



Michigan Department of Natural Resources Wildlife Division

2010 Ruffed Grouse and American Woodcock Hunter Cooperator Survey Preliminary Results* and Hunting Forecast for 2011

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Introduction

Ruffed grouse and American woodcock cooperator surveys rely on volunteer hunters who record numbers of hours hunted and ruffed grouse and woodcock flushed each day of hunting. Data obtained from cooperating hunters are summarized by hunt zone and by two-week intervals as the average number of grouse or woodcock flushed per hour of hunting. Flush rates reported by cooperators provide an index of abundance and an indicator of harvest. Grouse and woodcock cooperator surveys are just one of several surveys used by the Michigan Department of Natural Resources (DNR) to monitor ruffed grouse and woodcock populations. Results of this survey will be combined with hunter harvest data and information gathered during spring breeding surveys to forecast grouse and woodcock hunting prospects for the 2011 season.

Cooperator Participation

Hunter records were available from 197 cooperators who hunted in 2010. These hunters spent 6,133 hours afield. In 2009, we received reports from 186 cooperators who spent 6,803 hours afield.

Ruffed Grouse Flush Rates

The average number of ruffed grouse flushed per hour by cooperators in 2010 (1.7) is similar to the average number of grouse flushed per hour in 2009 (1.5). Ruffed grouse flush rates were highest in zones 1 (Upper Peninsula; 2.0) and 2 (northern Lower Peninsula; 1.7) (Figures 1 and 2). The highest average flush rates reported by cooperators were during October 1-15 in zones 1 and 3, and September 15-30 in Zone 2 (Table 1).

American Woodcock Flush Rates

The average number of woodcock flushed per hour statewide by cooperators was slightly higher in 2010 (1.4) than in 2009 (0.9). Woodcock flush rates were highest in Zone 2 (1.7), followed by zones 3 (1.1) and 1 (0.9), respectively (Figures 3 and 4). Average flush rates peaked during October 1-15 in all zones (Table 1).

Table 1. Average ruffed grouse and American woodcock flush per hour^a, by two week intervals, as reported by cooperating hunters in 2010.

Species and dates	Zone ^b		
	1	2	3
Ruffed grouse			
September 15–30	2.0	1.9	1.0
October 1–15	2.2	1.5	1.3
October 16–31	2.0	1.7	1.3
November 1–14	1.8	1.8	0.7
December 1–15	1.3	1.7	0.9
December 16–January 1	n/a	1.7	0.7
American woodcock			
September 15–30	0.5	2.1	1.3
October 1–15	1.6	2.2	2.0
October 16–31	0.6	1.8	1.8
November 1–14	0.1	0.5	1.0
December 1–15	0.0	0.0	0.0
December 16–January 1	n/a	0.0	0.0

*The results will be final when the annual status report is published.

^aDoes not include hunting data when effort was <20 hours.

^bSee Figure 2 for boundaries of zones.



2011 Hunting Forecast

Ruffed grouse populations have exhibited ten-year cycles in abundance over much of Canada, Alaska, and the Great Lakes states of Wisconsin, Minnesota, and Michigan (Rusch et al. 1999). Many factors affect grouse populations including changes in habitat and food availability. It is unclear why the population cycles occur. Based on current survey data, we expect the grouse population this fall will be near the peak of the cycle. With favorable spring production, 2011 fall ruffed grouse and woodcock numbers could be similar in the Lower Peninsula and similar or slightly higher in the Upper Peninsula compared to fall 2010. The best grouse and woodcock hunting opportunities will continue to be in areas of young early forest successional habitat.

Acknowledgments

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Literature Cited

Rusch, D.H. 1989. The grouse cycle. Pages 210-226 *in* S. Atwater and J. Schnell editors. Ruffed Grouse. Stackpole Books. Harrisburg, Pennsylvania, USA.

