



A PRELIMINARY REPORT ON THE 1992 EARLY SEPTEMBER EXPERIMENTAL CANADA GOOSE  
SEASON IN NORTHERN MICHIGAN

By

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February 1992



## Introduction

The giant Canada goose (Branta canadensis maxima) was first reintroduced in southern Michigan in the mid-1920's. By the early 1970's, the population had grown immensely in all parts of the state, and nuisance complaints from citizens became common. Complaints were most often associated with excessive goose droppings on beaches, lawns, and boat docks. Some agricultural damage also occurred. By 1990, the state's pre-hunting season population was estimated at 75,000 birds, including 12,200 in the North Zone and 14,600 in the Middle Zone (Martz, et. al. 1992).

The Michigan Department of Natural Resources (DNR) in 1986 (in the Lower Peninsula) and in 1987 (in the Upper Peninsula) in concurrence with the Mississippi Flyway Council and U. S. Fish and Wildlife Service (USFWS), established a special experimental early September goose season. It has been in effect ever since. In addition, the state uses the regular hunting season, a special late (winter) hunt, and a translocation program for managing the resident goose population.

## 1992 Hunt Structure

The state has three separate hunting zones: the North Zone (Upper Peninsula), the Middle Zone (Northern Lower Peninsula), and the South Zone (Southern Lower Peninsula)--see Fig. 1. During the 1992 early season, the North Zone hunt area consisted of a strip of shoreline and a small portion of the eastern Upper Peninsula. All of the Middle Zone was open to hunting, with the exception of Wigwam Bay Wildlife Area, East Unit, Arenac county. All of the South Zone was open to the early goose season except for Saginaw, Tuscola, and Huron counties and the adjacent waters of Saginaw Bay, as well as Allegan State Game Area and Muskegon State Game Area and County Wastewater. All other public and private lands (with landowner's permission) were open to hunting.

The 1992 season had a duration of ten days; the season's start date was September 1, and it ended on September 10. The daily bag limit was five Canada geese per person per day, with a possession limit of ten. All usual state and federal waterfowl rules applied to this hunt.

## Special Considerations

The USFWS requires no more than ten percent of the early season harvest be Interior Canada geese (B. c. interior). The USFWS also requires any state participating in the early goose hunt to provide an annual progress report, including information on racial composition of the harvest. The Memorandum of Agreement for Michigan's North and Middle Zone seasons, requires parts collection data from at least 100 adult birds of each sex from each zone for all years. The early hunt in the South Zone was approved as operational beginning in 1992. The North and Middle Zones remain experimental. Consequently, this report will concentrate exclusively on the North and Middle Zones.

Michigan hunters were asked to voluntarily contribute goose parts (head and tail) from their early season harvest. To increase hunter participation in the parts collection, a "shotgun lottery" was initiated in 1992. For each complete parts sample, the hunter's name was entered into a drawing for a new shotgun. Shotguns were donated by the Sault Bank, Michigan Duck Hunters Association, Waterfowl-USA, and Law Enforcement Officers Conservation Club of Southwest Michigan.



### Neck Collar Observations

Neck collar observations were made before, during, and after the ten-day hunt to determine if there were any appreciable numbers of Interior geese in the state. Observations took place before the season August 21-31, and after the season from September 11-20. They were also made during the September 1-10 hunt. No collared Interior geese were observed before, during, or after the early season in the North Zone (in areas both open and closed to hunting)--see Table 1. In the Middle Zone collared Interior Canadas were observed only after the early season. These observations, therefore, indicated no significant influx of migratory Canada geese, before or during the early September hunting season.

### Band Recoveries

The number of direct and indirect band recoveries during the early season supports the observation that few migrant geese were present during the early season. In the North Zone, only banded giants were reported in the 1992 early season. In the Middle Zone only five percent of the recovered bands from the early season were from migrating birds (two recoveries, see Table 2). Statewide, Interior goose band recoveries accounted for less than two percent of the reported bands.

