

## Summary of the 2004 Off-Reservation Treaty Waterfowl Season

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# Great Lakes Indian Fish & Wildlife Commission

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## SUMMARY OF THE 2004 OFF-RESERVATION TREATY WATERFOWL SEASON

#### INTRODUCTION

The fall of 2004 marked the 20<sup>th</sup> year of off-reservation treaty waterfowl hunting by Great Lakes Indian Fish and Wildlife Commission (GLIFWC) member tribes on lands ceded in the treaties of 1837 and 1842 (Figure 1). Participating tribes included Bad River, Lac Courte Orcilles, Lac du Flambeau, Mole Lake, Red Cliff and St. Croix of Wisconsin, Keweenaw Bay and Lac Vieux Descrt in the Upper Peninsula of Michigan, and the Mille Lacs Band of Minnesota. In addition, 2004 marked the 14<sup>th</sup> year of off-reservation treaty waterfowl hunting in the 1836 treaty area by the Bay Mills Indian Community in Upper Michigan.

Hunting regulations proposed by GLIFWC, as authorized by tribal governments, were reviewed by the U.S. Fish and Wildlife Service (USFWS) after consultation with GLIFWC and the Departments of Natural Resources of Wisconsin (WDNR), Michigan (MiDNR) and Minnesota (MnDNR), and published in the <u>Federal Register</u> for public comment. Final regulations approved by the USFWS are described below.

Annual surveys to estimate the number of hunters, harvest, and effort by tribal waterfowl hunters were conducted via mail from 1985 to 1994 and by telephone from 1995 to 1998. Due to the low harvest estimates generated from these surveys, and the insignificant biological impact, GLIFWC began conducting waterfowl harvest surveys on a 3 year cycle, conducting a telephone survey after the 2001 and 2004 seasons.

#### REGULATIONS

Season dates for zhiishiibag (ducks), aajigadeg (coots), manoominikeshiinh (rails), mergansers and snipe [ginwaa'okojiis (central/western dialect) or jiichiishkwenh (eastern dialect)] ran from September 15 - December 1 on all ceded lands. Nikag (goose) seasons ran from September 1 to December 1 in all ceded lands, but also continued later in any area that was open to state-licensed hunters after December 1. All ceded lands were also open to Badashka'anzhi (woodcock) hunting from September 7 until December 1, while the mourning dove (omiimii (central/western dialect) or miimii (eastern dialect)) season, which ran from September 1 until October 30, was limited to the 1837 and 1842 ceded territories.

In the Wisconsin and Minnesota portions of the ceded territory the daily bag limit for zhiishiibag (ducks) was 20, with additional limits on mallards (5 hens and 10 total), black ducks, redheads and pintails (4 each) and canvasbacks (2). In the Michigan portion of the ceded territory, the daily bag limit for ducks was 10 (2 hen mallards and 5 total, 2 black ducks, 2 redheads, 2 pintails and 1 canvasback). The bag limit for nikag (geese), all species combined, was 10 daily throughout the ceded territory. Bag limits for other species, in all open areas, were: mergansers

(all species in aggregate) 5; coot 20; rails (sora and Virginia in aggregate) 25; snipe 8, woodcock 5 and mourning dove 15.

Possession limits were twice the daily bag limit, except for rails, which had a possession limit of 25. Possession limits did not apply to birds cleaned, dressed, and at the hunter's primary residence. All federal and state closed areas and method restrictions were adopted, with the exception of state imposed open water hunting restrictions. Shooting hours were from ½ hour before sunrise to sunset, and there was no shell restriction on shotguns.

