 505	2 823	20 274	26 165	4.5	0.8	5.8
	2	55 523	8 348	4 181	23 522	52 223	2.8	0.5	6.3
	3	17 335	1 704	718	4 360	10 525	2.6	0.4	6.2
	Total	103 403	14 557	7 722	48 156	88 912	3.3	0.5	6.1
Man.	1	16 506	1 667	424	1 682	7 898	1.0	0.2	4.7
	2	3 542	753	183	692	3 544	0.9	0.2	4.7
	Total	20 048	2 420	607	2 375	11 442	1.0	0.2	4.7
Sask.	1	7 867	883	258	1 246	4 098	1.4	0.3	4.6
	2	3 707	414	75	523	1 356	1.3	0.4	3.3
	3	9 046	1 538	847	3 932	5 685	2.6	0.7	3.7
	Total	20 620	2 835	1 179	5 701	11 140	2.0	0.5	3.9
Alta.	1	12 713	1 018	125	891	4 212	0.9	0.2	4.1
	2	15 347	1 087	152	1 153	4 988	1.1	0.2	4.6
	Total	28 060	2 105	277	2 044	9 200	1.0	0.2	4.4
BC	1	5 479	399	151	896	1 335	2.2	0.7	3.3
	2	6 950	502	224	2 740	2 913	5.5	0.9	5.8
	Total	12 429	901	375	3 636	4 248	4.0	0.9	4.7
NWT	Total	348	9	0	0	52	0.0	0.0	5.6
Yukon	Total	256	14	0	0	31	0.0	0.0	2.3
Canada	Total	277 032	39 960	20 229	125 967	248 258	3.2	0.5	6.2

^a Mean seasonal bag per active hunter.^b Mean daily bag per active hunter.^c Mean recreation days per active hunter.

Table 15

Estimated recreational activity provided by the hunting of migratory game birds other than waterfowl, by province/territory and zone, 1993

Province/territory	Zone	Permit sales	Active hunters	Successful hunters	Birds harvested	Recreation days	S. bag ^a (avg.)	D. bag ^b (avg.)	R. days ^c (avg.)
Nfld.	1	18 509	3 323	1 308	6 484	39 278	2.0	0.2	11.8
	2	2 076	117	14	14	615	0.1	0.0	5.2
	Total	20 585	3 440	1 322	6 498	39 893	1.9	0.2	11.6
PEI	Total	3 609	593	216	749	2 481	1.3	0.3	4.2
NS	1	6 451	1 590	650	5 135	15 443	3.2	0.3	9.7
	2	2 537	628	340	927	3 312	1.5	0.3	5.3
	Total	8 988	2 217	990	6 061	18 755	2.7	0.3	8.5
NB	1	6 041	1 536	1 099	7 792	8 900	5.1	0.9	5.8
	2	2 967	752	509	3 961	5 365	5.3	0.7	7.1
	Total	9 008	2 287	1 608	11 753	14 264	5.1	0.8	6.2
Que.	1	36 464	6 782	5 364	40 396	38 282	6.0	1.1	5.6
	2	11 211	1 956	1 340	9 749	12 553	5.0	0.8	6.4
	Total	47 675	8 738	6 703	50 145	50 835	5.7	1.0	5.8
Ont.	1	28 466	4 096	2 289	18 542	27 185	4.5	0.7	6.6
	2	51 036	7 761	3 829	23 837	39 939	3.1	0.6	5.1
	3	16 322	1 490	799	5 111	10 941	3.4	0.5	7.3
	Total	95 824	13 347	6 917	47 490	78 066	3.6	0.6	5.8
Man.	1	16 074	1 363	296	1 665	5 448	1.2	0.3	4.0
	2	3 125	434	176	990	1 344	2.3	0.7	3.1
	Total	19 199	1 797	471	2 655	6 792	1.5	0.4	3.8
Sask.	1	7 778	854	176	717	2 652	0.8	0.3	3.1
	2	3 406	391	78	401	2 173	1.0	0.2	5.6
	3	8 587	933	486	1 868	3 163	2.0	0.6	3.4
	Total	19 771	2 179	740	2 986	7 988	1.4	0.4	3.7
Alta.	1	12 082	816	88	284	3 567	0.3	0.1	4.4
	2	14 705	1 064	215	1 921	5 895	1.8	0.3	5.5
	Total	26 787	1 880	303	2 205	9 462	1.2	0.2	5.0
BC	1	5 139	183	82	404	1 314	2.2	0.3	7.2
	2	6 679	450	182	959	2 215	2.1	0.4	4.9
	Total	11 818	633	264	1 362	3 529	2.2	0.4	5.6
NWT	Total	327	25	0	0	309	0.0	0.0	12.2
Yukon	Total	287	4	0	0	41	0.0	0.0	10.0
Canada	Total	263 878	37 141	19 535	131 904	232 417	3.6	0.6	6.3

^a Mean seasonal bag per active hunter.^b Mean daily bag per active hunter.^c Mean recreation days per active hunter.

Table 16a

Precision^a of the estimates of the number of active waterfowl hunters, and the number of ducks and geese harvested, by province/territory and zone, 1991–1993.

Province/territory	Zone	Year	Active hunters (±%)	Duck harvest (±%)	Goose harvest (±%)
Nfld.	1	1991	10 770 ± 7.07	45 116 ± 15.89	4 021 ± 36.18
		1992	11 204 ± 5.60	51 285 ± 13.42	4 632 ± 28.87
		1993	11 885 ± 5.60	54 753 ± 12.74	6 618 ± 29.25
	2	1991	1 364 ± 16.46	10 315 ± 32.04	1 863 ± 49.61
		1992	1 431 ± 12.52	11 484 ± 27.37	1 805 ± 38.02
		1993	1 406 ± 13.05	11 860 ± 23.74	3 141 ± 33.60
PEI	1	1991	3 848 ± 9.65	28 054 ± 33.92	21 459 ± 38.58
		1992	3 305 ± 8.19	15 055 ± 22.09	11 640 ± 22.52
		1993	3 119 ± 9.81	22 756 ± 29.55	19 168 ± 31.32
NS	1	1991	3 480 ± 9.94	50 305 ± 21.24	7 490 ± 38.57
		1992	4 312 ± 6.58	79 131 ± 17.27	3 392 ± 31.63
		1993	4 406 ± 7.40	74 311 ± 15.52	9 932 ± 30.48
	2	1991	3 315 ± 10.37	26 283 ± 17.98	2 409 ± 40.41
		1992	2 131 ± 11.74	16 577 ± 25.86	954 ± 46.19
		1993	2 517 ± 11.42	20 837 ± 21.53	3 412 ± 40.22
NB	1	1991	4 452 ± 9.84	32 479 ± 16.92	2 326 ± 58.17
		1992	4 620 ± 8.00	33 977 ± 17.65	1 770 ± 56.20
		1993	4 575 ± 8.19	33 437 ± 15.32	901 ± 53.68
	2	1991	2 423 ± 15.68	14 797 ± 25.62	2 903 ± 58.40
		1992	2 396 ± 13.08	18 304 ± 25.13	3 875 ± 51.37
		1993	2 424 ± 11.90	17 652 ± 24.96	6 015 ± 43.98
Que.	1	1991	29 578 ± 3.56	286 902 ± 8.69	80 884 ± 10.73
		1992	26 486 ± 3.35	264 781 ± 7.92	44 240 ± 13.30
		1993	26 958 ± 3.34	300 577 ± 7.94	122 733 ± 10.00
	2	1991	9 242 ± 5.95	70 076 ± 9.85	22 699 ± 20.54
		1992	8 727 ± 5.75	78 193 ± 10.29	12 087 ± 20.68
		1993	9 263 ± 5.61	95 884 ± 11.26	23 926 ± 18.38
Ont.	1	1991	19 145 ± 4.85	188 639 ± 9.88	30 142 ± 16.04
		1992	21 736 ± 4.16	183 916 ± 8.55	34 045 ± 13.41
		1993	19 664 ± 4.56	202 041 ± 8.97	32 947 ± 17.13
	2	1991	42 479 ± 2.88	313 385 ± 6.62	42 319 ± 10.57
		1992	40 507 ± 2.80	258 576 ± 6.17	39 793 ± 11.34
		1993	38 940 ± 2.91	290 158 ± 5.96	39 833 ± 12.82
Man.	3	1991	12 970 ± 4.85	118 321 ± 9.20	14 683 ± 15.81
		1992	11 798 ± 4.58	99 062 ± 9.17	7 637 ± 18.24
		1993	10 692 ± 5.15	89 834 ± 10.68	14 416 ± 19.32
	1	1991	16 187 ± 3.58	79 820 ± 8.08	121 168 ± 6.64
		1992	13 064 ± 3.97	84 014 ± 9.38	65 209 ± 7.99
		1993	13 471 ± 3.73	65 471 ± 9.55	93 336 ± 8.08
Sask.	2	1991	3 652 ± 7.54	27 008 ± 10.21	18 928 ± 13.83
		1992	4 483 ± 7.05	34 687 ± 10.20	22 070 ± 12.88
		1993	4 153 ± 7.52	28 193 ± 11.71	33 553 ± 13.83
	1	1991	7 454 ± 6.08	29 642 ± 13.03	61 881 ± 10.32
		1992	7 122 ± 6.04	33 119 ± 12.95	52 492 ± 8.68
		1993	7 366 ± 5.59	27 507 ± 13.22	58 491 ± 8.10
Alta.	2	1991	3 542 ± 9.06	21 568 ± 19.53	24 035 ± 16.08
		1992	3 550 ± 8.20	17 056 ± 18.51	26 429 ± 13.44
		1993	3 082 ± 9.01	16 241 ± 17.87	20 664 ± 14.75
	3	1991	8 466 ± 5.88	51 670 ± 14.46	61 309 ± 11.23
		1992	7 657 ± 5.67	42 381 ± 10.91	46 970 ± 9.60
		1993	6 796 ± 6.21	32 982 ± 10.64	45 929 ± 9.51
Alta.	1	1991	10 613 ± 4.37	76 409 ± 9.20	56 979 ± 8.09
		1992	10 326 ± 3.97	59 682 ± 7.60	44 710 ± 8.38
		1993	9 163 ± 4.17	54 775 ± 8.21	43 911 ± 8.18
	2	1991	13 008 ± 4.27	89 904 ± 11.10	73 292 ± 9.23
		1992	11 893 ± 4.11	69 452 ± 8.72	65 815 ± 8.22
		1993	11 727 ± 3.82	68 937 ± 8.51	62 949 ± 7.46

(Continued)

Table 16a (cont'd)

Precision^a of the estimates of the number of active waterfowl hunters, and the number of ducks and geese harvested, by province/territory and zone, 1991–1993.

Province/territory	Zone	Year	Active hunters (±%)	Duck harvest (±%)	Goose harvest (±%)
BC	1	1991	4 184 ± 9.32	26 588 ± 14.83	10 211 ± 20.05
		1992	4 100 ± 8.66	24 725 ± 12.97	10 278 ± 16.63
		1993	3 337 ± 10.22	22 435 ± 15.22	7 310 ± 20.37
	2	1991	4 076 ± 7.70	53 818 ± 13.23	10 666 ± 21.16
		1992	4 041 ± 6.66	57 559 ± 13.62	6 174 ± 16.91
		1993	3 610 ± 7.02	50 399 ± 14.59	8 295 ± 20.89
NWT	1	1991	150 ± 28.71	737 ± 41.31	275 ± 46.38
		1992	209 ± 23.45	1 230 ± 46.25	204 ± 55.85
		1993	208 ± 18.30	1 780 ± 43.82	215 ± 69.61
Yukon	1	1991	195 ± 31.33	1 100 ± 53.85	510 ± 81.71
		1992	116 ± 30.25	828 ± 54.26	154 ± 55.87
		1993	179 ± 19.47	1 339 ± 46.59	94 ± 71.37
Canada	Total	1991	214 596 ± 1.26	1 642 933 ± 2.89	672 453 ± 3.27
		1992	205 215 ± 1.17	1 535 071 ± 2.66	506 375 ± 3.03
		1993	198 941 ± 1.21	1 584 161 ± 2.76	657 788 ± 3.28

^a Precision is given as a 90% confidence interval.

