

# **Waterfowl Season Report**

## **Muskegon Wastewater Treatment System 2008**

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## **1. Introduction**

2008 season marked the 30<sup>th</sup> year of managed waterfowl hunting on the Muskegon County Wastewater Treatment Plant (WWTP) and Goose Management Unit (GMU).

## **2. Area Goals**

The goal of the managed hunt is to provide a safe, quality hunting experience within the Federal season framework established for the Muskegon GMU.

## **3. Habitat Management**

Muskegon County staff and contractors plant a rotation of corn, soybeans, alfalfa, winter wheat, and rye on the WWTP.

## **4. Area Maintenance**

Maintenance activities include repair and placement of informational and directional signs, field marker posts, and reflectors.

## **5. Recreational/Educational Activities**

The annual youth hunt with preferential drawings for hunting parties with youth hunters (16 and younger) was held on Saturday, October 25 (both morning and afternoon hunts). A total of 18 youth hunting parties with 25 youth hunters participated.

## **6. Waterfowl Season**

### **A. General**

The 2007 WWTP managed hunt opened on October 14. A total of 65 hunter parties (2-4 hunters per party) registered for 45 available hunting positions. Opening day was the only time the WWTP was oversubscribed in 2008. Unlike the 2007 season, when all available hunting positions became available by November 3, the maximum number of hunting positions (98) was not reached until December 6.

### **B. Weather and Habitat Conditions**

Dry August and September conditions reduced the advantages of a summer with moderate rainfall amounts. Water levels dropped significantly before the Southern Lower Peninsula (SLP) duck opener, but were still improved over the 2007 season. Cold temperatures during the first four days of October (approximately 11 degrees F below average, with lows in the low/mid 30s) may have contributed to the movements of early migrants like blue-winged teal and wood ducks out of the area prior to the SLP duck season opener.

Muskegon area weather patterns were near normal for temperature and precipitation during the months of October and November. The only significant departure was in the snowfall category, where the 14.8 inches of snow officially recorded in November were approximately twice the recent average. However, December weather patterns fluctuated from average by a wide margin with temperatures down (1.5 degrees Fahrenheit lower than normal), rainfall up (almost 4.4 inches more), and snowfall almost triple the recent average (68.6 inches in December of 2008).

### C. Migration and Waterfowl Numbers

WWTP duck use estimates were very similar to 2007 counts in both maximum weekly number and timing. In 2007, the maximum count was 17,679 ducks compared to 16,963 in 2008. Both high counts occurred during the last 10 days of October. Once again, high numbers of ruddy ducks and northern shovelers comprised a large part of the estimate. Peak mallard and black duck estimates occurred between the second and fourth weeks of November. While the timing was similar to the 2007 surveys, the overall number of mallards and black ducks declined on the WWTP, with a peak count just under 2300 in 2008 compared to 3300 in 2007.

WWTP Canada goose peak estimates were also very similar to 2007 levels, with a maximum count of 7400 in 2007 compared to 7500 in 2008. The high count occurred in mid-October with a second peak period of 7400 geese in the mid-November to early December period. WWTP waterfowl surveys are shown in Table 1.

### D. Season Dates and Regulations

The Federal waterfowl hunting season framework for the Muskegon GMU was unchanged in 2008 (45 days). Due to calendar weekend schedules, actual hunting days declined slightly from 27 to 26, and hunt periods declined from 41 to 38. Once again, the November 15-30 period was closed by agreement with the Muskegon County WWTP administration. The Muskegon GMU season began on October 14, and the last day of hunting was December 14..

### E. Harvest and Hunter Use

The duck hunter success rate averaged .33 ducks per hunter trip – very similar to the .32 ducks per trip in 2007, and well above the 5 year average of .22 ducks. However, total Canada goose harvest declined from 495 to 349 birds, and goose hunter success rates reflected the drop (.41 geese per trip in 2007 compared to .32 in 2008), and fell below the 5 year average of .38 geese per trip. Only 40% of all geese checked were juveniles, and this percentage was almost 20 points lower than in 2006 (59% in 2006). Harsh December weather contributed to the decline, but October hunting success was lower due to delayed crop harvest (wet fields) resulting in fewer available hunting positions. As in previous years, 70% of the goose harvest and almost 60% of hunter trips took place in October. Early in the season, fewer WWTP fields were open for hunting.