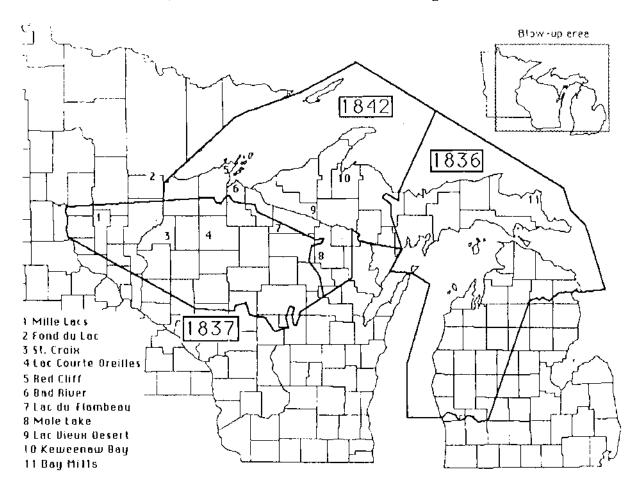


Figure 1. Map of the territories ceded in the treaties of 1836, 1837, and 1842 with reservation locations. (Ceded territory boundary depictions approximate.)

#### **METHODS**

Tribal waterfowl hunters were required to possess a permit for waterfowl hunting. All tribes except Keweenaw Bay used a GLIFWC-issued, off-reservation natural resources harvesting permit. When tribal members obtained this permit they were asked if they harvested waterfowl off-reservation the previous year, and this information was used to group permit holders into

"active", "inactive", and "non-respondent" groups (with non-respondents being those individuals who failed to provide this information). Randomly selected individuals were surveyed by telephone. Thirty-three percent of the "active" (56/170), 15% of the "inactive" (157/1026) and 11% of the "non-respondent" (45/417) individuals were surveyed. Separate participation and harvest estimates were then calculated for each group, and pooled to estimate total hunters, hunter days, and harvest.

The 2004 methodology differed from the 2001 survey, when "non-respondent" individuals were pooled with the "active" group. This was done because past surveys have generally shown a lower level of activity in the "non-respondent" group than in the active group. Estimates for harvested species in 2004, as in previous years, were based on the hunter's identification and recollection and may not be comparable to estimates from surveys based on parts collections.

The Keweenaw Bay tribe allowed their tribal identification card to be used as a permit for waterfowl hunting in 2004. Thus, Keweenaw Bay waterfowl hunters were not surveyed in 2004, unlike previous years when a GLIFWC harvest permit was used.

It can be difficult to use the tribal waterfowl harvest data to draw solid inferences about the impact of particular harvest regulations. Estimates based on a small number of hunters can be influenced by random variation and data outliers, while waterfowl harvest tends to be influenced by weather, the strength of the fall flight, and other factors. The interplay of these variables can make it difficult if not impossible to discern the individual effect of any one, particularly in a given year. In general, tribal harvest estimates may best be used to evaluate long-term trends.

#### RESULTS

Although tribal harvesting permits were validated for waterfowl hunting by 1,613 individuals in 2004, the proportion of permit holders who hunt waterfowl is low, likely because the permit is free and because waterfowl hunting is a simple check-off category on a general harvesting permit that is also required for harvesting other animals and plants. In 2004, for example, 3.9% (63 of 1613) permit holders were estimated to have hunted waterfowl.

Eleven percent (6/56) of the "active" hunters, 2.5% (4/157) of the "inactive" hunters, and 4.4% (2/45) of the "non-respondent" individuals surveyed reported hunting waterfowl in 2004. These 12 survey respondents reported harvesting 154 ducks, 22 coot and 28 Canada geese in 81 days of hunting, yielding expanded estimates of 645 ducks, 91 coot and 84 Canada geese in 421 hunting-days by 63 hunters. An estimated 296 of the hunting-days took place in Wisconsin, and 125 in Michigan. No hunting was reported for the Minnesota ceded territory. No harvest was reported for rails or snipe, and only one respondent reported harvesting woodcock (one taken) or mourning doves (three taken). Most hunting took place near reservations, with over 80% of all hunting days reported occurring in counties with reservations, and the remainder coming from adjacent counties (Figure 2).