Table 17a

Characteristics of the sample of the SCS, by province/territory and zone, 1991

Province/territory	Zone	Permit sales	Sample	Response rate ^a	Estimated response rate from successful hunters ^b	Net coverage of hunting population ^c	Parts of birds received
Nfld.	1	18 733	990	6.5	23.6	0.6	238
	2	2 005	458	4.4	11.2	1.5	79
PEI	1	4 209	993	5.6	8.1	1.5	284
NS	1	7 310	1 903	6.9	18.8	3.8	815
	2	2 794	936	13.6	16.9	3.8	708
NB	1	6 510	716	12.2	24.2	2.0	666
	2	3 487	843	5.3	10.4	1.9	142
Que.	1	41 055	1 968	20.6	39.0	1.4	3 195
	2	12 684	1 206	16.3	31.2	2.1	1 457
Ont.	1	31 273	1 779	13.7	36.4	1.3	1 323
	2	58 766	2 310	24.9	48.4	1.4	3 344
	3	18 763	2 260	10.9	24.9	1.9	1 208
Man.	1	18 395	823	17.0	23.2	0.9	861
	2	3 727	241	16.2	24.9	1.1	250
Sask.	1	8 522	411	17.5	29.4	1.0	493
	2	4 094	317	12.3	23.1	1.1	237
	3	9 798	445	18.9	27.2	1.0	424
Alta.	1	12 024	654	21.9	34.8	1.3	887
	2	17 375	826	18.4	34.6	1.2	933
BC	1	5 902	1 555	9.6	22.3	3.6	880
	2	7 699	1 250	9.4	22.7	2.9	734
NWT	1	352	123	8.1	40.9	6.7	44
Yukon	1	300	67	6.0	17.8	2.0	53
Canada	Total	295 777	23 074	13.6	27.2	1.5	19 255

^a The percentage of selected hunters who submitted a part sample.

^b The percentage of successful hunters who submitted a part sample, obtained using the SCS response rate and the proportion of successful waterfowl hunters in the HQS sample selected from the previous year.

^c The percentage of the total hunting population who submitted a part sample, obtained using number of responses/estimated number of active hunters.

Table 17b

Characteristics of the sample of the SCS, by province/territory and zone, 1992

Province/territory	Zone	Permit sales	Sample	Response rate ^a	Estimated response rate from successful hunters ^b	Net coverage of hunting population ^c	Parts of birds received
Nfld.	1	18 398	884	8.8	26.2	0.7	350
	2	1 919	437	3.9	7.2	1.2	60
PEI	1	3 753	968	5.8	9.3	1.7	289
NS	1	6 546	1 801	6.8	13.9	2.9	721
	2	2 647	918	12.9	25.1	5.5	698
NB	1	6 239	725	15.0	27.6	2.4	895
	2	3 099	797	6.6	13.9	2.2	252
Que.	1	37 391	1 949	21.7	45.7	1.6	3 262
	2	11 876	1 177	18.4	36.3	2.5	1 698
Ont.	1	30 545	1 732	18.4	37.7	1.5	1 739
	2	55 523	2 494	23.9	48.2	1.5	3 770
	3	17 335	2 274	10.9	27.4	2.1	1 584
Man.	1	16 506	1 016	18.4	33.9	1.4	1 174
	2	3 542	263	21.7	23.4	1.3	332
Sask.	1	7 867	463	18.4	29.2	1.2	584
	2	3 707	349	18.3	28.5	1.8	339
	3	9 046	478	21.1	35.8	1.3	695
Alta.	1	12 713	989	18.7	30.5	1.8	1 298
	2	15 347	974	17.1	35.8	1.4	1 082
BC	1	5 479	1 514	11.0	24.3	4.1	982
	2	6 950	1 267	11.2	28.9	3.5	1 245
NWT	1	348	127	8.7	25.9	5.3	56
Yukon	1	256	62	12.9	63.1	6.9	43
Canada	Total	277 032	23 658	14.9	30.2	1.7	23 148

^a The percentage of selected hunters who submitted a part sample.^b The percentage of successful hunters who submitted a part sample, obtained using the SCS response rate and the proportion of successful waterfowl hunters in the HQS sample selected from the previous year.^c The percentage of the total hunting population who submitted a part sample, obtained using number of responses/estimated number of active hunters.

Table 17c

Characteristics of the sample of the SCS, by province/territory and zone, 1993

Province/territory	Zone	Permit sales	Sample	Response rate ^a	Estimated response rate from successful hunters ^b	Net coverage of hunting population ^c	Parts of birds received
Nfld.	1	18 509	290	30.7	78.2	0.7	386
	2	2 076	235	10.2	18.0	1.7	141
PEI	1	3 609	429	16.1	23.3	2.2	397
NS	1	6 451	1 377	11.1	20.4	3.5	963
	2	2 537	981	10.5	14.9	4.1	556
NB	1	6 041	765	14.1	27.2	2.4	757
	2	2 967	541	11.8	20.0	2.6	321
Que.	1	36 464	2 130	20.3	35.8	1.6	4 079
	2	11 211	1 273	19.8	35.1	2.7	1 917
Ont.	1	28 466	1 865	16.1	35.1	1.5	1 896
	2	51 036	2 417	21.4	40.5	1.3	3 000
	3	16 322	2 314	9.4	22.1	2.0	1 200
Man.	1	16 074	885	17.3	26.5	1.1	984
	2	3 125	248	19.8	21.8	1.2	276
Sask.	1	7 778	423	19.6	30.0	1.1	488
	2	3 406	331	18.1	32.1	1.9	323
	3	8 587	416	20.4	39.0	1.3	561
Alta.	1	12 082	900	19.9	37.2	2.0	1 185
	2	14 705	845	19.9	36.5	1.4	1 126
BC	1	5 139	2 050	8.2	20.5	5.1	1 067
	2	6 679	1 336	9.5	23.6	3.5	1 278
NWT	1	327	51	11.8	40.2	2.9	47
Yukon	1	287	44	22.7	66.0	5.6	53
Canada	Total	263 878	22 146	15.4	29.3	1.7	23 001

^a The percentage of selected hunters who submitted a part sample.^b The percentage of successful hunters who submitted a part sample, obtained using the SCS response rate and the proportion of successful waterfowl hunters in the HQS sample selected from the previous year.^c The percentage of the total hunting population who submitted a part sample, obtained using number of responses/estimated number of active hunters.

Table 18

Total waterfowl harvested in Canada, by species, 1990–93

Species	1990		1991		1992		1993	
	Harvest	%	Harvest	%	Harvest	%	Harvest	%
Common Merganser	21 070	1.1	14 167	0.9	20 239	1.3	12 277	0.8
Red-breasted Merganser	9 919	0.5	10 082	0.6	14 292	0.9	15 866	1.0
Hooded Merganser	24 385	1.2	29 464	1.8	26 845	1.7	20 853	1.3
Mallard	734 535	37.0	629 140	38.3	579 811	37.8	536 999	33.9
American Black Duck	243 537	12.3	225 939	13.8	206 514	13.5	203 313	12.8
Gadwall	36 292	1.8	32 543	2.0	34 874	2.3	33 149	2.1
European Wigeon	58	0.0	0	0.0	745	0.0	95	0.0
American Wigeon	47 402	2.4	38 161	2.3	45 645	3.0	45 459	2.9
Eurasian Green-winged Teal	0	0.0	0	0.0	0	0.0	660	0.0
American Green-winged Teal	199 714	10.1	113 064	6.9	99 103	6.5	132 306	8.4
Blue-winged Teal	37 549	1.9	29 047	1.8	22 459	1.5	29 190	1.8
Northern Shoveler	14 640	0.7	13 538	0.8	15 277	1.0	10 078	0.6
Northern Pintail	71 643	3.6	35 223	2.1	33 418	2.2	37 752	2.4
Wood Duck	138 551	7.0	127 330	7.8	108 631	7.1	120 960	7.6
Redhead	16 409	0.8	13 422	0.8	10 814	0.7	11 941	0.8
Canvasback	8 522	0.4	9 301	0.6	4 626	0.3	6 652	0.4
Greater Scaup	27 694	1.4	19 693	1.2	18 191	1.2	25 082	1.6
Lesser Scaup	68 366	3.4	66 832	4.1	53 137	3.5	69 986	4.4
Ring-necked Duck	109 962	5.5	99 955	6.1	89 636	5.8	95 069	6.0
Common Goldeneye	76 294	3.8	47 740	2.9	46 293	3.0	70 000	4.4
Barrow's Goldeneye	1 053	0.1	3 085	0.2	3 649	0.2	3 672	0.2
Bufflehead	27 782	1.4	33 321	2.0	37 817	2.5	35 286	2.2
Oldsquaw	6 021	0.3	4 962	0.3	4 523	0.3	9 156	0.6
Harlequin Duck	233	0.0	178	0.0	0	0.0	72	0.0
Common Eider	26 521	1.3	23 067	1.4	39 175	2.6	26 485	1.7
King Eider	606	0.0	384	0.0	216	0.0	1 109	0.1
Black Scoter	7 032	0.4	7 372	0.4	4 913	0.3	7 896	0.5
White-winged Scoter	10 191	0.5	4 158	0.3	7 578	0.5	8 942	0.6
Surf Scoter	18 502	0.9	7 767	0.5	6 113	0.4	12 561	0.8
Ruddy Duck	7 048	0.0	3 998	0.2	536	0.0	1 298	0.1
Total Ducks	1 985 184	100.0	1 642 933	100.0	1 535 071	100.0	1 584 161	100.0
Lesser Snow Goose (white phase)	65 488	9.0	64 218	9.5	38 244	7.6	49 171	7.5
Lesser Snow Goose (blue phase)	37 950	5.2	37 925	5.6	20 602	4.1	39 387	6.0
Greater Snow Goose	61 138	8.4	48 421	7.2	29 178	5.8	102 184	15.5
Ross' Goose	9 427	1.3	3 638	0.5	4 702	0.9	2 477	0.4
White-fronted Goose	45 102	6.2	43 434	6.5	31 401	6.2	29 060	4.4
Canada Goose	204 081	28.1	182 716	27.2	126 133	24.9	182 429	27.7
Small Canada Goose	71 687	9.9	92 065	13.7	63 977	12.6	68 829	10.5
Large Canada Goose	232 187	31.9	199 175	29.6	190 368	37.6	182 998	27.8
Brant	307	0.0	862	0.1	1 566	0.3	1 039	0.2
Total geese	727 366	100.0	672 453	100.0	506 171	100.0	657 573	100.0
Total waterfowl	2 712 550	—	2 315 386	—	2 041 243	—	2 241 734	—

Table 19
Estimated number of waterfowl harvested in Newfoundland, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Common Merganser	1	4 258	6.4	373	0.8	5 075	9.9	3 711	6.8
	2	317	1.2	0	0	618	5.4	0	0
	Total	4 575	5.0	373	0.7	5 693	9.1	3 711	5.6
Red-breasted Merganser	1	1 877	2.8	913	2.0	3 268	6.4	3 307	6.0
	2	2 277	9.0	2 880	27.9	1 441	12.5	2 138	18.0
	Total	4 154	4.5	3 793	6.8	4 709	7.5	5 445	8.2
Hooded Merganser	1	0	0.0	0	0	80	0.2	0	0
	2	493	1.9	1 405	13.6	342	3.0	0	0
	Total	493	0.5	1 405	2.5	422	0.7	0	0
Mallard	1	519	0.8	522	1.2	283	0.6	886	1.6
	2	643	2.5	427	4.1	580	5.1	139	1.2
	Total	1 162	1.3	949	1.7	864	1.4	1 025	1.5
American Black Duck	1	16 982	25.7	12 801	28.4	12 330	24.0	11 017	20.1
	2	5 681	22.3	2 272	22.0	1 157	10.1	2 116	17.8
	Total	22 663	24.8	15 073	27.2	13 487	21.5	13 133	19.7
Gadwall	1	91	0.1	140	0.3	0	0	0	0
	Total	91	0.1	140	0.3	0	0	0	0
European Wigeon	1	0	0.0	0	0	283	0.6	0	0
	Total	0	0.0	0	0	283	0.5	0	0
American Wigeon	1	91	0.1	627	1.4	0	0	104	0.2
	2	0	0.0	0	0	0	0	553	4.7
	Total	91	0.1	627	1.1	0	0	657	1.0
American Green-winged Teal	1	9 392	14.2	6 458	14.3	4 418	8.6	6 697	12.2
	2	1 216	4.8	871	8.4	649	5.6	487	4.1
	Total	10 608	11.6	7 329	13.2	5 067	8.1	7 183	10.8
Blue-winged Teal	1	346	0.5	0	0	0	0	1 036	1.9
	2	0	0.0	0	0	0	0	41	0.3
	Total	346	0.4	0	0	0	0	1 077	1.6
Northern Pintail	1	2 449	3.7	236	0.5	0	0	872	1.6
	2	1 665	6.5	115	1.1	0	0	218	1.8
	Total	4 114	4.5	351	0.6	0	0	1 090	1.6
Wood Duck	1	0	0.0	0	0	0	0	138	0.3
	Total	0	0.0	0	0	0	0	138	0.2
Greater Scaup	1	2 984	4.5	0	0	1 360	2.7	5 267	9.6
	2	700	2.8	0	0	0	0	692	5.8
	Total	3 683	4.0	0	0	1 360	2.2	5 959	8.9
Lesser Scaup	1	887	1.3	0	0	742	1.4	2 037	3.7
	2	870	3.4	272	2.6	262	2.3	194	1.6
	Total	1 756	1.9	272	0.5	1 003	1.6	2 231	3.3
Ring-necked Duck	1	8 889	13.4	6 314	14.0	4 195	8.2	5 009	9.1
	2	0	0.0	0	0	0	0	122	1.0
	Total	8 889	9.7	6 314	11.4	4 195	6.7	5 131	7.7
Common Goldeneye	1	7 794	11.8	6 021	13.3	4 303	8.4	2 531	4.6
	2	6 602	26.0	387	3.7	774	6.7	1 653	13.9
	Total	14 396	15.7	6 408	11.6	5 077	8.1	4 184	6.3
Barrow's Goldeneye	1	0	0.0	411	0.9	567	1.1	0	0
	2	104	0.4	119	1.2	171	1.5	55	0.5
	Total	104	0.1	530	1.0	738	1.2	55	0.1
Bufflehead	1	0	0.0	627	1.4	0	0	0	0
	Total	0	0.0	627	1.1	0	0	0	0
Total sport ducks		77 125	84.3	44 191	79.7	42 897	68.3	51 020	76.6
Oldsquaw	1	904	1.4	0	0	103	0.2	2 704	4.9
	Total	904	1.0	0	0	103	0.2	2 704	4.1