Hunter participation declined overall. Part of the decline was due to calendar timing (three fewer hunts). Most of the decline took place in October, with 620 hunter trips compared to 778 in 2007. Combined November/December hunter trips and harvest did not change significantly. The 5 Year Summary, AM/PM Hunt comparison, October/November/December comparison, and hunter participation figures are in Tables 2-5.

#### F. Daily Hunter Use and Species Harvest

See Table 6.

#### G. Cropping and Management Practices

Approximately 3500 acres of crops are planted on the WWTP, in a rotation of corn, soybeans, and alfalfa, with soil erosion reseeds of winter wheat and rye in the soybean fields. Unlike the 2007 season, this year the corn fields were not chopped for silage use. However, wet field conditions delayed most of the corn harvest activity until the second week of November or later.

Overall, corn fields comprised approximately 40% of the WWTP fields, and contributed 32% of the goose harvest. 18% of the fields were soybean fields that were reseeded after harvest to winter wheat or rye, and 28% of the harvest occurred in these fields. Hay fields comprised 42% of the total WWTP fields, and 40% of the harvest came from these fields. The harvest distribution continues to reflect the overall increase in hay fields.

#### H. Recommendations

1. Dependent upon season framework, continue holding the preferential Youth Hunt drawings on the last Saturday in October.
2. Retain the two Canada goose daily limit.
3. Take the majority of WWTP/Muskegon GMU hunting days before the mandatory firearm deer season closure (opening as near as possible to mid October), and the remainder in December. The exact division can be based upon available days.

#### I. Prominent Clientele Groups

1. West Michigan MDHA
2. Macatawa Bay MDHA

Once again, out thanks to the administration, farm unit staff, and maintenance staff of the Muskegon County Wastewater System. Without their support, cooperation, and assistance, the managed waterfowl hunt could not take place.

cc: S. Schaefer, SWMU Wildlife Supervisor  
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Table 1.

**Muskegon WWTP Waterfowl Surveys 2008**

Species	Sept. 15-20	Sept 22-27	Sept. 29-Oct. 4	Oct. 6-11	Oct. 13-18	Oct. 20-25
Mallard		457	961	475	1427	845
Black duck	9	33	70	67	56	97
Gadwall	8	30	25	12	54	33
N. shoveler	1437	1430	1800	1100	2100	3500
BWT	38	200	15	6		
GWT		37	20	55	21	10
Wood duck		8	2	2		
Pintail				5	10	4
Widgeon						5
<b>Dabblers</b>	<b>1968</b>	<b>2187</b>	<b>2893</b>	<b>1772</b>	<b>3668</b>	<b>4494</b>
Ruddy duck	366	2880	12500	12250	11350	11900
Ringneck						20
Redhead				70	60	50
Scaup	7	35	10	280	260	424
Bufflehead					5	19
Goldeneye				1		6
H. merganser				3		
Canvasback						50
<b>Total ducks</b>	<b>2311</b>	<b>5102</b>	<b>15403</b>	<b>14373</b>	<b>15345</b>	<b>16963</b>
Mute swans	5	4	2			
C. geese	930	2500	4000	5000	7500	5600
S. geese					3	
<b>Total geese</b>	<b>930</b>	<b>2500</b>	<b>4000</b>	<b>5000</b>	<b>7503</b>	<b>5600</b>

Table 1. continued

**Muskegon WWTP Waterfowl Surveys 2008**

Species	Oct.27-Nov.1	Nov. 3-8	Nov. 10-15	Nov. 17-22	Nov. 24-29	Dec. 1-6	Dec. 8-13
Mallard	1122	1385	1660	2095	1780	1475	890
Black duck	100	236	237	172	307	180	157
Gadwall	290	119	170	83	140	54	74
N. shoveler	4500	3300	2400	2315	2350	1890	40
GWT	28	7	20	3			
Pintail	20			6			4
Wood duck		5					
Widgeon		5	25				
<b>Dabblers</b>	<b>4465</b>	<b>5057</b>	<b>4512</b>	<b>4674</b>	<b>4577</b>	<b>3599</b>	<b>1165</b>
Ruddy duck	3000	741	672	69			
Ringneck			50				
Redhead	50	10	10				
Scaup	270	392	342	48			
Bufflehead	46	32	557	148	73	68	
Goldeneye		3	5	1	4	5	10
H. merganser		5					10
C. merganser							6
Canvasback	13	10	10				
<b>Total ducks</b>	<b>7794</b>	<b>6247</b>	<b>6158</b>	<b>4940</b>	<b>4654</b>	<b>3672</b>	<b>1191</b>
T. swans			369		43		6
C. geese	3000	5800	5700	7400	5700	7400	800
S. geese	25	5		1		5	
<b>Total geese</b>	<b>3025</b>	<b>5800</b>	<b>5700</b>	<b>7401</b>	<b>5700</b>	<b>7405</b>	<b>800</b>