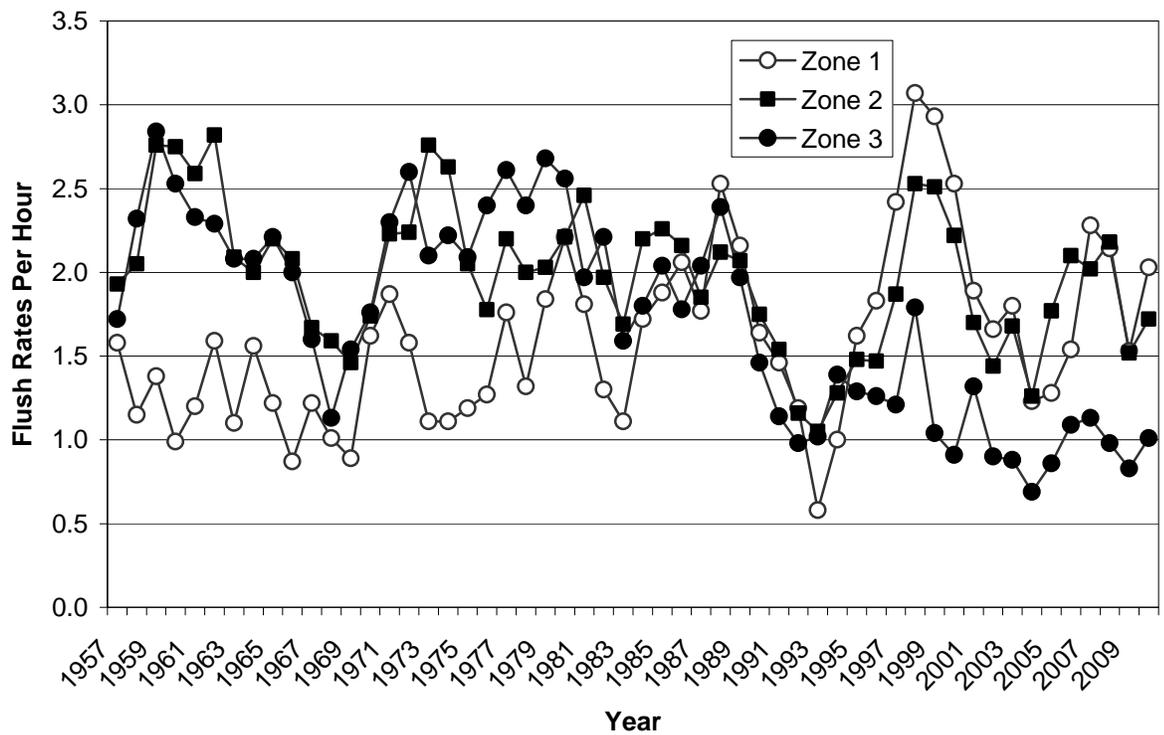
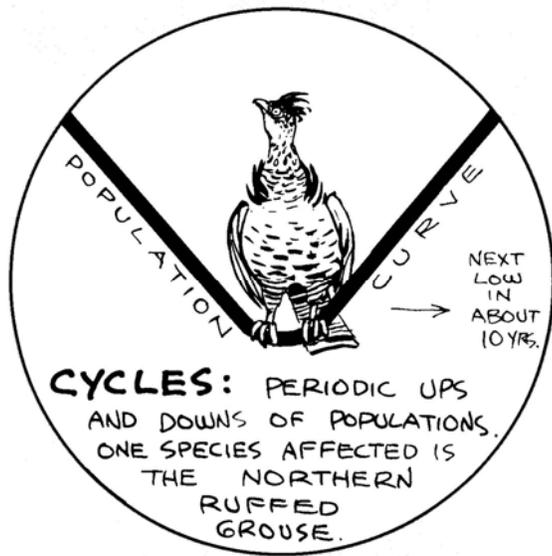


Figure 1. Ruffed grouse flush rates reported by cooperating hunters, 1957-2010.