(Continued)

Table 19 (cont'd)

Estimated number of waterfowl harvested in Newfoundland, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Harlequin Duck	1	233	0.4	0	0.0	0	0.0	72	0.1
	Total	233	0.3	0	0.0	0	0.0	72	0.1
Common Eider	1	6 817	10.3	8 515	18.9	12 711	24.8	7 994	14.6
	2	1 493	5.9	607	5.9	4 932	42.9	1 731	14.6
	Total	8 310	9.1	9 122	16.5	17 643	28.1	9 724	14.6
King Eider	1	224	0.3	384	0.9	216	0.4	424	0.8
	2	0	0	0	0.0	0	0.0	263	2.2
	Total	224	0.2	384	0.7	216	0.3	688	1.0
Black Scoter	1	91	0.1	627	1.4	598	1.2	165	0.3
	2	268	1.1	157	1.5	372	3.2	406	3.4
	Total	359	0.4	784	1.4	970	1.5	571	0.9
White-winged Scoter	1	930	1.4	0	0.0	283	0.6	544	1.0
	Total	930	1.0	0	0.0	283	0.5	544	0.8
Surf Scoter	1	346	0.5	146	0.3	469	0.9	238	0.4
	2	3 111	12.2	804	7.8	186	1.6	1 052	8.9
	Total	3 457	3.8	950	1.7	655	1.0	1 290	1.9
Total sea ducks		14 417	15.7	11 239	20.3	19 871	31.7	15 593	23.4
Total ducks		91 542	100.0	55 431	100.0	62 769	100.0	66 613	100.0
Greater Snow Goose	1	287	8.3	0	0.0	0	0.0	0	0.0
	Total	287	4.1	0	0.0	0	0.0	0	0.0
White-fronted Goose	1	287	8.3	0	0.0	0	0.0	0	0.0
	Total	287	4.1	0	0.0	0	0.0	0	0.0
Canada Goose	1	2 873	83.3	3 360	83.5	4 144	89.5	6 618	100.0
	2	3 596	100.0	1 863	100.0	1 805	100.0	3 141	100.0
	Total	6 379	91.7	5 223	88.8	5 949	92.4	9 759	100.0
Large Canada Goose	1	0	0	662	16.5	487	10.5	0	0.0
	Total	0	0	662	11.2	487	7.6	0	0.0
Total geese		6 954	100.0	5 885	100.0	6 437	100.0	9 759	100.0
Total waterfowl		98 496		61 315		69 206		76 372	

^a Zonal percentages were calculated as (species/total ducks or total geese in zone) × 100; total percentages were calculated as (species/total ducks or total geese in province) × 100.

Table 20

Estimated number of waterfowl harvested in Prince Edward Island, 1990–1993

Species	1990		1991		1992		1993	
	Harvest	% ^a						
Common Merganser	0	0.0	0	0.0	113	0.8	0	0.0
Red-breasted Merganser	92	0.5	0	0.0	0	0.0	177	0.8
Hooded Merganser	35	0.2	571	2.0	83	0.6	0	0.0
Mallard	1 028	5.1	1 106	3.9	199	1.3	1 178	5.2
American Black Duck	11 369	56.5	14 499	51.7	8 043	53.4	10 741	47.2
Gadwall	217	1.1	206	0.7	0	0.0	0	0.0
American Wigeon	236	1.2	888	3.2	789	5.2	269	1.2
American Green-winged Teal	4 076	20.3	6 137	21.9	3 787	25.2	6 011	26.4
Blue-winged Teal	1 237	6.2	1 861	6.6	250	1.7	778	3.4
Northern Pintail	450	2.2	542	1.9	910	6.0	1 336	5.9
Wood Duck	0	0.0	459	1.6	0	0.0	76	0.3
Greater Scaup	79	0.4	0	0.0	0	0.0	176	0.8
Ring-necked Duck	1 255	6.2	1 578	5.6	516	3.4	1 035	4.5
Common Goldeneye	0	0.0	206	0.7	213	1.4	506	2.2
Barrow's Goldeneye	0	0.0	0	0.0	150	1.0	0	0.0
Total sport ducks	20 110	100.0	28 054	100.0	15 055	100.0	22 283	97.9
White-winged Scoter	0	0.0	0	0.0	0	0.0	379	1.7
Surf Scoter	0	0.0	0	0.0	0	0.0	95	0.4
Total sea ducks	0	0.0	0	0.0	0	0.0	474	2.1
Total ducks	20 110	100.0	28 054	100.0	15 055	100.0	22 756	100.0
Canada Goose	25 177	100.0	21 459	100.0	11 640	100.0	19 168	100.0
Total geese	25 177	100.0	21 459	100.0	11 640	100.0	19 168	100.0
Total waterfowl	45 287		49 512		26 695		41 924	

^a Percentages were calculated as (species/total ducks or total geese in province) × 100.

Table 21
Estimated number of waterfowl harvested in Nova Scotia, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Common Merganser	1	479	0.6	805	1.6	550	0.7	777	1.0
	2	671	3.0	27	0.1	263	1.6	555	2.7
	Total	1 150	1.1	832	1.1	813	0.8	1 332	1.4
Red-breasted Merganser	1	1 176	1.4	1 190	2.4	4 947	6.3	4 968	6.7
	2	424	1.9	173	0.7	518	3.1	224	1.1
	Total	1 599	1.5	1 363	1.8	5 465	5.7	5 192	5.5
Hooded Merganser	1	0	0.0	511	1.0	109	0.1	605	0.8
	2	0	0.0	53	0.2	111	0.7	170	0.8
	Total	0	0.0	564	0.7	219	0.2	775	0.8
Mallard	1	2 830	3.5	2 083	4.1	5 382	6.8	4 176	5.6
	2	727	3.3	1 629	6.2	1 025	6.2	853	4.1
	Total	3 557	3.4	3 712	4.8	6 408	6.7	5 029	5.3
American Black Duck	1	26 503	32.4	22 263	44.3	30 795	38.9	23 846	32.1
	2	11 509	51.8	17 032	64.8	10 284	62.0	12 452	59.8
	Total	38 012	36.5	39 295	51.3	41 079	42.9	36 298	38.1
Gadwall	1	131	0.2	0	0.0	0	0.0	55	0.1
	2	17	0.1	0	0.0	0	0.0	112	0.5
	Total	147	0.1	0	0.0	0	0.0	166	0.2
European Wigeon	1	37	0.0	0	0.0	0	0.0	0	0.0
	2	21	0.1	0	0.0	0	0.0	0	0.0
	Total	58	0.1	0	0.0	0	0.0	0	0.0
American Wigeon	1	111	0.1	168	0.3	108	0.1	49	0.1
	2	212	1.0	266	1.0	330	2.0	210	1.0
	Total	324	0.3	434	0.6	438	0.5	259	0.3
American Green-winged Teal	1	14 725	18.0	4 516	9.0	7 404	9.4	8 439	11.4
	2	4 545	20.4	3 355	12.8	2 219	13.4	3 626	17.4
	Total	19 270	18.5	7 871	10.3	9 622	10.1	12 065	12.7
Blue-winged Teal	1	74	0.1	240	0.5	216	0.3	245	0.3
	2	142	0.6	241	0.9	98	0.6	45	0.2
	Total	216	0.2	481	0.6	314	0.3	290	0.3
Northern Shoveler	1	75	0.1	0	0.0	0	0.0	0	0.0
	2	21	0.1	0	0.0	16	0.1	0	0.0
	Total	96	0.1	0	0.0	16	0.0	0	0.0
Northern Pintail	1	304	0.4	624	1.2	54	0.1	682	0.9
	2	349	1.6	277	1.1	25	0.2	170	0.8
	Total	653	0.6	901	1.2	79	0.1	851	0.9
Wood Duck	1	338	0.4	0	0.0	1 674	2.1	792	1.1
	2	221	1.0	350	1.3	189	1.1	187	0.9
	Total	559	0.5	350	0.5	1 863	1.9	979	1.0
Greater Scaup	1	1 351	1.7	1 024	2.0	553	0.7	586	0.8
	2	258	1.2	633	2.4	252	1.5	575	2.8
	Total	1 609	1.5	1 656	2.2	805	0.8	1 160	1.2
Lesser Scaup	1	811	1.0	270	0.5	0	0.0	379	0.5
	2	240	1.1	211	0.8	171	1.0	22	0.1
	Total	1 051	1.0	481	0.6	171	0.2	401	0.4
Ring-necked Duck	1	1 816	2.2	1 569	3.1	999	1.3	2 651	3.6
	2	946	4.3	657	2.5	468	2.8	537	2.6
	Total	2 762	2.7	2 227	2.9	1 467	1.5	3 188	3.4
Common Goldeneye	1	2 949	3.6	1 436	2.9	1 940	2.5	2 960	4.0
	2	1 408	6.3	341	1.3	485	2.9	966	4.6
	Total	4 357	4.2	1 777	2.3	2 425	2.5	3 925	4.1
Barrow's Goldeneye	1	0	0.0	0	0.0	0	0.0	214	0.3
	Total	0	0.0	0	0.0	0	0.0	214	0.2
Bufflehead	1	2 067	2.5	570	1.1	1 853	2.3	912	1.2

(Continued)

Table 21 (cont'd)

Estimated number of waterfowl harvested in Nova Scotia, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Ruddy Duck	2	286	1.3	106	0.4	16	0.1	98	0.5
	Total	2 354	2.3	677	0.9	1 869	2.0	1 010	1.1
	1	0	0.0	0	0.0	0	0.0	0	0.0
	2	0	0.0	33	0.1	0	0.0	0	0.0
Total sport ducks	Total	0	0.0	33	0.0	0	0.0	0	0.0
		77 774	74.8	62 655	81.8	73 054	76.3	73 137	76.9
Oldsquaw	1	1 760	2.2	610	1.2	1 120	1.4	2 395	3.2
	2	0	0.0	304	1.2	63	0.4	0	0.0
	Total	1 760	1.7	914	1.2	1 183	1.2	2 395	2.5
Common Eider	1	13 275	16.2	8 525	16.9	16 663	21.1	11 874	16.0
	2	115	0.5	378	1.4	0	0.0	0	0.0
	Total	13 389	12.9	8 903	11.6	16 663	17.4	11 874	12.5
King Eider	1	236	0.3	0	0.0	0	0.0	421	0.6
	Total	236	0.2	0	0.0	0	0.0	421	0.4
Black Scoter	1	1 091	1.3	2 304	4.6	1 770	2.2	1 166	1.6
	2	28	0.1	27	0.1	0	0.0	0	0.0
	Total	1 118	1.1	2 331	3.0	1 770	1.8	1 166	1.2
White-winged Scoter	1	2 202	2.7	395	0.8	1 638	2.1	1 238	1.7
	2	0	0.0	70	0.3	0	0.0	0	0.0
	Total	2 202	2.1	465	0.6	1 638	1.7	1 238	1.3
Surf Scoter	1	7 462	9.1	1 199	2.4	1 355	1.7	4 881	6.6
	2	95	0.4	120	0.5	44	0.3	36	0.2
	Total	7 557	7.3	1 319	1.7	1 400	1.5	4 917	5.2
Total sea ducks		26 263	25.2	13 933	18.2	22 653	23.7	22 012	23.1
Total ducks		104 038	100.0	76 588	100.0	95 707	100.0	95 149	100.0
Lesser Snow Goose (white phase)	1	0	0.0	0	0.0	58	1.7	0	0.0
	Total	0	0.0	0	0.0	58	1.3	0	0.0
Greater Snow Goose	2	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0
White-fronted Goose	1	0	0.0	49	0.7	0	0.0	49	0.5
	Total	0	0.0	49	0.5	0	0.0	49	0.4
Canada Goose	1	3 551	100.0	7 441	99.3	3 334	98.3	9 883	99.5
	2	3 019	100.0	2 409	100.0	954	100.0	3 412	100.0
	Total	6 569	100.0	9 851	99.5	4 288	98.7	13 295	99.6
Total geese		6 569	100.0	9 900	100.0	4 346	100.0	13 344	100.0
Total waterfowl		110 607		86 488		100 053		108 493	

^a Zonal percentages were calculated as (species/total ducks or total geese in zone) × 100; total percentages were calculated as (species/total ducks or total geese in province) × 100.