### Summer Culmen Measurements

Each summer, Michigan DNR employees conduct banding operations on the state's local population of giant Canada geese. During these banding operations, some culmen measurements are taken from the adult birds in order to determine the characteristics of giants breeding in Michigan. An interesting trend has been observed from these measures. In 1992, the North and Middle Zone giants measured smaller than the South Zone giants. This diversity of culmen measure suggests that local breeding giant Canada geese in the two northern-most zones may actually be smaller than the southern Michigan breeders. This same tendency was noted in a report by Soulliere, et. al. (1988). This dimorphism will have to be taken into consideration in evaluating the percentage of giants estimated from the culmen collections in the North and Middle Zones.

### Hunter Participation and Harvest

Information concerning the estimated harvest, estimated number of hunters, as well as hunter hours and success, will not be compiled until June, 1993.

The harvest estimates are not yet available for the 1992 Early Season. The average annual estimated harvest for 1986-1991, however, was 13,200 (Martz, 1992). The early season accounted for an average of 18.3 percent of the geese harvested per year in Michigan. The DNR surveys suggested about 1,200 birds were taken annually in the North Zone and 2,100 in the Middle Zone.

### Parts Collection

Previously, hunters were asked to voluntarily submit parts of their harvested geese for analysis, in order to determine the composition of the kill. During the early seasons from 1987-1991, there were 52 usable samples in the North Zone analyzed by department biologists (Table 3). Using the algebraic formula developed by Trost et. al. (1992), it was determined that 90.1 percent of the parts in this zone were giants. For the period of 1987-1992, however, the percentage of giants in the North Zone collection declined slightly to 89.4 percent--as the sample size increased 34 birds to 86 total samples.



In the Middle Zone during the period of 1986-1991, giants accounted for 87.4 percent of the 29 sample parts collection. The percentage of giants in the Middle Zone during the years 1986-1992, however, increased 9.9 percentage points to 97.3 percent, as the Middle Zone parts collection rose 70 birds to 99 useable samples (Table 3).

During the 1992 Early September Goose Season, the Michigan DNR established a "shotgun lottery" in order to increase hunter participation in the parts collection. For every valid sample submitted and delivered to the DNR Wildlife Division offices by September 25th, the hunter's name was entered in a drawing for a new shotgun. One shotgun was awarded to a hunter in each zone. Even though awareness of the drawing was unexpectedly low, hunter cooperation increased to such a point that the parts collection for the first six years combined more than doubled in 1992. It is our belief that if this "lottery" is maintained, hunter awareness will increase, and even larger parts samples will be obtained in 1993.

#### Summary and Conclusions

Neck collar observations and band recoveries suggest few migrants were present in northern Michigan during the 1992 Early September Experimental Hunt. Increased parts collections occurred as a result of a shotgun lottery. Culmen measurements of harvested birds suggest both the North and South Zones meet USFWS criteria for conduct of early September seasons.

#### Literature Cited

Soulliere, G. J. et. al. 1988. An Evaluation of Michigan's Special Canada Goose Seasons and Characteristics of the Harvest, 1982-87, 21 pp.

Martz, G. F. 1992. An Evaluation of the 1986-91 Early September Goose Seasons in Michigan, 19 pp.

Trost, R. E. et. al. 1992. Evaluating the Use of Morphological Measurements of Canada Geese to Determine Breeding Ground Affiliations: Interim Report (in draft), 10 pp.