Average Number of Ruffed Grouse Flushes per Hour by Cooperators, 2010

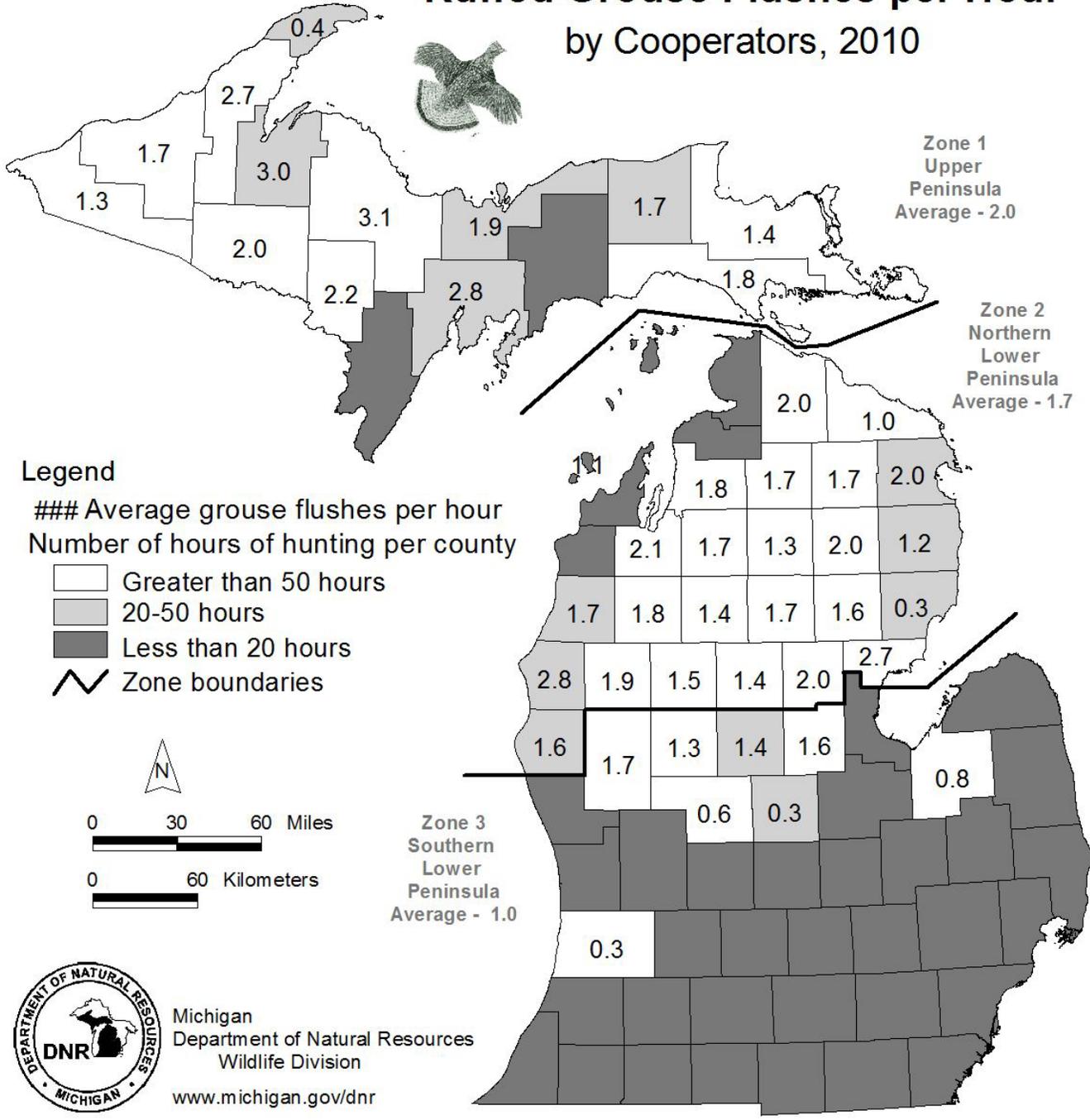


Figure 2. Average number of ruffed grouse flushed per hour by cooperators in 2010.

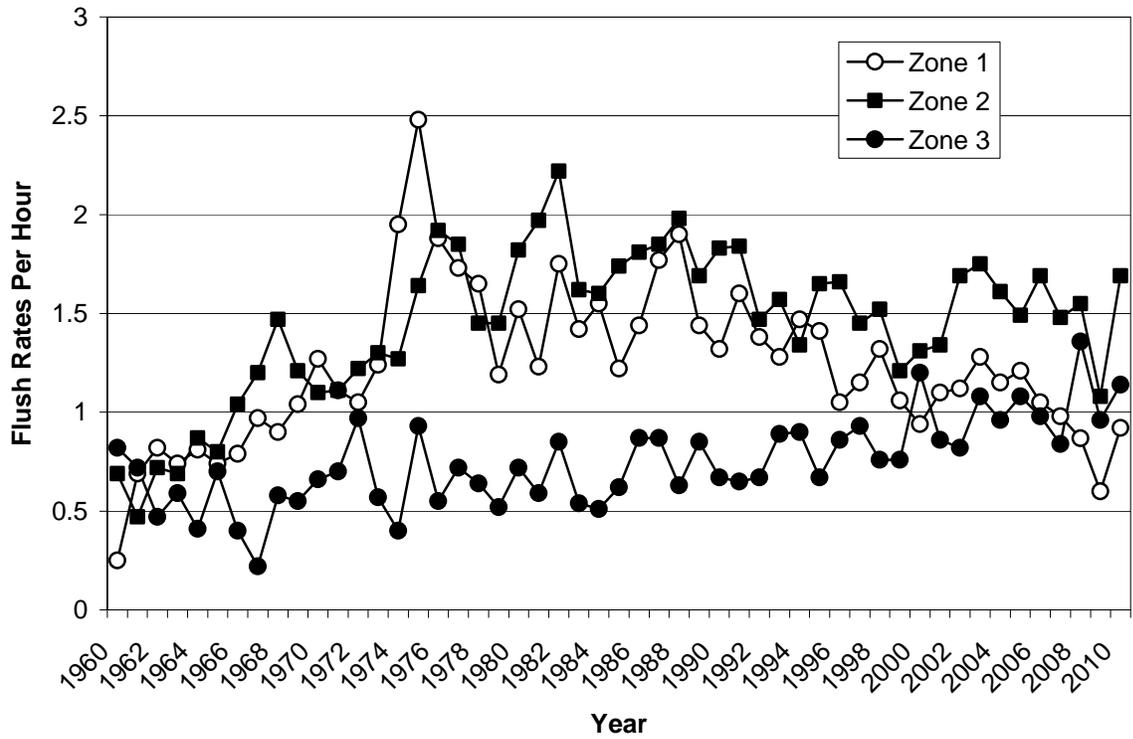


Figure 3. American woodcock flush rates reported by cooperating hunters, 1960-2010.