Table 22

Estimated number of waterfowl harvested in New Brunswick, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Common Merganser	1	295	0.5	568	1.7	395	1.2	137	0.4
	2	127	0.9	0	0.0	164	0.9	0	0.0
	Total	422	0.6	568	1.2	559	1.1	137	0.3
Red-breasted Merganser	1	0	0.0	0	0.0	47	0.1	0	0.0
	2	151	1.1	0	0.0	388	2.1	196	1.1
	Total	151	0.2	0	0.0	435	0.8	196	0.4
Hooded Merganser	1	45	0.1	162	0.5	254	0.7	252	0.8
	2	0	0.0	522	3.5	47	0.3	103	0.6
	Total	45	0.1	684	1.4	301	0.6	355	0.7
Mallard	1	2 685	4.7	3 620	11.1	3 783	11.1	2 590	7.7
	2	498	3.7	962	6.5	1 460	8.0	1 165	6.6
	Total	3 183	4.5	4 583	9.7	5 242	10.0	3 754	7.3
American Black Duck	1	18 920	33.2	9 611	29.6	13 092	38.5	8 969	26.8
	2	7 823	57.9	10 511	71.0	9 998	54.6	10 622	60.2
	Total	26 743	37.9	20 122	42.6	23 091	44.2	19 591	38.3
Gadwall	1	89	0.2	54	0.2	237	0.7	210	0.6
	Total	89	0.1	54	0.1	237	0.5	210	0.4
European Wigeon	1	0	0.0	0	0.0	0	0.0	0	0.0
	2	0	0.0	0	0.0	47	0.3	0	0.0
	Total	0	0.0	0	0.0	47	0.1	0	0.0
American Wigeon	1	1 435	2.5	1 110	3.4	1 745	5.1	1 197	3.6
	2	0	0.0	50	0.3	694	3.8	587	3.3
	Total	1 435	2.0	1 161	2.5	2 439	4.7	1 784	3.5
American Green-winged Teal	1	10 658	18.7	4 488	13.8	4 137	12.2	6 572	19.7
	2	1 663	12.3	1 457	9.8	2 493	13.6	1 685	9.5
	Total	12 321	17.5	5 945	12.6	6 630	12.7	8 257	16.2
Blue-winged Teal	1	3 505	6.1	1 115	3.4	1 135	3.3	2 392	7.2
	2	401	3.0	202	1.4	329	1.8	538	3.0
	Total	3 906	5.5	1 317	2.8	1 464	2.8	2 930	5.7
Northern Shoveler	1	105	0.2	54	0.2	408	1.2	49	0.1
	2	0	0.0	0	0.0	0	0.0	0	0.0
	Total	105	0.1	54	0.1	408	0.8	49	0.1
Northern Pintail	1	963	1.7	270	0.8	274	0.8	313	0.9
	2	744	5.5	574	3.9	190	1.0	393	2.2
	Total	1 707	2.4	844	1.8	463	0.9	706	1.4
Wood Duck	1	3 194	5.6	2 912	9.0	1 862	5.5	3 747	11.2
	2	155	1.1	151	1.0	443	2.4	110	0.6
	Total	3 349	4.7	3 063	6.5	2 305	4.4	3 857	7.5
Greater Scaup	1	328	0.6	267	0.8	615	1.8	259	0.8
	2	92	0.7	0	0.0	283	1.5	103	0.6
	Total	420	0.6	267	0.6	898	1.7	363	0.7
Lesser Scaup	1	1 154	2.0	455	1.4	116	0.3	81	0.2
	2	542	4.0	0	0.0	0	0.0	609	3.5
	Total	1 697	2.4	455	1.0	116	0.2	690	1.4
Ring-necked Duck	1	7 711	13.5	3 659	11.3	2 886	8.5	2 904	8.7
	2	738	5.5	156	1.1	565	3.1	152	0.9
	Total	8 449	12.0	3 815	8.1	3 451	6.6	3 055	6.0
Common Goldeneye	1	3 438	6.0	1 666	5.1	1 769	5.2	1 779	5.3
	2	150	1.1	106	0.7	625	3.4	939	5.3
	Total	3 588	5.1	1 771	3.7	2 393	4.6	2 718	5.3
Barrow's Goldeneye	1	210	0.4	63	0.2	45	0.1	0	0.0
	2	0	0.0	0	0.0	0	0.0	135	0.8
	Total	210	0.3	63	0.1	45	0.1	135	0.3
Bufflehead	1	519	0.9	233	0.7	37	0.1	128	0.4

(Continued)

Table 22 (cont'd)

Estimated number of waterfowl harvested in New Brunswick, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Ruddy Duck	2	57	0.4	106	0.7	141	0.8	86	0.5
	Total	576	0.8	338	0.7	178	0.3	214	0.4
	1	0	0.0	54	0.2	0	0.0	0	0.0
Total sport ducks	Total	0	0.0	54	0.1	0	0.0	0	0.0
		68 395	97.0	45 158	95.5	50 702	97.0	49 002	95.9
Oldsquaw	1	0	0.0	304	0.9	0	0.0	68	0.2
	2	0	0.0	0	0.0	440	2.4	0	0.0
	Total	0	0.0	304	0.6	440	0.8	68	0.1
Common Eider	1	1 249	2.2	1 152	3.5	1 140	3.4	1 635	4.9
	2	114	0.8	0	0.0	0	0.0	0	0.0
	Total	1 363	1.9	1 152	2.4	1 140	2.2	1 635	3.2
Black Scoter	1	0	0.0	94	0.3	0	0.0	0	0.0
	2	204	1.5	0	0.0	0	0.0	0	0.0
	Total	204	0.3	94	0.2	0	0.0	0	0.0
White-winged Scoter	1	142	0.2	90	0.3	0	0.0	123	0.4
	Total	142	0.2	90	0.2	0	0.0	123	0.2
Surf Scoter	1	385	0.7	477	1.5	0	0.0	34	0.1
	2	51	0.4	0	0.0	0	0.0	227	1.3
	Total	436	0.6	477	1.0	0	0.0	261	0.5
Total sea ducks		2 145	3.0	2 118	4.5	1 580	3.0	2 087	4.1
Total ducks		70 539	100.0	47 276	100.0	52 282	100.0	51 089	100.0
Lesser Snow Goose (white phase)	1	269	6.5	0	0.0	0	0.0	0	0.0
	Total	269	3.5	0	0.0	0	0.0	0	0.0
Lesser Snow Goose (blue phase)	1	179	4.3	0	0.0	0	0.0	0	0.0
	Total	179	2.3	0	0.0	0	0.0	0	0.0
Greater Snow Goose	1	0	0.0	0	0.0	295	16.7	0	0.0
	Total	0	0.0	0	0.0	295	5.2	0	0.0
Canada Goose	1	2 872	69.6	2 326	100.0	1 475	83.3	901	100.0
	2	3 605	100.0	2 903	100.0	3 875	100.0	6 015	100.0
	Total	6 477	83.8	5 229	100.0	5 351	94.8	6 916	100.0
Large Canada Goose	1	808	19.6	0	0.0	0	0.0	0	0.0
	Total	808	10.4	0	0.0	0	0.0	0	0.0
Total geese		7 733	100.0	5 229	100.0	5 646	100.0	6 916	100.0
Total waterfowl		78 273		52 505		57 927		58 005	

^a Zonal percentages were calculated as (species/total ducks or total geese in zone) × 100; total percentages were calculated as (species/total ducks or total geese in province) × 100.

Table 23

Estimated number of waterfowl harvested in Quebec, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Common Merganser	1	5 582	1.6	8 331	2.9	5 818	2.2	3 326	1.1
	2	5 708	5.8	1 615	2.3	1 840	2.4	1 926	2.0
	Total	11 290	2.5	9 946	2.8	7 657	2.2	5 252	1.3
Red-breasted Merganser	1	2 438	0.7	2 835	1.0	1 659	0.6	1 635	0.5
	2	796	0.8	1 217	1.7	702	0.9	2 389	2.5
	Total	3 235	0.7	4 052	1.1	2 361	0.7	4 025	1.0
Hooded Merganser	1	6 460	1.8	8 811	3.1	7 591	2.9	7 094	2.4
	2	1 212	1.2	1 475	2.1	2 686	3.4	1 764	1.8
	Total	7 672	1.7	10 286	2.9	10 277	3.0	8 858	2.2
Mallard	1	75 702	21.1	73 919	25.8	77 416	29.2	86 687	28.8
	2	10 822	11.0	10 564	15.1	10 408	13.3	13 345	13.9
	Total	86 525	19.0	84 483	23.7	87 824	25.6	100 032	25.2
American Black Duck	1	68 841	19.2	61 221	21.3	56 701	21.4	56 083	18.7
	2	36 436	37.2	23 999	34.2	25 433	32.5	31 786	33.2
	Total	105 277	23.1	85 220	23.9	82 135	23.9	87 869	22.2
Gadwall	1	3 538	1.0	6 110	2.1	5 867	2.2	4 967	1.7
	2	41	0.0	164	0.2	422	0.5	167	0.2
	Total	3 579	0.8	6 274	1.8	6 290	1.8	5 134	1.3
European Wigeon	1	0	0.0	0	0.0	88	0.0	0	0.0
	2	0	0.0	0	0.0	0	0.0	51	0.1
	Total	0	0.0	0	0.0	88	0.0	51	0.0
American Wigeon	1	4 623	1.3	1 888	0.7	4 750	1.8	5 700	1.9
	2	798	0.8	848	1.2	1 623	2.1	1 636	1.7
	Total	5 422	1.2	2 735	0.8	6 373	1.9	7 336	1.9
American Green-winged Teal	1	72 490	20.2	31 468	11.0	22 854	8.6	31 015	10.3
	2	16 865	17.2	8 357	11.9	6 776	8.7	10 935	11.4
	Total	89 355	19.6	39 825	11.2	29 630	8.6	41 950	10.6
Blue-winged Teal	1	2 713	0.8	3 347	1.2	2 006	0.8	4 303	1.4
	2	1 447	1.5	978	1.4	1 175	1.5	1 412	1.5
	Total	4 160	0.9	4 325	1.2	3 181	0.9	5 715	1.4
Northern Shoveler	1	1 750	0.5	2 607	0.9	2 762	1.0	2 329	0.8
	2	124	0.1	0	0.0	310	0.4	86	0.1
	Total	1 874	0.4	2 607	0.7	3 072	0.9	2 415	0.6
Northern Pintail	1	14 865	4.1	8 392	2.9	5 471	2.1	9 840	3.3
	2	4 703	4.8	965	1.4	750	1.0	1 561	1.6
	Total	19 658	4.3	9 357	2.6	6 222	1.8	11 401	2.9
Wood Duck	1	21 947	6.1	19 439	6.8	21 174	8.0	24 640	8.2
	2	1 455	1.5	1 552	2.2	1 601	2.0	3 003	3.1
	Total	23 402	5.1	20 990	5.9	22 775	6.6	27 642	7.0
Redhead	1	631	0.2	356	0.1	1 051	0.4	636	0.2
	2	0	0.0	0	0.0	53	0.1	88	0.1
	Total	631	0.1	356	0.1	1 104	0.3	724	0.2
Canvasback	1	0	0.0	198	0.1	134	0.1	0	0.0
	2	0	0.0	0	0.0	0	0.0	88	0.1
	Total	0	0.0	198	0.1	134	0.0	88	0.0
Greater Scaup	1	8 855	2.5	5 675	2.0	4 392	1.7	7 917	2.6
	2	429	0.4	639	0.9	438	0.6	672	0.7
	Total	9 284	2.0	6 314	1.8	4 830	1.4	8 590	2.2
Lesser Scaup	1	20 097	5.6	16 096	5.6	11 451	4.3	14 627	4.9
	2	3 950	4.0	2 306	3.3	3 798	4.9	6 285	6.6
	Total	24 047	5.3	18 402	5.2	15 249	4.4	20 912	5.3
Ring-necked Duck	1	15 666	4.4	20 057	7.0	11 108	4.2	14 123	4.7
	2	3 855	3.9	4 566	6.5	4 509	5.8	4 608	4.8
	Total	19 521	4.3	24 623	6.9	15 616	4.6	18 731	4.7

(Continued)

Table 23 (cont'd)

