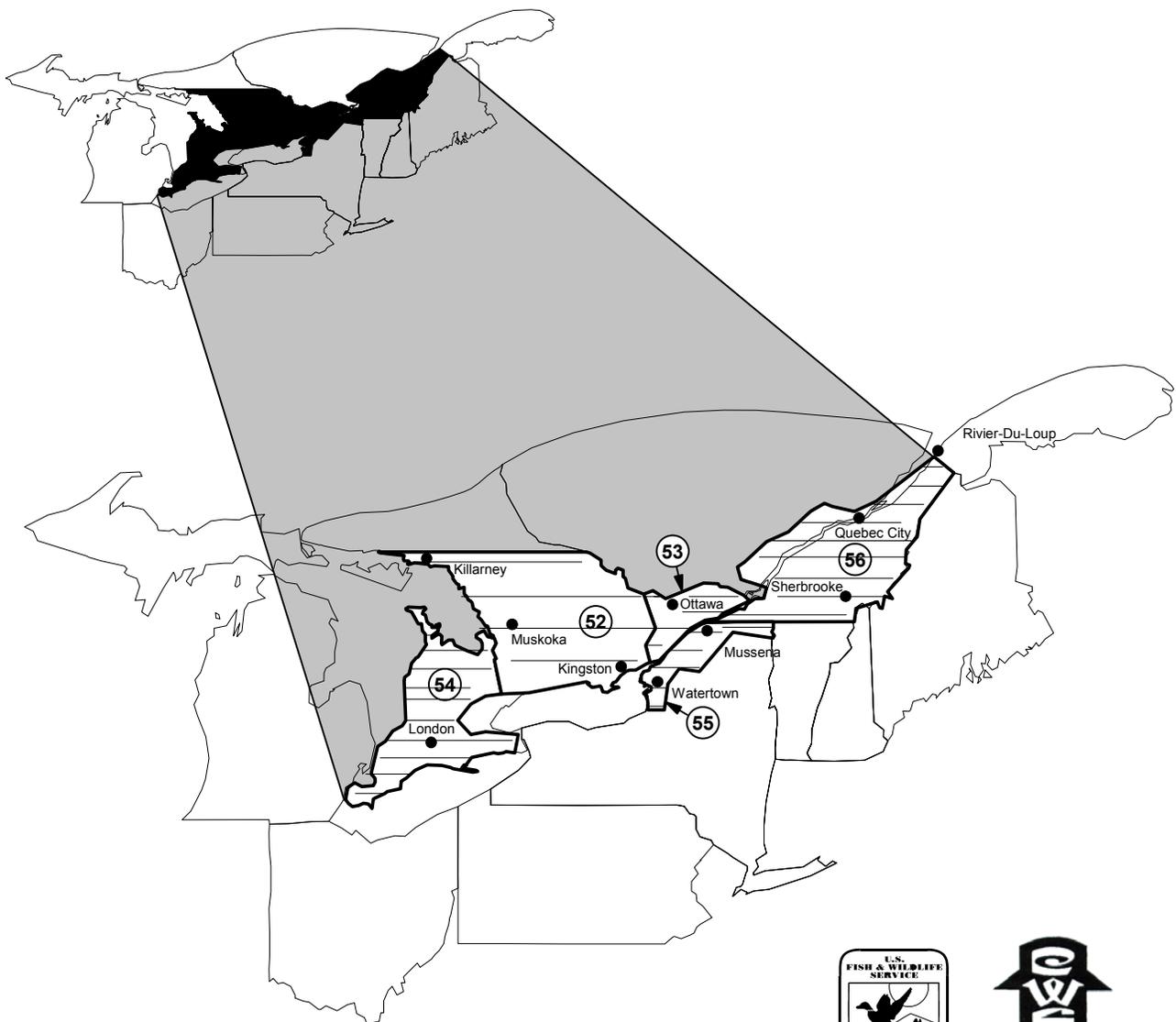


# NEW YORK, EASTERN ONTARIO, and SOUTHERN QUEBEC

## Waterfowl Breeding Population Survey

### 2008



TITLE: Waterfowl Breeding Population Survey for New York, Eastern Ontario and Southern Quebec

STRATA SURVEYED: 52-53, 55-56 and 68

DATES: May 2008

DATA SUPPLIED BY: United States Fish and Wildlife Service (USFWS)

AERIAL CREW:

Pilot/Observer

James Bredy, Regional Aviation Manager, R-2, USFWS

Observer

Peter Fasbender, Wildlife Biologist, USFWS

ABSTRACT: We conducted the 2008 Waterfowl Breeding Population and Habitat Survey for New York, Eastern Ontario and Southern Quebec during the month of May 2008. Wetland habitat conditions were generally good across the survey area. The 2008 total duck population estimate was lower than the 2007 estimate (-19%). Percent changes for selected species compared to 2007 estimates were mallard (-17%), American black duck (-28%), and scaup (-90%). The Canada goose population estimate was also lower than the 2007 estimate (-65%).

METHODS: The procedures used during the 2008 survey are described in the Standard Operating Procedures for Aerial Waterfowl Breeding Population and Habitat Surveys in North America, Section III-A, (USFWS and CWS 1987). No changes were made this year in survey methods however, in stratum 56 five segments were partially flown and only 76 of 140 segments (transects 1,3,4,6,8,10 and 11, as well as segments 7-10 on transect 7 and segments 1-2 on transect 13) in Stratum 68 were flown (Table 1).