Table 1. CANADA GOOSE COLLAR OBSERVATION DATA FOR MICHIGAN'S NORTH ZONE (UP) AND MIDDLE ZONE (NLP)

	Number of Geese <u>Examined</u>	Number of Geese <u>Collared</u>	<u>No. of collars by color</u>		
			<u>grn.</u>	<u>wht.</u>	<u>org.</u>
<u>MIDDLE ZONE</u>					
Aug. 21 - 31	137	0	0	0	0
Sept. 1 - 10	599	4	3	1	0
Sept. 11 - 20	773	6	1	1	4
MIDDLE ZONE TOTAL	1509	10	4	2	4
<u>NORTH ZONE (area open to hunting)</u>					
Aug. 21 - 31	1322	26	26	0	0
Sept. 1 - 10	267	0	0	0	0
Sept. 11 - 20	737	16	16	0	0
TOTAL	2326	42	42	0	0
<u>NORTH ZONE (area closed to hunting)</u>					
Aug. 21 - 31	2149	0	0	0	0
Sept. 1 - 10	2344	0	0	0	0
Sept. 11 - 20	731	0	0	0	0
TOTAL	5224	0	0	0	0
NORTH ZONE TOTAL	7550	42	42	0	0



Table 2. NUMBER OF DIRECT AND INDIRECT BAND RECOVERIES DURING THE 1992 EARLY SEPTEMBER EXPERIMENTAL GOOSE SEASON IN MICHIGAN'S NORTH AND MIDDLE ZONES

<u>Michigan Recovery Zone</u>	<u>Breeding Ground \ Reference Area</u>				<u>Total</u>
	<u>Mich. Giants</u>	<u>Foreign Giants</u>	<u>SJBP</u>	<u>MVP</u>	
North (UP)	9	3	0	0	12
Middle (NLP)	27	8	2	0	37
TOTAL	36	11	2	0	49



Table 3. PERCENT GIANT CANADAS IN NORTHERN MICHIGAN'S EARLY SEPTEMBER CANADA GOOSE SEASONS AS DETERMINED BY CULMEN MEASUREMENTS OF ADULT BIRDS

<u>Seasons</u>	<u>Zone</u>	<u>Sex</u>	<u>Sample Size</u>	<u>Percent Giants**</u>
1986 - 1991				
	North*	males	27	97.5
	North*	females	25	82.8
	North*	both sexes	52	90.1
	Middle	males	14	74.8
	Middle	females	15	100.0
	Middle	both sexes	29	87.4
1986 - 1992				
	North*	males	49	95.4
	North*	females	37	83.3
	North*	both sexes	86	89.4
	Middle	males	54	95.1
	Middle	females	45	99.5
	Middle	both sexes	99	97.3

\*There was no early season in the North Zone (Upper Peninsula) in 1986; Middle Zone = northern Lower Peninsula.

\*\*Percentages were derived using "algebraic" formula presented by Trost et. al. (1992). All percentages over 100 were presented as 100%.





# EXPERIMENTAL EARLY SEPTEMBER CANADA GOOSE HUNT

Michigan Department of Natural Resources



**Hunt Purpose:** The purpose of this hunt is to provide additional control of local giant Canada goose populations.

**Dates:** September 1-10, 1992

**Bag Limit:** 5 Canada geese daily      **Possession Limit:** 10 Canada geese

**Licenses:** All hunters must possess a current Michigan license (lifetime, sportsperson, senior hunting, small game, junior small game, or non-resident small game, etc.). In addition, all hunters **16 years of age and older** must possess **both** the State and Federal duck stamps.

**Daily Shooting Hours:** One-half hour before sunrise to sunset, local time.

**Open Hunt Area:** Lower Peninsula *excluding Saginaw, Tuscola and Huron Counties* and portions of the eastern Upper Peninsula. See map on reverse side of this sheet and additional explanations which follow.

**State Parks and Recreation Areas:** Portions of Michigan's state parks and recreation areas are open for early season goose hunting beginning September 1. CONTACT YOUR LOCAL DEPARTMENT OF NATURAL RESOURCES PARKS OR WILDLIFE DIVISION OFFICE FOR ADDITIONAL INFORMATION AND MAPS.

**Game and Wildlife Areas:** Most of the State game and wildlife areas are open for early season goose hunting. However, some areas are closed by agreement with Federal authorities to prevent unintentional harvest of early-arriving migrant geese from Canadian breeding grounds. These areas are identified on the reverse side of this pamphlet.