Estimated number of waterfowl harvested in Quebec, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Common Goldeneye	1	15 463	4.3	7 609	2.7	8 923	3.4	11 804	3.9
	2	2 203	2.2	2 070	3.0	3 413	4.4	3 915	4.1
	Total	17 666	3.9	9 679	2.7	12 336	3.6	15 718	4.0
Barrow's Goldeneye	1	149	0.0	0	0.0	247	0.1	511	0.2
	2	232	0.2	589	0.8	1 156	1.5	659	0.7
	Total	381	0.1	589	0.2	1 403	0.4	1 170	0.3
Bufflehead	1	3 738	1.0	1 399	0.5	5 318	2.0	1 360	0.5
	2	74	0.1	900	1.3	3 044	3.9	2 296	2.4
	Total	3 811	1.8	2 298	0.6	8 362	2.4	3 656	0.9
Ruddy Duck	1	0	0.0	0	0.0	149	0.1	0	0.0
	Total	0	0.0	0	0.0	149	0.0	0	0.0
Total sport ducks		436 699	95.7	342 558	96.0	327 068	95.4	377 267	95.2
Oldsquaw	1	1 413	0.4	1 045	0.4	1 991	0.8	1 704	0.6
	2	348	0.4	2 088	3.0	249	0.3	1 048	1.1
	Total	1 761	0.4	3 133	0.9	2 240	0.7	2 752	0.7
Harlequin Duck	1	0	0.0	178	0.1	0	0.0	0	0.0
	Total	0	0.0	178	0.0	0	0.0	0	0.0
Common Eider	1	444	0.1	356	0.1	476	0.2	206	0.1
	2	3 015	3.1	3 171	4.5	3 018	3.9	3 046	3.2
	Total	3 458	0.8	3 527	1.0	3 494	1.0	3 252	0.8
Black Scoter	1	3 314	0.9	2 993	1.0	780	0.3	4 226	1.4
	2	582	0.6	262	0.4	698	0.9	657	0.7
	Total	3 896	0.9	3 254	0.9	1 478	0.4	4 883	1.2
White-winged Scoter	1	4 786	1.3	1 590	0.6	3 315	1.3	3 538	1.2
	2	533	0.5	915	1.3	1 899	2.4	879	0.9
	Total	5 319	1.2	2 506	0.7	5 214	1.5	4 416	1.1
Surf Scoter	1	2 857	0.8	984	0.3	1 289	0.5	2 307	0.8
	2	2 337	2.4	838	1.2	2 191	2.8	1 583	1.7
	Total	5 195	1.1	1 822	0.5	3 480	1.0	3 891	1.0
Total sea ducks		19 630	4.3	14 420	4.0	15 906	4.6	19 193	4.8
Total ducks		456 329	100.0	356 978	100.0	342 974	100.0	396 461	100.0
Lesser Snow Goose (white phase)	1	2 138	2.3	1 090	1.3	92	0.2	5 931	4.8
	2	155	0.7	124	0.5	0	0.0	895	3.7
	Total	2 293	1.9	1 214	1.2	92	0.2	6 825	4.7
Lesser Snow Goose (blue phase)	1	0	0.0	1 307	1.6	360	0.8	660	0.5
	2	0	0.0	124	0.5	140	1.2	155	0.6
	Total	0	0.0	1 431	1.4	499	0.9	815	0.6
Greater Snow Goose	1	55 238	58.8	44 187	54.6	26 154	59.1	88 832	72.4
	2	5 409	22.8	3 510	15.5	830	6.9	8 702	36.4
	Total	60 647	51.5	47 696	46.0	26 983	47.9	97 534	66.5
White-fronted Goose	2	0	0.0	81	0.4	0	0.0	0	0.0
	Total	0	0.0	81	0.1	0	0.0	0	0.0
Canada Goose	1	34 598	36.8	33 445	41.3	7 755	17.5	26 435	21.5
	2	17 640	74.5	18 455	81.3	5 598	46.3	14 174	59.2
	Total	52 238	44.4	51 900	50.1	13 353	23.7	40 609	27.7
Small Canada Goose	1	726	0.8	394	0.5	360	0.8	0	0.0
	2	252	1.1	244	1.1	0	0.0	0	0.0
	Total	977	0.8	638	0.6	360	0.6	0	0.0
Large Canada Goose	1	1 297	1.4	299	0.4	8 042	18.2	0	0.0
	2	227	1.0	0	0.0	5 433	44.9	0	0.0
	Total	1 525	1.3	299	0.3	13 475	23.9	0	0.0
Brant	1	0	0.0	161	0.2	1 478	3.3	876	0.7

Continued

Table 23 (cont'd)

Estimated number of waterfowl harvested in Quebec, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
	2	0	0.0	162	0.7	88	0.7	0	0.0
	Total	0	0.0	323	0.3	1 566	2.8	876	0.6
Total geese		117 679	100.0	103 583	100.0	56 327	100.0	146 659	100.0
Total waterfowl		574 008		460 561		399 301		543 120	

(a) Zonal percentages were calculated as (species/total ducks or total geese in zone) × 100; total percentages were calculated as (species/total ducks or total geese in province) × 100.

Table 24
Estimated number of waterfowl harvested in Ontario, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Common Merganser	1	592	0.3	411	0.2	428	0.2	516	0.3
	2	2 009	0.6	1 537	0.5	4 651	1.8	1 207	0.4
	3	657	0.5	432	0.4	324	0.3	0	0.0
	Total	3 258	0.5	2 379	0.4	5 404	1.0	1 723	0.3
Red-breasted Merganser	1	0	0.0	348	0.2	763	0.4	195	0.1
	2	480	0.1	364	0.1	560	0.2	572	0.2
	3	208	0.2	123	0.1	0	0.0	0	0.0
	Total	689	0.1	834	0.1	1 323	0.2	767	0.1
Hooded Merganser	1	1 599	0.8	1 548	0.8	1 528	0.8	740	0.4
	2	10 954	3.2	10 000	3.2	10 279	4.0	8 345	2.9
	3	3 360	2.6	3 778	3.2	2 682	2.7	981	1.1
	Total	15 912	2.3	15 326	2.5	14 489	2.7	10 066	1.7
Mallard	1	97 065	45.7	84 816	45.0	81 344	44.2	80 527	39.9
	2	116 852	34.0	107 957	34.4	86 784	33.6	94 474	32.6
	3	47 350	37.0	36 253	30.6	28 519	28.8	27 646	30.8
	Total	261 267	38.2	229 027	36.9	196 646	36.3	202 647	34.8
American Black Duck	1	12 330	5.8	14 765	7.8	11 415	6.2	9 192	4.5
	2	14 286	4.2	17 465	5.6	17 017	6.6	17 594	6.1
	3	11 741	9.2	16 440	13.9	9 796	9.9	7 770	8.6
	Total	38 357	5.6	48 670	7.8	38 228	7.1	34 557	5.9
Gadwall	1	1 480	0.7	1 801	1.0	1 352	0.7	1 806	0.9
	2	428	0.1	1 686	0.5	1 649	0.6	1 118	0.4
	3	451	0.4	53	0.0	191	0.2	232	0.3
	Total	2 359	0.3	3 540	0.6	3 192	0.6	3 156	0.5
European Wigeon	2	0	0.0	0	0.0	56	0.0	0	0.0
	Total	0	0.0	0	0.0	56	0.0	0	0.0
American Wigeon	1	10 492	4.9	7 375	3.9	5 555	3.0	6 108	3.0
	2	3 241	0.9	3 527	1.1	5 384	2.1	2 317	0.8
	3	1 963	1.5	1 343	1.1	1 931	1.9	730	0.8
	Total	15 696	2.3	12 245	2.0	12 870	2.4	9 155	1.6
American Green-winged Teal	1	16 468	7.8	13 096	6.9	11 827	6.4	14 957	7.4
	2	17 028	4.9	14 692	4.7	10 841	4.2	17 139	5.9
	3	6 415	5.0	3 909	3.3	4 345	4.4	5 621	6.3
	Total	39 910	5.8	31 697	5.1	27 013	5.0	37 717	6.5
Blue-winged Teal	1	4 575	2.2	3 439	1.8	2 959	1.6	4 408	2.2
	2	10 506	3.1	6 314	2.0	5 331	2.1	5 904	2.0
	3	3 887	3.0	2 615	2.2	1 988	2.0	1 252	1.4
	Total	18 968	2.8	12 368	2.0	10 278	1.9	11 564	2.0
Northern Shoveler	1	580	0.3	330	0.2	566	0.3	721	0.4
	2	881	0.3	648	0.2	443	0.2	311	0.1
	3	69	0.1	0	0.0	0	0.0	84	0.1
	Total	1 531	0.2	977	0.2	1 010	0.2	1 115	0.2
Northern Pintail	1	4 687	2.2	2 028	1.1	2 768	1.5	3 057	1.5
	2	2 385	0.7	1 210	0.4	1 188	0.5	1 229	0.4
	3	1 159	0.9	1 504	1.3	905	0.9	870	1.0
	Total	8 230	1.2	4 742	0.8	4 861	0.9	5 157	0.9
Wood Duck	1	23 943	11.3	20 952	11.1	19 016	10.3	24 448	12.1
	2	76 966	22.4	69 235	22.1	53 898	20.8	53 208	18.3
	3	9 185	7.2	10 365	8.8	6 840	6.9	9 646	10.7
	Total	110 095	16.1	100 552	16.2	79 754	14.7	87 301	15.0
Redhead	1	4 416	2.1	4 493	2.4	4 384	2.4	4 565	2.3
	2	978	0.3	388	0.1	1 516	0.6	1 197	0.4
	3	271	0.2	1 374	1.2	332	0.3	163	0.2
	Total	5 665	0.8	6 256	1.0	6 232	1.2	5 926	1.0
Canvasback	1	4 763	2.2	3 997	2.1	3 194	1.7	1 251	0.6
	2	706	0.2	0	0.0	0	0.0	202	0.1

(Continued)

Table 24 (cont'd)

Estimated number of waterfowl harvested in Ontario, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
	3	433	0.3	209	0.2	0	0.0	149	0.2
	Total	5 901	0.9	4 206	0.7	3 194	0.6	1 601	0.3
Greater Scaup	1	4 372	2.1	2 965	1.6	4 370	2.4	4 913	2.4
	2	6 843	2.0	4 841	1.5	3 110	1.2	2 948	1.0
	3	744	0.6	2 009	1.7	2 433	2.5	790	0.9
	Total	11 958	1.7	9 816	1.6	9 913	1.8	8 651	1.5
Lesser Scaup	1	8 308	3.9	7 795	4.1	11 446	6.2	18 981	9.4
	2	10 172	3.0	15 169	4.8	6 303	2.4	12 368	4.3
	3	7 292	5.7	8 240	7.0	6 838	6.9	3 824	4.3
	Total	25 772	3.8	31 203	5.0	24 587	4.5	35 174	6.0
Ring-necked Duck	1	9 673	4.6	5 358	2.8	7 570	4.1	7 789	3.9
	2	31 311	9.1	27 213	8.7	27 943	10.8	29 566	10.2
	3	21 374	16.7	19 730	16.7	19 102	19.3	17 561	19.5
	Total	62 357	9.1	52 301	8.4	54 614	10.1	54 916	9.4
Common Goldeneye	1	927	0.4	1 474	0.8	2 944	1.6	3 788	1.9
	2	24 882	7.2	18 592	5.9	12 444	4.8	25 909	8.9
	3	7 175	5.6	5 274	4.5	6 580	6.6	8 907	9.9
	Total	32 983	4.8	25 340	4.1	21 968	4.1	38 604	6.6
Barrow's Goldeneye	2	0	0.0	315	0.1	152	0.1	465	0.2
	3	0	0.0	53	0.0	73	0.1	180	0.2
	Total	0	0.0	369	0.1	225	0.0	644	0.1
Bufflehead	1	5 070	2.4	8 145	4.3	9 790	5.3	11 669	5.8
	2	8 910	2.6	9 365	3.0	7 842	3.0	11 481	4.0
	3	3 896	3.0	2 766	2.3	5 630	5.7	2 784	3.1
	Total	17 876	2.6	20 276	3.3	23 262	4.3	25 934	4.5
Ruddy Duck	1	425	0.2	3 298	1.7	0	0.0	836	0.4
	2	137	0.0	0	0.0	186	0.1	0	0.0
	3	0	0.0	209	0.2	0	0.0	0	0.0
	Total	562	0.1	3 506	0.6	186	0.0	836	0.1
Total sport ducks		679 348	99.3	615 631	99.2	539 305	99.6	577 211	99.2
Oldsquaw	1	0	0.0	205	0.1	0	0.0	739	0.4
	2	1 464	0.4	405	0.1	399	0.2	221	0.1
	3	131	0.1	0	0.0	159	0.2	245	0.3
	Total	1 596	0.2	611	0.1	558	0.1	1 206	0.2
King Eider	1	105	0.0	0	0.0	0	0.0	0	0.0
	Total	105	0.0	0	0.0	0	0.0	0	0.0
Black Scoter	1	238	0.1	0	0.0	192	0.1	391	0.2
	2	1 007	0.3	734	0.2	326	0.1	266	0.1
	3	209	0.2	174	0.1	152	0.2	0	0.0
	Total	1 454	0.2	908	0.1	670	0.1	657	0.1
White-winged Scoter	1	0	0.0	0	0.0	185	0.1	230	0.1
	2	805	0.2	561	0.2	90	0.0	1 539	0.5
	3	0	0.0	535	0.5	166	0.2	275	0.3
	Total	805	0.1	1 097	0.2	442	0.1	2 043	0.4
Surf Scoter	1	171	0.1	0	0.0	318	0.2	213	0.1
	2	839	0.2	1 167	0.4	184	0.1	578	0.2
	3	143	0.1	932	0.8	77	0.1	125	0.1
	Total	1 152	0.2	2 099	0.3	579	0.1	916	0.2
Total sea ducks		5 112	0.7	4 715	0.8	2 249	0.4	4 822	0.8
Total ducks		684 460	100.0	620 345	100.0	541 554	100.0	582 033	100.0
Lesser Snow Goose (white phase)	1	217	0.5	168	0.6	0	0.0	175	0.5
	2	417	1.0	204	0.5	0	0.0	0	0.0
	3	1 185	7.1	1 357	9.2	350	4.6	472	3.3
	Total	1 818	1.8	1 729	2.0	350	0.4	648	0.7