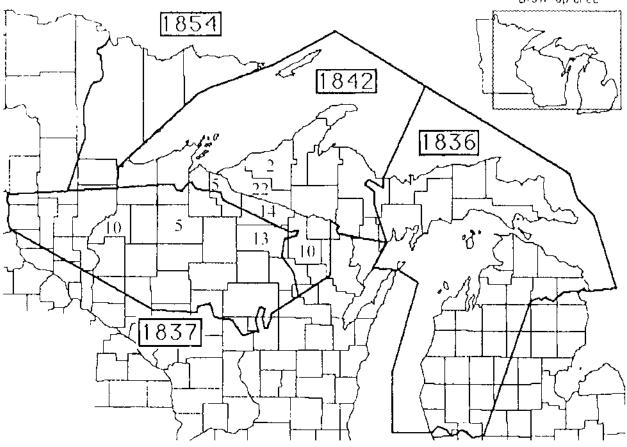


Figure 2. Waterfowl hunting days by county, as reported by respondents to the 2004 offreservation tribal waterfowl hunting survey.

Comparing the 2004 harvest estimates to those made for 1996, 1997, 1998 and 2001 (the four previous years for which harvest estimates were available) suggests that tribal harvest has not changed in a biologically substantive way (Table 1). Duck, goose and coot harvests in 2004 were all about two-thirds of the average level estimated for the 4 previously-surveyed years. Inclusion of estimates for the Keneenaw Bay Tribe would not likely make up this difference, except perhaps for geese, which KB members tend to hunt more heavily than individuals from other tribes.

Survey respondents were asked to report the composition of their duck harvest. The reported composition in 2004 differed from the collective composition from the nine previous surveys (Figure 3). Mallards made up a larger proportion of the total harvest in 2004, and wood ducks, for the first time, were not reported at all. Scaup were below the nine-year average, while bluewinged teal and all other species combined were above.

Approximately 91% of the survey respondents reported harvesting 6 ducks or less on their best day of hunting, while 9% reported getting 7-10 ducks on their best day. No hunter reported harvesting more than 10 ducks in a single day. The most geese reported taken in a single day of hunting was 4. It is clear that hunter harvest is generally determined by factors other than the bag

limit. Although total duck harvest has remained low even with a twenty-bird bag limit, the large bag is important to tribal hunters because it allows those individuals who do locate ducks on a particular hunting trip a greater opportunity to meet their subsistence needs.

Table 1. Treaty waterfor	vi harvest : 1	1996. I	997.	1998.	2001	and 2004.
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YEAR	EAR ESTIMATED # OF HUNTERS	ESTIMATED# OF DAYS	ESTIMATED HARVEST			
			DUCKS	GEESE	COOTS	
2004 <sup>1</sup>	63	421	645	84	91	
2001	75	353	1014	81	146	
1998	92	625	599	177	172	
1997	151	951	1022	183	164	
1996	125	572	1278	72	57	

<sup>&</sup>lt;sup>1</sup>2004 estimates do not include the Keweenaw Bay tribe.

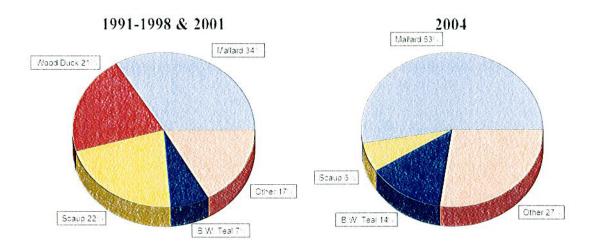


Figure 3. Species composition of the treaty duck harvest, 2004 versus previous survey years (1991-1998 and 2001 combined).

### **SUMMARY**

A tribal waterfowl harvest survey was conducted for 2004 to allow harvest comparisons to previous surveys conducted from 1996-1998 and again in 2001. The 2004 harvest estimates were within the range of estimates generated in the 4 previous survey years. While the exercise of the treaty right to harvest waterfowl remains culturally significant to individual tribal members, the biological impact remains insignificant. Tribal waterfowl hunters will be surveyed next following the 2007 season.