## Other Information and Rules:

NO PERSON SHALL TAKE OR ATTEMPT TO TAKE MIGRATORY GAME BIRDS AS FOLLOWS: with a shotgun larger than 10-gauge; with any firearm other than a shotgun *capable* of holding no more than three shells in the barrel and magazine combined; by use of more than one gun per person in the hunting party; by using a car or other motor driven land vehicle or aircraft, except for paraplegics and amputees of the legs; by use of a motorboat, power boat or sailboat unless the motor has been shut off, the sails furled and its progress has ceased; by chasing or driving birds with a motorized vehicle or sailboat; from a sinkbox; by use of live decoys, cattle, horses, mules, electronic devices or baiting.

YOU MAY NOT: possess or use shot shells or muzzleloaders, loaded with a material other than steel; use any single projectile loads; possess or transport more than the daily bag limit between the place where taken and your auto, home, temporary lodging, commercial preservation facility, post office or common carrier; give or leave birds at any place or with another person unless the birds are tagged (hunter's name, address, license number, number killed and date by species); receive birds belonging to another unless properly tagged; transport dressed or plucked birds unless one fully-feathered wing is attached; kill or wound a migratory game bird without making a reasonable attempt to retrieve it for your daily bag; leave decoys out overnight on public waters; erect a blind on public waters without affixing your name and address. THIS IS NOT A COMPLETE SET OF RULES. FOR MORE INFORMATION CONSULT TITLE 50, CODE OF FEDERAL REGULATIONS, PART 20, OR CONTACT YOUR NEAREST DEPARTMENT OF NATURAL RESOURCES OFFICE.

## HUNTERS: YOUR HELP IS NEEDED IN THE COLLECTION OF GOOSE PARTS!

To maintain the early September season, Michigan is required to determine the proportion of local giant Canada geese in the harvest. For each goose you shoot during September 1-10 in Michigan, place the head and tail (including tail feathers and the vent with 2 inches of attached intestine) into a plastic bag. Insert a note, written with lead pencil, with your name and address and date and location of kill (nearest town and county). Freeze each specimen for delivery **by September 25** to the nearest Department of Natural Resources Wildlife Division office. Your name will be included in a DRAWING FOR A NEW SHOTGUN each time you submit a complete sample.

FIG. 1.

# 1992 EXPERIMENTAL EARLY SEPTEMBER CANADA GOOSE HUNT

## OPEN HUNT AREAS

1. Most of the Lower Peninsula, including private lands (with landowner permission), most game and wildlife areas, and portions of the state recreation and parks areas are available for hunting.
2. Portions of the eastern Upper Peninsula.

## CLOSED AREAS

A. There is no early September season in that portion of the Upper Peninsula described as: west and north of a line beginning at the Ontario border in Lake Superior directly north of Brimley; then south through Brimley along highway M-221 to Highway M-28; east on M-28 to highway I-75; south on I-75 to highway US-2; west on highway US-2 to the center of the White Fish River (Delta County) and the middle of Little Bay de Noc into Green Bay to the border with Wisconsin.



B. There is no early September season in any part of Saginaw, Tuscola or Huron counties, including the adjacent waters of Saginaw Bay. The adjacent waters of Saginaw Bay means those lands and waters easterly and southerly of a line due north from the mouth of the Quanicassee River in Tuscola County to the intersection with the dividing line between the State's Middle and South waterfowl hunting zones, then northeasterly passing one mile north of the Charity Islands to the international boundary with Canada—and north of a line beginning at the intersection of the Huron-Sanilac county line with the Lake Huron shoreline due east to the international boundary with Canada. Too many early-arriving migrant Canada geese were harvested during the 1986-90 experimental seasons.

C. There is no early September season within the posted boundaries of the game and wildlife areas listed below:

1. Allegan SGA - Allegan County
2. Muskegon SGA and County Wastewater, Muskegon County
3. Wigwam Bay WA, east unit - Arenac County