(Continued)

Table 24 (cont'd)

Estimated number of waterfowl harvested in Ontario, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
		0	0.0	0	0.0	0	0.0	0	0.0
		0	0.0	0	0.0	0	0.0	0	0.0
		0	0.0	0	0.0	0	0.0	0	0.0
Lesser Snow Goose (blue phase)	1	97	0.2	186	0.6	0	0.0	127	0.4
	2	0	0.0	316	0.7	0	0.0	0	0.0
	3	826	5.0	568	3.9	240	3.1	1 769	12.3
	Total	923	0.9	1 070	1.2	240	0.3	1 896	2.2
Greater Snow Goose	1	0	0.0	0	0.0	776	2.3	42	0.1
	2	0	0.0	0	0.0	0	0.0	0	0.0
	3	0	0.0	0	0.0	150	2.0	387	2.7
	Total	0	0.0	0	0.0	925	1.1	430	0.5
Ross's Goose	2	0	0.0	0	0.0	0	0.0	0	0.0
	3	0	0.0	0	0.0	80	1.0	0	0.0
	Total	0	0.0	0	0.0	80	0.1	0	0.0
White-fronted Goose	2	0	0.0	0	0.0	0	0.0	171	0.4
	Total	0	0.0	0	0.0	0	0.0	171	0.2
Canada Goose	1	42 212	98.5	28 896	95.9	33 269	97.7	32 534	98.7
	2	40 154	97.7	41 493	98.0	39 260	98.7	39 499	99.2
	3	14 667	87.9	12 552	85.5	6 658	87.2	11 609	80.5
	Total	97 032	96.5	82 942	95.2	79 187	97.2	83 643	95.9
Small Canada Goose	1	0	0.0	0	0.0	0	0.0	69	0.2
	2	331	0.8	101	0.2	152	0.4	0	0.0
	3	0	0.0	206	1.4	0	0.0	0	0.0
	Total	331	0.3	307	0.4	152	0.2	69	0.1
Large Canada Goose	1	97	0.2	556	1.8	0	0.0	0	0.0
	2	95	0.2	0	0.0	381	1.0	0	0.0
	3	0	0.0	0	0.0	160	2.1	178	1.2
	Total	191	0.2	556	0.6	541	0.7	178	0.2
Brant	1	219	0.5	335	1.1	0	0.0	0	0.0
	2	88	0.2	204	0.5	0	0.0	162	0.4
	Total	307	0.3	539	0.6	0	0.0	162	0.2
Total geese		100 603	100.0	87 143	100.0	81 474	100.0	87 196	100.0
Total waterfowl		785 063		707 489		623 028		669 229	

^a Zonal percentages were calculated as (species/total ducks or total geese in zone) × 100; total percentages were calculated as (species/total ducks or total geese in province) × 100.

Table 25

Estimated number of waterfowl harvested in Manitoba, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Hooded Merganser	1	0	0.0	527	0.7	969	1.2	594	0.9
	2	0	0.0	102	0.4	0	0.0	0	0.0
	Total	0	0.0	629	0.6	969	0.8	594	0.6
Mallard	1	37 212	50.6	45 344	56.8	48 760	58.0	28 660	43.8
	2	23 635	61.7	15 589	57.7	17 232	49.7	14 309	50.8
	Total	60 847	54.4	60 933	57.0	65 992	55.6	42 970	45.9
American Black Duck	1	0	0.0	1 189	1.5	138	0.2	0	0.0
	2	106	0.3	0	0.0	0	0.0	1 125	4.0
	Total	106	0.1	1 189	1.1	138	0.1	1 125	1.2
Gadwall	1	3 035	4.1	3 078	3.9	3 509	4.2	6 545	10.0
	2	1 538	4.0	1 169	4.3	3 216	9.3	0	0.0
	Total	4 573	4.1	4 247	4.0	6 724	5.7	6 545	7.0
European Wigeon	1	0	0.0	0	0.0	270	0.3	0	0.0
	Total	0	0.0	0	0.0	270	0.2	0	0.0
American Wigeon	1	1 920	2.6	1 338	1.7	2 862	3.4	2 104	3.2
	2	80	0.2	1 156	4.3	922	2.7	1 624	5.8
	Total	2 000	1.8	2 494	2.3	3 784	3.2	3 728	4.0
American Green-winged Teal	1	3 669	5.0	2 790	3.5	2 594	3.1	2 330	3.6
	2	5 934	15.5	739	2.7	2 505	7.2	1 175	4.2
	Total	9 603	8.6	3 529	3.3	5 099	4.3	3 506	3.7
Blue-winged Teal	1	836	1.1	800	1.0	2 139	2.5	1 623	2.5
	2	759	2.0	0	0.0	1 600	4.6	951	3.4
	Total	5 595	1.4	800	0.7	3 739	3.1	2 573	2.7
Northern Shoveler	1	2 833	3.9	1 601	2.0	2 313	2.8	1 224	1.9
	2	923	2.4	830	3.1	506	1.5	0	0.0
	Total	3 756	3.4	2 431	2.3	2 818	2.4	1 224	1.3
Northern Pintail	1	3 555	4.8	3 804	4.8	4 228	5.0	3 927	6.0
	2	1 724	4.5	603	2.2	1 008	2.9	1 245	4.4
	Total	5 279	4.7	4 407	4.1	5 236	4.4	5 172	5.5
Wood Duck	1	582	0.8	821	1.0	549	0.7	655	1.0
	2	301	0.8	0	0.0	399	1.2	0	0.0
	Total	884	0.8	821	0.8	949	0.8	655	0.7
Redhead	1	4 072	5.5	1 114	1.4	813	1.0	2 525	3.9
	2	807	2.1	274	1.0	1 223	3.5	339	1.2
	Total	4 879	4.4	1 388	1.3	2 036	1.7	2 864	3.1
Canvasback	1	929	1.3	274	0.3	788	0.9	554	0.8
	2	463	1.2	199	0.7	0	0.0	1 951	6.9
	Total	1 392	1.2	472	0.4	788	0.7	2 505	2.7
Greater Scaup	1	383	0.5	626	0.8	298	0.4	0	0.0
	2	0	0.0	0	0.0	0	0.0	163	0.6
	Total	383	0.3	626	0.6	298	0.3	163	0.2
Lesser Scaup	1	6 369	8.7	7 937	9.9	6 996	8.3	5 092	7.8
	2	223	0.6	1 289	4.8	1 231	3.5	1 136	4.0
	Total	6 592	5.9	9 226	8.6	8 228	6.9	6 228	6.6
Ring-necked Duck	1	4 154	5.7	2 546	3.2	5 270	6.3	5 792	8.8
	2	748	2.0	4 275	15.8	3 518	10.1	739	2.6
	Total	4 902	4.4	6 821	6.4	8 788	7.4	6 531	7.0
Common Goldeneye	1	1 755	2.4	1 139	1.4	276	0.3	1 594	2.4
	2	222	0.6	0	0.0	315	0.9	1 237	4.4
	Total	1 977	1.8	1 139	1.1	591	0.5	2 832	3.0
Bufflehead	1	1 507	2.1	3 943	4.9	1 244	1.5	1 864	2.8
	2	63	0.2	783	2.9	1 011	2.9	294	1.0
	Total	1 570	1.4	4 726	4.4	2 255	1.9	2 159	2.3
Ruddy Duck	1	0	0.0	0	0.0	0	0.0	386	0.6

(Continued)

Table 25 (cont'd)

Estimated number of waterfowl harvested in Manitoba, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Total sport ducks	Total	0	0.0	0	0.0	0	0.0	386	0.4
		110 338	98.7	105 878	99.1	118 701	100.0	91 759	98.0
Common Eider	1	0	0.0	363	0.5	0	0.0	0	0.0
	Total	0	0.0	363	0.3	0	0.0	0	0.0
Black Scoter	2	0	0.0	0	0.0	0	0.0	619	2.2
	Total	0	0.0	0	0.0	0	0.0	619	0.7
White-winged Scoter	2	792	2.1	0	0.0	0	0.0	163	0.6
	Total	792	0.7	0	0.0	0	0.0	163	0.2
Surf Scoter	1	705	1.0	587	0.7	0	0.0	0	0.0
	2	0	0.0	0	0.0	0	0.0	1 125	4.0
	Total	705	0.6	587	0.5	0	0.0	1 125	1.2
Total sea ducks		1 497	1.3	950	0.9	0	0	1 906	2.0
Total ducks		111 835	100.0	106 827	100.0	118 701	100.0	93 664	100.0
Lesser Snow Goose (white phase)	1	17 688	18.5	31 455	26.0	8 676	13.3	16 582	17.8
	2	5 212	16.2	4 162	22.0	2 551	11.6	2 890	8.6
	Total	22 899	17.9	35 616	25.4	11 227	12.9	19 472	15.3
Lesser Snow Goose (blue phase)	1	25 659	26.8	27 538	22.7	12 168	18.7	27 239	29.2
	2	5 468	17.0	3 099	16.4	3 383	15.3	4 590	13.7
	Total	31 127	24.3	30 637	21.9	15 551	17.8	31 829	25.1
Greater Snow Goose	1	0	0.0	724	0.6	249	0.4	1 938	2.1
	2	0	0.0	0	0.0	510	2.3	0	0.0
	Total	0	0.0	724	0.5	760	0.9	1 938	1.5
Ross' Goose	1	0	0.0	394	0.3	912	1.4	69	0.1
	2	105	0.3	0	0.0	731	3.3	0	0.0
	Total	105	0.1	394	0.3	1 644	1.9	69	0.1
White-fronted Goose	1	0	0.0	404	0.3	494	0.8	0	0.0
	2	105	0.3	137	0.7	134	0.6	0	0.0
	Total	105	0.1	541	0.4	628	0.7	0	0.0
Canada Goose	1	5 146	5.4	285	0.2	2 110	3.2	2 208	2.4
	2	105	0.3	379	2.0	1 699	7.7	3 475	10.4
	Total	5 251	4.1	664	0.5	3 809	4.4	5 683	4.5
Small Canada Goose	1	8 118	8.5	19 455	16.1	4 540	7.0	9 761	10.5
	2	2 336	7.3	2 181	11.5	704	3.2	1 271	3.8
	Total	10 455	8.2	21 635	15.4	5 244	6.0	11 032	8.7
Large Canada Goose	1	39 071	40.8	40 913	33.8	36 060	55.3	35 539	38.1
	2	18 869	58.6	8 971	47.4	12 357	56.0	21 327	63.6
	Total	57 941	45.3	49 883	35.6	48 418	55.5	56 867	44.8
Total geese		127 882	100.0	140 097	100.0	87 279	100.0	126 889	100.0
Total waterfowl		239 717		246 924		205 980		220 553	

^a Zonal percentages were calculated as (species/total ducks or total geese in zone) × 100; total percentages were calculated as (species/total ducks or total geese in province) × 100.