Table 1. continued      **Muskegon WWTP Waterfowl Surveys 2008/09**

Species	Dec. 15-20	Dec. 22-27	Dec. 29-Jan. 3	Jan. 5-10
Mallard	356	430	238	390
Black duck	88	104	96	193
Gadwall	75	115	91	115
N. shoveler	12			
Pintail		5	27	3
<b>Dabblers</b>	<b>531</b>	<b>654</b>	<b>452</b>	<b>701</b>
Goldeneye	3	1		
Bufflehead				
C. merganser		1		3
<b>Total ducks</b>	<b>534</b>	<b>656</b>	<b>452</b>	<b>704</b>
Mute swan		1		1
<b>Total swans</b>		<b>1</b>		<b>1</b>
C. geese	280	78	166	300
<b>Total geese</b>	<b>280</b>	<b>78</b>	<b>166</b>	<b>300</b>

Table 2.

**Harvest Data – 5 Year Summary**

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
<b>Hunter Trips</b>	1211	951	1312	1207	1083
<b>Hunting Days</b>	15	9	29	27	26
<b>Hunts</b>	23	13	43	41	38
<b>Quota</b>	500	500	1000	n/a	n/a
<b>Geese</b>	234	518	604	495	351
<b>Ducks</b>	214	64	235	357	348
<b>Goose Cripples Reported</b>	12	14	27	22	22
<b>% Geese Crippled</b>	5	3	4	4	6
<b>Duck Cripples Reported</b>	17	3	14	15	20
<b>% Ducks Crippled</b>	8	5	6	4	6
<b>Geese/ Hunter Trip</b>	.19	.54	.46	.41	.32
<b>Ducks/ Hunter Trip*</b>	.18	.07	.21	.32	.33

\*(based on days open for duck hunting)

Table 3.

**2008 AM/PM Breakdown**

	<u>AM</u>	<u>PM</u>	<u>Total</u>
<b>Hunts</b>	26	12	38
<b>Registered Parties</b>	334	38	372
<b>Hunting Parties</b>	367	86	453
<b>Hunter Trips</b>	904	179	1083
<b>Hours</b>	3548	712	4260
<b>Ducks</b>	266	82	348
<b>Geese</b>	321	30	351
<b>Ducks not Recovered Reported</b>	13	7	20
<b>% Ducks not Recovered</b>	5	9	6
<b>Geese not Recovered Reported</b>	18	4	22
<b>% Geese not Recovered</b>	6	13	6
<b>Ducks/ Hunter Trip</b>	.30	.48	.33
<b>Geese/ Hunter Trip</b>	.36	.17	.32

Table 4.

**2008 October/November/December Breakdown**

	<u>October</u>	<u>November</u>	<u>December</u>	<u>Total</u>
<b>Hunts</b>	14	12	12	38
<b>Registered Parties</b>	241	100	31	372
<b>Hunting Parties</b>	242	157	54	453
<b>Hunter Trips</b>	620	342	121	1083
<b>Hours</b>	2519	1304	437	4260
<b>Ducks</b>	237	96	15	348
<b>Geese</b>	235	67	49	351
<b>Ducks not Recovered Reported</b>	10	8	2	20
<b>% Ducks not Recovered</b>	4	8	13	6
<b>Geese not Recovered Reported</b>	8	8	6	22
<b>% Geese not Recovered</b>	3	12	12	6
<b>Ducks/ Hunter</b>	.38	.28	.17	.33
<b>Geese/ Hunter Trip</b>	.38	.20	.40	.32

Table 5.

**Hunter County/State of Residence**

<u>County/State</u>	<u>Hunters</u>	<u>Hunter Trips</u>
Ottawa	169	334
Muskegon	135	343
Kent	91	208
Allegan	48	94
Newaygo	17	54
Berrien	5	5
Kalamazoo	4	5
Oceana	3	3
Montcalm	2	2
Washtenaw	2	2
Arenac	1	2
Monroe	1	2
Barry	1	1
Eaton	1	1
Genesee	1	1
Grand Traverse	1	1
Ionia	1	1
Iosco	1	1
Jackson	1	1
Kalkaska	1	1
Saginaw	1	1
Wayne	1	1
Indiana	4	5
N. Carolina	1	4
Ohio	1	3
Illinois	1	1
<b>Totals</b>	<b>499</b>	<b>1083</b>