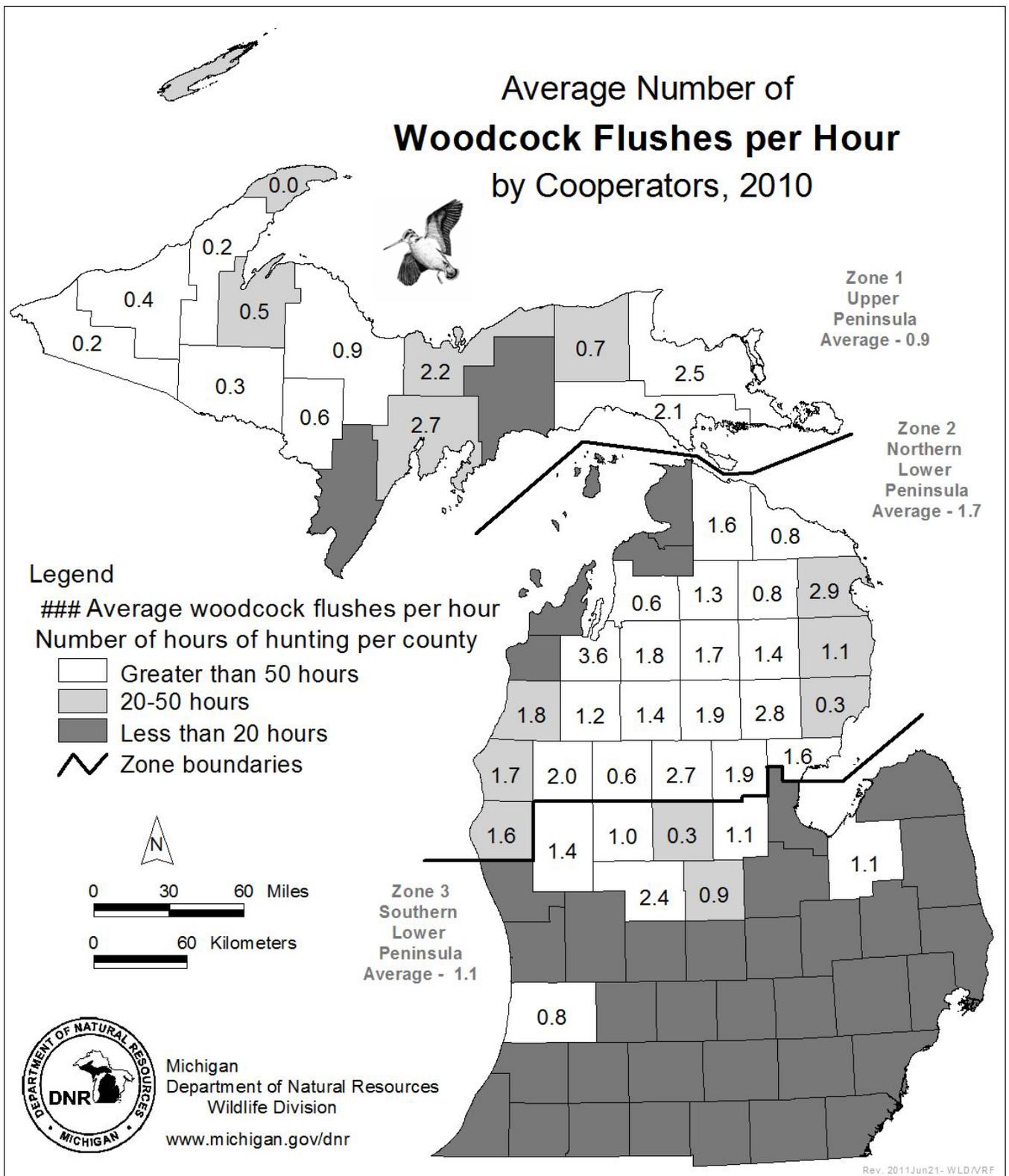


Figure 4. Average number of American woodcock flushed per hour by cooperators in 2010.