Table 26

Estimated number of waterfowl harvested in Saskatchewan, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Hooded Merganser	2	0	0.0	0	0.0	0	0.0	21	0.1
	3	183	0.4	0	0.0	0	0.0	0	0.0
	Total	183	0.2	0	0.0	0	0.0	21	0.0
Mallard	1	25 984	74.3	17 487	59.0	23 463	70.8	14 952	54.4
	2	21 734	63.3	16 116	74.7	13 510	79.2	12 546	77.2
	3	31 776	68.5	36 447	70.5	31 792	75.0	22 853	69.3
	Total	79 494	68.7	70 050	68.1	68 765	74.3	50 351	65.6
American Black Duck	1	0	0.0	312	1.1	0	0.0	0	0.0
	3	621	1.3	0	0.0	239	0.6	0	0.0
	Total	621	0.5	312	0.3	239	0.3	0	0.0
Gadwall	1	2 363	6.8	2 429	8.2	3 794	11.5	4 753	17.3
	2	3 602	10.5	1 091	5.1	1 637	9.6	208	1.3
	3	4 622	10.0	2 163	4.2	3 429	8.1	3 086	9.4
	Total	10 587	9.2	5 682	5.5	8 861	9.6	8 047	10.5
American Wigeon	1	1 489	4.3	213	0.7	2 217	6.7	2 172	7.9
	2	1 112	3.2	252	1.2	0	0.0	374	2.3
	3	1 424	3.1	748	1.4	986	2.3	1 655	5.0
	Total	4 025	3.5	1 213	1.2	3 202	3.5	4 202	5.5
Eurasian Green-winged Teal	1	0	0.0	0	0.0	0	0.0	418	1.5
	Total	0	0.0	0	0.0	0	0.0	418	0.5
American Green-winged Teal	1	556	1.6	1 041	3.5	478	1.4	2 019	7.3
	2	510	1.5	655	3.0	178	1.0	208	1.3
	3	342	0.7	522	1.0	904	2.1	844	2.6
	Total	1 407	1.2	2 218	2.2	1 559	1.7	3 071	4.0
Blue-winged Teal	1	0	0.0	629	2.1	436	1.3	581	2.1
	2	1 251	3.6	1 068	4.9	177	1.0	416	2.6
	3	495	1.1	2 723	5.3	381	0.9	0	0.0
	Total	1 746	1.5	4 420	4.3	994	1.1	998	1.3
Northern Shoveler	1	1 009	2.9	0	0.0	1 760	5.3	0	0.0
	2	0	0.0	89	0.4	1 076	6.3	0	0.0
	3	1 043	2.2	1 432	2.8	1 050	2.5	440	1.3
	Total	2 052	1.8	1 520	1.5	3 886	4.2	440	0.6
Northern Pintail	1	3 147	9.0	1 243	4.2	49	0.1	1 938	7.0
	2	2 496	7.3	163	0.8	178	1.0	801	4.9
	3	4 444	9.6	2 617	5.1	1 899	4.5	514	1.6
	Total	10 087	8.7	4 024	3.9	2 126	2.3	3 253	4.2
Wood Duck	3	0	0.0	0	0.0	697	1.6	0	0.0
	Total	0	0.0	0	0.0	697	0.8	0	0.0
Redhead	1	0	0.0	1 689	5.7	537	1.6	0	0.0
	2	294	0.9	0	0.0	0	0.0	0	0.0
	3	723	1.6	2 269	4.4	175	0.4	300	0.9
	Total	1 017	0.9	3 958	3.8	712	0.8	300	0.4
Canvasback	1	201	0.6	752	2.5	151	0.5	0	0.0
	2	153	0.4	0	0.0	0	0.0	0	0.0
	3	154	0.3	1 721	3.3	131	0.3	1 862	5.6
	Total	508	0.4	2 472	2.4	282	0.3	1 862	2.4
Greater Scaup	1	0	0.0	474	1.6	0	0.0	0	0.0
	Total	0	0.0	474	0.5	0	0.0	0	0.0
Lesser Scaup	1	201	0.6	3 372	11.4	130	0.4	673	2.4
	2	2 143	6.2	492	2.3	299	1.8	577	3.6
	3	213	0.5	0	0.0	349	0.8	946	2.9
	Total	2 557	2.2	3 864	3.8	778	0.8	2 196	2.9
Ring-necked Duck	1	0	0.0	0	0.0	105	0.3	0	0.0
	2	449	1.3	0	0.0	0	0.0	1 089	6.7
	3	0	0.0	514	1.0	349	0.8	182	0.6
	Total	449	0.4	514	0.5	454	0.5	1 271	1.7

(Continued)

Table 26 (cont'd)

Estimated number of waterfowl harvested in Saskatchewan, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Common Goldeneye	3	335	0.7	0	0.0	0	0.0	0	0.0
	Total	335	0.3	0	0.0	0	0.0	0	0.0
Bufflehead	2	558	1.7	1 643	7.6	0	0.0	0	0.0
	3	0	0.0	0	0.0	0	0.0	300	0.9
	Total	558	0.5	1 643	1.6	0	0.0	300	0.4
Total sport ducks		115 657	100.0	102 365	99.5	92 556	100.0	76 730	100.0
Surf Scoter	3	0	0.0	514	1.0	0	0.0	0	0.0
	Total	0	0.0	514	0.5	0	0.0	0	0.0
Total sea ducks		0	0.0	514	0.5	0	0.0	0	0.0
Total ducks		115 657	100.0	102 879	100.0	92 556	100.0	76 730	100.0
Lesser Snow Goose (white phase)	1	12 401	17.6	5 235	8.5	7 248	13.8	6 671	11.4
	2	2 733	8.3	2 094	8.7	1 657	6.3	246	1.2
	3	12 029	20.3	10 265	16.7	8 043	17.1	8 421	18.3
	Total	27 163	16.7	17 594	12.0	16 949	13.5	15 338	12.3
Lesser Snow Goose (blue phase)	1	902	1.3	399	0.6	443	0.8	450	0.8
	2	0	0.0	338	1.4	335	1.3	0	0.0
	3	4 476	7.6	3 893	6.4	3 514	7.5	3 886	8.5
	Total	5 378	3.3	4 630	3.1	4 292	3.4	4 336	3.5
Greater Snow Goose	3	0	0.0	0	0.0	215	0.5	2 282	5.0
	Total	0	0.0	0	0.0	215	0.2	2 282	1.8
Ross' Goose	1	4 094	5.8	1 564	2.5	846	1.6	1 280	2.2
	2	186	0.6	349	1.5	48	0.2	99	0.5
	3	1 807	3.1	53	0.1	436	0.9	103	0.2
	Total	6 087	3.8	1 965	1.3	1 329	1.1	1 483	1.2
White-fronted Goose	1	16 462	23.4	21 645	35.0	14 481	27.6	15 247	26.1
	2	5 494	16.8	4 518	18.8	3 637	13.8	1 986	9.6
	3	5 420	9.2	5 227	8.5	3 981	8.5	4 589	10.0
	Total	27 376	16.9	31 390	21.3	22 099	17.6	21 823	17.4
Canada Goose	1	1 349	1.9	0	0.0	330	0.6	350	0.6
	2	60	0.2	0	0.0	180	0.7	184	0.9
	3	439	0.7	915	1.5	285	0.6	433	0.9
	Total	1 848	1.1	915	0.6	795	0.6	966	0.8
Small Canada Goose	1	17 450	24.8	22 912	37.0	19 868	37.8	20 485	35.0
	2	2 449	7.5	5 632	23.4	2 260	8.6	3 310	16.0
	3	8 961	15.2	9 077	14.8	7 918	16.9	11 858	25.8
	Total	28 861	17.8	37 621	25.6	30 045	23.9	35 653	28.5
Large Canada Goose	1	17 744	25.2	10 126	16.4	9 278	17.7	14 008	23.9
	2	21 839	66.7	11 105	46.2	18 312	69.3	14 839	71.8
	3	25 981	44.0	31 878	52.0	22 578	48.1	14 356	31.3
	Total	65 564	40.4	53 110	36.1	50 167	39.8	43 202	34.5
Total geese		162 278	100.0	147 225	100.0	125 892	100.0	125 083	100.0
Total waterfowl		277 936		250 104		218 447		201 813	

^a Zonal percentages were calculated as (species/total ducks or total geese in zone) × 100; total percentages were calculated as (species/total ducks or total geese in province) × 100.

Table 27

Estimated number of waterfowl harvested in Alberta, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Common Merganser	2	375	0.3	0	0.0	0	0.0	0	0.0
	Total	375	0.2	0	0.0	0	0.0	0	0.0
Red-breasted Merganser	1	0	0.0	0	0.0	0	0.0	59	0.1
	Total	0	0.0	0	0.0	0	0.0	59	0.0
Hooded Merganser	1	0	0.0	0	0.0	0	0.0	100	0.2
	Total	0	0.0	0	0.0	0	0.0	100	0.1
Mallard	1	59 353	72.4	57 173	74.8	42 836	71.8	34 625	63.2
	2	116 568	77.7	64 932	72.2	51 959	74.8	48 469	70.3
	Total	175 921	75.9	122 105	73.4	94 796	73.4	83 094	67.2
American Black Duck	1	0	0.0	360	0.5	73	0.1	0	0.0
	2	286	0.2	969	1.1	0	0.0	0	0.0
	Total	286	0.1	1 330	0.8	73	0.1	0	0.0
Gadwall	1	4 818	5.9	3 935	5.1	3 637	6.1	5 669	10.4
	2	7 794	5.2	6 587	7.3	3 193	4.6	3 481	5.1
	Total	12 612	5.4	10 522	6.3	6 830	5.3	9 151	7.4
American Wigeon	1	2 809	3.4	2 319	3.0	2 384	4.0	3 335	6.1
	2	2 768	1.8	1 461	1.6	3 269	4.7	3 924	5.7
	Total	5 577	2.4	3 781	2.3	5 653	4.4	7 260	5.9
Eurasian Green-winged Teal	1	0	0.0	0	0.0	0	0.0	59	0.1
	Total	0	0.0	0	0.0	0	0.0	59	0.0
American Green-winged Teal	1	2 459	3.0	1 113	1.5	2 001	3.4	1 759	3.2
	2	2 482	1.7	2 883	3.2	3 030	4.4	3 470	5.0
	Total	4 941	2.1	3 995	2.4	5 031	3.9	5 229	4.2
Blue-winged Teal	1	2 291	2.8	1 226	1.6	1 171	2.0	1 606	2.9
	2	1 416	0.9	1 283	1.4	571	0.8	1 218	1.8
	Total	3 707	1.6	2 509	1.5	1 742	1.3	2 824	2.3
Northern Shoveler	1	1 667	2.0	2 099	2.7	1 366	2.3	2 015	3.7
	2	2 350	1.6	2 525	2.8	1 089	1.6	1 965	2.9
	Total	4 017	1.7	4 624	2.8	2 455	1.9	3 981	3.2
Northern Pintail	1	5 382	6.6	2 001	2.6	3 146	5.3	2 178	4.0
	2	8 101	5.4	3 688	4.1	3 768	5.4	1 847	2.7
	Total	13 483	5.8	5 689	3.4	6 915	5.4	4 024	3.3
Wood Duck	1	0	0.0	332	0.4	0	0.0	0	0.0
	2	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	332	0.2	0	0.0	0	0.0
Redhead	1	1 891	2.3	528	0.7	527	0.9	1 133	2.1
	2	2 124	1.4	771	0.9	114	0.2	764	1.1
	Total	4 016	1.7	1 299	0.8	641	0.5	1 898	1.5
Canvasback	1	195	0.2	967	1.3	194	0.3	570	1.0
	2	502	0.3	888	1.0	0	0.0	0	0.0
	Total	698	0.3	1 855	1.1	194	0.2	570	0.5
Greater Scaup	1	195	0.2	0	0.0	0	0.0	0	0.0
	2	0	0.0	387	0.4	0	0.0	0	0.0
	Total	195	0.1	387	0.2	0	0.0	0	0.0
Lesser Scaup	1	195	0.2	1 565	2.0	1 310	2.2	625	1.1
	2	3 693	2.5	899	1.0	1 010	1.5	1 003	1.5
	Total	3 889	1.7	2 464	1.5	2 320	1.8	1 628	1.3
Ring-necked Duck	1	76	0.1	423	0.6	139	0.2	182	0.3
	2	1 077	0.7	589	0.7	0	0.0	512	0.7
	Total	1 153	0.5	1 012	0.6	139	0.1	694	0.6
Common Goldeneye	1	109	0.1	887	1.2	427	0.7	599	1.1
	2	395	0.3	302	0.3	600	0.9	541	0.8
	Total	503	0.2	1 189	0.7	1 027	0.8	1 140	0.9
Barrow's Goldeneye	1	0	0.0	740	1.0	0	0.0	0	0.0

(Continued)

Table 27 (cont'd)

Estimated number of waterfowl harvested in Alberta, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Bufflehead	2	0	0.0	0	0.0	362	0.5	617	0.9
	Total	0	0.0	740	0.4	362	0.3	617	0.5
	1	467	0.6	593	0.8	268	0.4	203	0.4
Ruddy Duck	2	0	0.0	1 483	1.6	252	0.4	1 126	1.6
	Total	467	0.2	2 076	1.2	520	0.4	1 330	1.1
	1	76	0.1	148	0.2	201	0.3	56	0.1
Total sport ducks	2	0	0.0	256	0.3	0	0.0	0	0.0
	Total	76	0.0	404	0.2	201	0.2	56	0.0
		231 914	100.0	166 313	100.0	128 898	99.8	123 712	100.0
Common Eider	2	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	235	0.3	0	0.0
		0	0.0	0	0.0	235	0.2	0	0.0
Total sea ducks		0	0.0	0	0.0	235	0.2	0	0.0
Total ducks		231 914	100.0	166 313	100.0	129 134	100.0	123 712	100.0
Lesser Snow Goose (white phase)	1	3 234	5.3	4 203	7.4	2 985	6.7	2 864	6.5
	2	6 928	7.2	1 241	1.7	6 138	9.3	1 928	3.1
	Total	10 162	6.5	5 445	4.2	9 122	8.3	4 793	4.5
Lesser Snow Goose (blue phase)	1	127	0.2	72	0.1	0	0.0	367	0.8
	2	215	0.2	84	0.1	0	0.0	144	0.2
	Total	343	0.2	156	0.1	0	0.0	511	0.5
Greater Snow Goose	1	204	0.3	0	0.0	0	0.0	0	0.0
	Total	204	0.1	0	0.0	0	0.0	0	0.0
Ross' Goose	1	508	0.8	462	0.8	339	0.8	771	1.8
	2	2 726	2.9	817	1.1	1 311	2.0	155	0.2
	Total	3 235	2.1	1 279	1.0	1 650	1.5	926	0.9
White-fronted Goose	1	5 891	9.7	5 201	9.1	3 837	8.6	5 016	11.4
	2	11 226	11.7	6 140	8.4	4 813	7.3	2 000	3.2
	Total	17 118	10.9	11 341	8.7	8 650	7.8	7 017	6.6
Canada Goose	1	1 530	2.5	670	1.2	445	1.0	321	0.7
	2	1 155	1.2	3 307	4.5	411	0.6	1 814	2.9
	Total	2 685	1.7	3 978	3.1	855	0.8	2 135	2.0
Small Canada Goose	1	9 065	14.9	10 378	18.2	9 650	21.6	6 415	14.6
	2	19 256	20.1	17 746	24.2	16 379	24.9	13 401	21.3
	Total	28 321	18.1	28 124	21.6	26 029	23.6	19 815	18.5
Large Canada Goose	1	40 266	66.2	35 993	63.2	27 455	61.4	28 156	64.1
	2	54 126	56.6	43 956	60.0	36 764	55.9	43 507	69.1
	Total	94 392	60.3	79 949	61.4	64 219	58.1	71 664	67.1
Total geese		156 458	100.0	130 271	100.0	110 525	100.0	106 861	100.0
Total waterfowl		388 373		296 583		239 659		230 572	

^a Zonal percentages were calculated as (species/total ducks or total geese in zone) × 100; total percentages were calculated as (species/total ducks or total geese in province) × 100.