Table 6. **2008 Daily Hunters and Species Harvest**

	<u>Oct. 14</u>	<u>Oct. 16</u>	<u>Oct. 18 am</u>	<u>Oct. 18 pm</u>	<u>Oct. 19 am</u>	<u>Oct. 19 pm</u>	<u>Oct. 21</u>
<b>Parties</b>	45	30	25	11	14	3	14
<b>Hunters</b>	134	74	64	24	36	5	37
<b>C. geese</b>	79	27	24	4	20	0	20
<b>S. geese</b>			1				
<b>Mallards</b>	54	38	10	12	2	1	7
<b>GWT</b>	1						
<b>Pintail</b>	1	3					
<b>Black duck</b>		1	1				
<b>Widgeon</b>		2					
<b>Wood duck</b>					1		
<b>Gadwall</b>	1	1					

Table 6 cont. **2008 Daily Hunters and Species Harvest**

	<u>Oct. 23</u>	<u>Oct. 25 am</u>	<u>Oct. 25 pm</u>	<u>Oct. 26 am</u>	<u>Oct. 26 pm</u>	<u>Oct. 28</u>	<u>Oct. 30</u>
<b>Parties</b>	13	26	7	16	14	13	11
<b>Hunters</b>	32	84	16	38	27	29	25
<b>C. geese</b>	26	14	5	3	1	5	5
<b>S. Geese</b>							1
<b>Mallards</b>	11	30	2	17	16	5	8
<b>GWT</b>	3	6	2				
<b>Pintail</b>		1					1
<b>Black duck</b>				1			

Table 6 cont. **2008 Daily Hunters and Species Harvest**

	<u>Nov. 1 am</u>	<u>Nov. 1 pm</u>	<u>Nov. 2 am</u>	<u>Nov. 2 pm</u>	<u>Nov. 4</u>	<u>Nov. 6</u>	<u>Nov. 8 am</u>
<b>Parties</b>	16	9	13	9	10	11	25
<b>Hunters</b>	58	20	20	18	21	29	56
<b>C. geese</b>	10	1	3	5	17	13	7
<b>Mallards</b>	4	5	1	12	1	4	13
<b>Black duck</b>							1
<b>Wood duck</b>							1

Table 6 cont. **2008 Daily Hunters and Species Harvest**

	<u>Nov. 8 pm</u>	<u>Nov. 9 am</u>	<u>Nov. 9 pm</u>	<u>Nov. 11</u>	<u>Nov. 13</u>	<u>Dec. 2</u>	<u>Dec. 4</u>
<b>Parties</b>	13	8	12	11	11	13	7
<b>Hunters</b>	29	20	25	25	21	38	17
<b>C. geese</b>	1	0	1	0	9	23	9
<b>Mallards</b>	20	2	5	7	14	9	3
<b>Black duck</b>	3				1	1	
<b>Wood duck</b>	1						
<b>Gadwall</b>	1						

Table 6 cont.

**2008 Daily Hunters and Species Harvest**

	<u>Dec. 6 am</u>	<u>Dec. 6 pm</u>	<u>Dec. 7 am</u>	<u>Dec. 7 pm</u>	<u>Dec. 9</u>	<u>Dec. 11</u>	<u>Dec. 13 am</u>
<b>Parties</b>	8	2	1	2	3	4	3
<b>Hunters</b>	23	5	2	3	5	8	8
<b>C. Geese</b>	1	4	0	0	4	0	0
<b>Mallards</b>		2					

Table 6 cont.

**2008 Daily Hunters and Species Harvest**

	<u>Dec. 13 pm</u>	<u>Dec. 14 am</u>	<u>Dec. 14 pm</u>
<b>Parties</b>	2	3	2
<b>Hunters</b>	4	5	3
<b>C. geese</b>	8	0	0

**Table 6 Totals**

<b>Parties</b>	<b>453</b>
<b>Hunters</b>	<b>1083</b>
<b>C. geese</b>	<b>349</b>
<b>S. geese</b>	<b>2</b>
<b>Mallards</b>	<b>315</b>
<b>GWT</b>	<b>10</b>
<b>Black duck</b>	<b>9</b>
<b>Pintail</b>	<b>6</b>
<b>Gadwall</b>	<b>3</b>
<b>Wood duck</b>	<b>3</b>
<b>Widgeon</b>	<b>2</b>