We completed the survey during May 2008. We used a Partenavia, P68C, Observer as the survey aircraft in all strata. The Pilot/Observer was experienced in waterfowl survey procedures, but both aircrew members were new to the survey area. The observer was provided training in duck identification and survey procedures before the survey began and was closely monitored for accuracy in identification and compliance with established procedures throughout the survey.

A survey computer program written by John I. Hodges, USFWS-Alaska (retired), provided the basis for recording observations and transcribing data into electronic format. This software integrates point locations (from the aircraft Global Positioning System) with each bird observation (Thorpe 2002).

Population estimates were calculated using procedures described in USFWS and CWS (1987), except that visibility correction factors were based on helicopter surveys from the Eastern Survey Area. Stratum 55 was not surveyed in 2007, so we used data from 2006 for year to year comparisons for that stratum (Table 2).

Table 1. Survey design for New York, Eastern Ontario and Southern Quebec. May 2008.

Stratum	52	53	55	56*	68
<b>Survey Design</b>					
Square miles in Stratum	28266	4259	4149	21721	140307
Square miles sampled in Stratum	180	45	54	234	630
Number of Transects in Stratum	3	4	5	10	14
Number of Segments in Stratum	32	10	12	52	140
Expansion Factor	157.03	94.31	74.38	95.05	223
<b>May 2008 Coverage</b>					
Square miles in Sample	143.24	45.16	55.78	228.52	341.94
Number of Transects in Sample	3	4	5	10	9
Number of Segments in Sample	32	10	12	52	76
Expansion Factor	197.34	94.31	74.38	95.05	410.33

\*Five partial segments in stratum 56

**WEATHER AND HABITAT CONDITIONS:** The boreal forest of the eastern survey area (strata 51-72) was generally in good condition this spring, although in most places spring was delayed by 1-2 weeks relative to the early springs of preceding years (USFWS 2008). Most of the eastern survey area experienced record or near-record winter snowfall and spring precipitation accompanied by average to below-average temperatures (USFWS 2008). The frost seal throughout much of southern Ontario (strata 52-54) was poor; however, winter snowfall and spring rains led to good-to-excellent habitat conditions across most of the area (USFWS 2008).

**BREEDING POPULATION ESTIMATES:** The 2008 total duck population estimate was 19% lower than the 2007 estimate (Table 2). The dabbling duck, diving duck and miscellaneous duck population estimates decreased 9%, 23% and 37%, respectively from 2007 (Table 2). The few species counted in both years that showed a population estimate increase were green-winged teal (55%), goldeneye (135%) and bufflehead (42%). The 2008 Canada goose population estimate was 65% lower than the 2007 estimate (Table 2).

**CONCLUSIONS:** In spite of generally reduced population estimates across the survey area, estimates across the Eastern Survey Area of mallards, scaup, scoters, green-winged teal, American wigeon, buffleheads, American black ducks, ring-necked ducks, mergansers, and goldeneyes were all similar to their 2007 estimates and long-term averages (USFWS 2008).

Table 2. Status of waterfowl breeding population estimates in New York, Eastern Ontario and Southern Quebec, comparing 2007\* with 2008.

Species	Stratum (2008)					Total		% Change
	52	53	55	56	68	2007*	2008	
<b>Ducks</b>								
<b>Dabblers</b>								
Mallard	26,051	11,535	15,451	28,786	22,767	126,033	104,588	-17
American black duck	12,819	1,634	1,611	5,557	159,678	251,993	181,298	-28
Gadwall	0	0	0	0	2,495	4,215	2,495	-41
American wigeon	0	0	0	861	4,686	8,203	5,547	-32
Green-winged teal	8,476	0	799	3,062	153,820	107,152	166,157	55
Blue-winged teal	0	0	0	0	0	8,550	0	na
Northern pintail	0	0	0	0	0	494	0	na
Subtotal	47,346	13,168	17,860	38,266	343,445	506,640	460,085	-9
<b>Divers</b>								
Scaup spp.	0	0	0	0	3,167	30,942	3,167	-90
Ring-necked duck	13,352	580	1,144	1,169	91,193	298,357	107,439	-64
Goldeneye spp.	14,899	0	0	2,871	178,222	83,431	195,992	135
Bufflehead	2,397	382	0	385	16,323	13,758	19,486	42
Ruddy duck	0	0	0	1,129	0	0	1,129	na
Subtotal	30,648	962	1,144	5,554	288,905	426,489	327,213	-23
<b>Miscellaneous</b>								
Long-tailed duck	3,142	0	0	0	0	0	3,142	na
Merganser spp.	6,135	244	193	6,526	81,209	150,515	94,308	-37
Scoter spp.	0	0	0	0	0	5,292	0	na
Subtotal	9,277	244	193	6,526	81,209	155,807	97,449	-37
Total Ducks	87,271	14,375	19,197	50,345	713,560	1,088,936	884,748	-19
Canada goose	31,696	24,134	21,262	9,833	128,299	617,531	215,223	-65

\*Using 2006 estimates for stratum 55

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