Table 28

Estimated number of waterfowl harvested in British Columbia, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
Common Merganser	1	0	0.0	0	0.0	0	0.0	21	0.1
	2	0	0.0	69	0.1	0	0.0	46	0.1
	Total	0	0.0	69	0.1	0	0.0	67	0.1
Red-breasted Merganser	1	0	0.0	39	0.1	0	0.0	0	0.0
	Total	0	0.0	39	0.0	0	0.0	0	0.0
Hooded Merganser	1	46	0.1	0	0.0	86	0.3	85	0.4
	Total	46	0.0	0	0.0	86	0.1	85	0.1
Mallard	1	22 672	64.0	16 364	61.5	14 472	58.5	12 639	56.3
	2	37 723	62.1	35 094	65.2	37 700	65.5	32 542	64.6
	Total	60 395	62.8	51 457	64.0	52 172	63.4	45 181	62.0
American Black Duck	1	41	0.1	0	0.0	0	0.0	0	0.0
	2	62	0.1	229	0.4	0	0.0	0	0.0
	Total	103	0.1	229	0.3	0	0.0	0	0.0
Gadwall	1	429	1.2	925	3.5	316	1.3	293	1.3
	2	1 607	2.6	954	1.8	2 424	4.2	446	0.9
	Total	2 037	2.1	1 879	2.3	2 739	3.3	739	1.0
European Wigeon	2	0	0.0	0	0.0	0	0.0	44	0.1
	Total	0	0.0	0	0.0	0	0.0	44	0.1
American Wigeon	1	3 471	9.8	2 687	10.1	3 184	12.9	3 298	14.7
	2	8 595	14.2	9 210	17.1	6 624	11.5	7 182	14.3
	Total	12 066	12.5	11 897	14.8	9 807	11.9	10 481	14.4
Eurasian Green-winged Teal	1	0	0.0	0	0.0	0	0.0	44	0.2
	2	0	0.0	0	0.0	0	0.0	139	0.3
	Total	0	0.0	0	0.0	0	0.0	183	0.3
American Green-winged Teal	1	2 126	6.0	1 500	5.6	1 477	6.0	2 050	9.1
	2	5 984	9.9	2 915	5.4	4 015	7.0	5 233	10.4
	Total	8 111	8.4	4 415	5.5	5 492	6.7	7 282	10.0
Blue-winged Teal	1	1 482	4.2	815	3.1	497	2.0	346	1.5
	2	186	0.3	151	0.3	0	0.0	95	0.2
	Total	1 668	1.7	966	1.2	497	0.6	441	0.6
Northern Shoveler	1	292	0.8	721	2.7	733	3.0	494	2.2
	2	765	1.3	582	1.1	815	1.4	301	0.6
	Total	1 056	1.1	1 303	1.6	1 549	1.9	795	1.1
Northern Pintail	1	2 211	6.2	1 260	4.7	1 465	5.9	915	4.1
	2	5 539	9.1	2 919	5.4	4 928	8.6	3 786	7.5
	Total	7 750	8.1	4 180	5.2	6 393	7.8	4 701	6.5
Wood Duck	1	132	0.4	0	0.0	77	0.3	0	0.0
	2	120	0.2	763	1.4	197	0.3	310	0.6
	Total	263	0.3	763	0.9	274	0.3	310	0.4
Redhead	1	201	0.6	140	0.5	90	0.4	120	0.5
	Total	201	0.2	140	0.2	90	0.1	120	0.2
Canvasback	2	0	0.0	98	0.2	35	0.1	25	0.1
	Total	0	0.0	98	0.1	35	0.0	25	0.0
Greater Scaup	1	0	0.0	0	0.0	87	0.4	0	0.0
	2	81	0.1	153	0.3	0	0.0	0	0.0
	Total	81	0.1	153	0.2	87	0.1	0	0.0
Lesser Scaup	1	710	2.0	428	1.6	470	1.9	412	1.8
	2	68	0.1	0	0.0	180	0.3	40	0.1
	Total	779	0.8	428	0.5	651	0.8	452	0.6
Ring-necked Duck	1	225	0.6	414	1.6	251	1.0	181	0.8
	2	0	0.0	298	0.6	34	0.1	95	0.2
	Total	225	0.2	712	0.9	285	0.3	276	0.4
Common Goldeneye	1	381	1.1	231	0.9	211	0.9	207	0.9
	2	0	0.0	0	0.0	53	0.1	40	0.1

(Continued)

Table 28 (cont'd)

Estimated number of waterfowl harvested in British Columbia, 1990–1993

Species	Zone	1990		1991		1992		1993	
		Harvest	% ^a						
	Total	381	0.4	231	0.3	264	0.3	247	0.3
Barrow's Goldeneye	1	358	1.0	692	2.6	321	1.3	603	2.7
	2	0	0.0	103	0.2	381	0.7	74	0.1
	Total	358	0.4	794	1.0	702	0.9	677	0.9
Bufflehead	1	539	1.5	371	1.4	988	4.0	650	2.9
	2	0	0.0	282	0.5	173	0.3	0	0.0
	Total	539	0.6	654	0.8	1 161	1.4	650	0.9
Ruddy Duck	1	66	0.2	0	0.0	0	0.0	19	0.1
	Total	66	0.1	0	0.0	0	0.0	19	0.0
Total sport ducks		96 124	100.0	80 406	100.0	82 284	100.0	72 778	99.9
Oldsquaw	1	0	0.0	0	0.0	0	0.0	31	0.1
	Total	0	0.0	0	0.0	0	0.0	31	0.0
King Eider	1	41	0.1	0	0.0	0	0.0	0	0.0
	Total	41	0.0	0	0.0	0	0.0	0	0.0
Surf Scoter	1	0	0.0	0	0.0	0	0.0	25	0.1
	Total	0	0.0	0	0.0	0	0.0	25	0.0
Total sea ducks		41	0.0	0	0.0	0	0.0	56	0.1
Total ducks		96 165	100.0	80 406	100.0	82 284	100.0	72 835	100.0
Lesser Snow Goose (white phase)	1	108	1.2	6	0.1	0	0.0	0	0.0
	2	2 755	29.7	2 613	24.5	447	7.2	2 094	25.2
	Total	2 863	15.5	2 619	12.5	447	2.7	2 094	13.4
Lesser Snow Goose (blue phase)	1	0	0.0	0	0.0	20	0.2	0	0.0
	Total	0	0.0	0	0.0	20	0.1	0	0.0
White-fronted Goose	1	138	1.5	32	0.3	7	0.1	0	0.0
	2	0	0.0	0	0.0	17	0.3	0	0.0
	Total	138	0.7	32	0.2	24	0.1	0	0.0
Canada Goose	1	246	2.7	141	1.4	563	5.5	162	2.2
	2	143	1.5	140	1.3	343	5.6	93	1.1
	Total	389	2.1	281	1.3	906	5.5	256	1.6
Small Canada Goose	1	1 850	20.1	2 831	27.7	1 547	15.0	1 581	21.6
	2	1 287	13.9	909	8.5	446	7.2	648	7.8
	Total	3 136	17.0	3 740	17.9	1 993	12.1	2 229	14.3
Large Canada Goose	1	6 851	74.5	7 201	70.5	8 141	79.2	5 566	76.1
	2	5 100	54.9	7 005	65.7	4 921	79.7	5 459	65.8
	Total	11 951	64.7	14 206	68.0	13 062	79.4	11 025	70.7
Total geese		18 477	100.0	20 877	100.0	16 452	100.0	15 604	100.0
Total waterfowl		90 717		101 283		98 736		88 439	

^a Zonal percentages were calculated as (species/total ducks or total geese in zone) × 100; total percentages were calculated as (species/total ducks or total geese in province) × 100.

Table 29

Estimated number of waterfowl harvested in the Northwest Territories, 1990–1993

Species	1990		1991		1992		1993	
	Harvest	% ^a						
Mallard	866	40.4	94	12.8	605	49.2	1 178	66.2
American Wigeon	449	21.0	323	43.8	164	13.4	251	14.1
American Green-winged Teal	112	5.2	102	13.9	62	5.0	34	1.9
Northern Shoveler	112	5.2	0	0.0	0	0.0	0	0.0
Northern Pintail	281	13.1	112	15.3	136	11.0	61	3.4
Wood Duck	0	0.0	0	0.0	15	1.2	0	0.0
Redhead	0	0.0	24	3.3	0	0.0	109	6.1
Canvasback	23	1.1	0	0.0	0	0.0	0	0.0
Greater Scaup	0	0.0	0	0.0	0	0.0	21	1.2
Lesser Scaup	191	8.9	37	5.1	33	2.7	35	2.0
Ring-necked Duck	0	0.0	37	5.1	55	4.5	7	0.4
Bufflehead	0	0.0	6	0.8	160	13.0	14	0.8
Total sport ducks	2 141	100.0	737	100.0	1 230	100.0	1 710	96.0
White-winged Scoter	0	0.0	0	0.0	0	0.0	35	2.0
Surf Scoter	0	0.0	0	0.0	0	0.0	35	2.0
Total sea ducks	0	0.0	0	0.0	0	0.0	70	4.0
Total ducks	2 141	100.0	737	100.0	1 230	100.0	1 780	100.0
Lesser Snow Goose (white phase)	339	63.6	0	0.0	0	0.0	0	0.0
White-fronted goose	97	18.2	0	0.0	0	0.0	0	0.0
Canada Goose	48	9.1	275	100.0	0	0.0	0	0.0
Small Canada Goose	48	9.1	0	0.0	0	0.0	0	0.0
Total geese	533	100.0	275	100.0	0	0.0	0	0.0
Total waterfowl	2 674		1 011		1 230		1 780	0.0

^a Percentage were calculated as (species/total ducks or total geese in territory) × 100.

Table 30

Estimated number of waterfowl harvested in Yukon Territory, 1990–1993

Species	1990		1991		1992		1993	
	Harvest	%	Harvest	%	Harvest	%	Harvest	%
Common Merganser	0	0.0	0	0.0	0	0.0	53	4.0
Red-breasted Merganser	0	0.0	0	0.0	0	0.0	6	0.4
Mallard	290	64.1	641	58.3	298	36.0	560	41.8
American Wigeon	81	17.9	364	33.1	126	15.2	78	5.8
American Green-winged Teal	0	0.0	0	0.0	111	13.4	0	0.0
Northern Shoveler	41	9.0	22	2.0	64	7.7	60	4.4
Northern Pintail	41	9.0	73	6.6	77	9.3	0	0.0
Lesser Scaup	0	0.0	0	0.0	0	0.0	40	3.0
Ring-necked Duck	0	0.0	0	0.0	55	6.6	233	17.4
Common Goldeneye	0	0.0	0	0.0	0	0.0	127	9.5
Barrow's Goldeneye	0	0.0	0	0.0	24	3.0	158	11.8
Bufflehead	0	0.0	0	0.0	49	5.9	20	1.5
Total sport ducks	453	100.0	1 100	100.0	804	97.0	1 334	99.6
Harlequin Duck	0	0.0	0	0.0	0	0.0	0	0.0
Black Scoter	0	0.0	0	0.0	24	3.0	0	0.0
Surf Scoter	0	0.0	0	0.0	0	0.0	6	0.4
Total sea Ducks	0	0.0	0	0.0	24	3.0	6	0.4
Total ducks	453	100.0	1 100	100.0	828	100.0	1 339	100.0
Lesser Snow Goose (white phase)	407	100.0	0	0.0	0	0.0	0	0.0
Small Canada Goose	0	0.0	0	0.0	154	100.0	31	33.3
Large Canada Goose	0	0.0	510	100.0	0	0.0	63	66.7
Total geese	407	100.0	510	100.0	154	100.0	94	100.0
Total waterfowl	860		1 610		982		1 433	

^a Percentages were calculated as (species/total ducks or total geese in territory) × 100.