

2012-13 RUFFED GROUSE POPULATION STATUS REPORT



KENTUCKY DEPARTMENT OF FISH AND WILDLIFE RESOURCES

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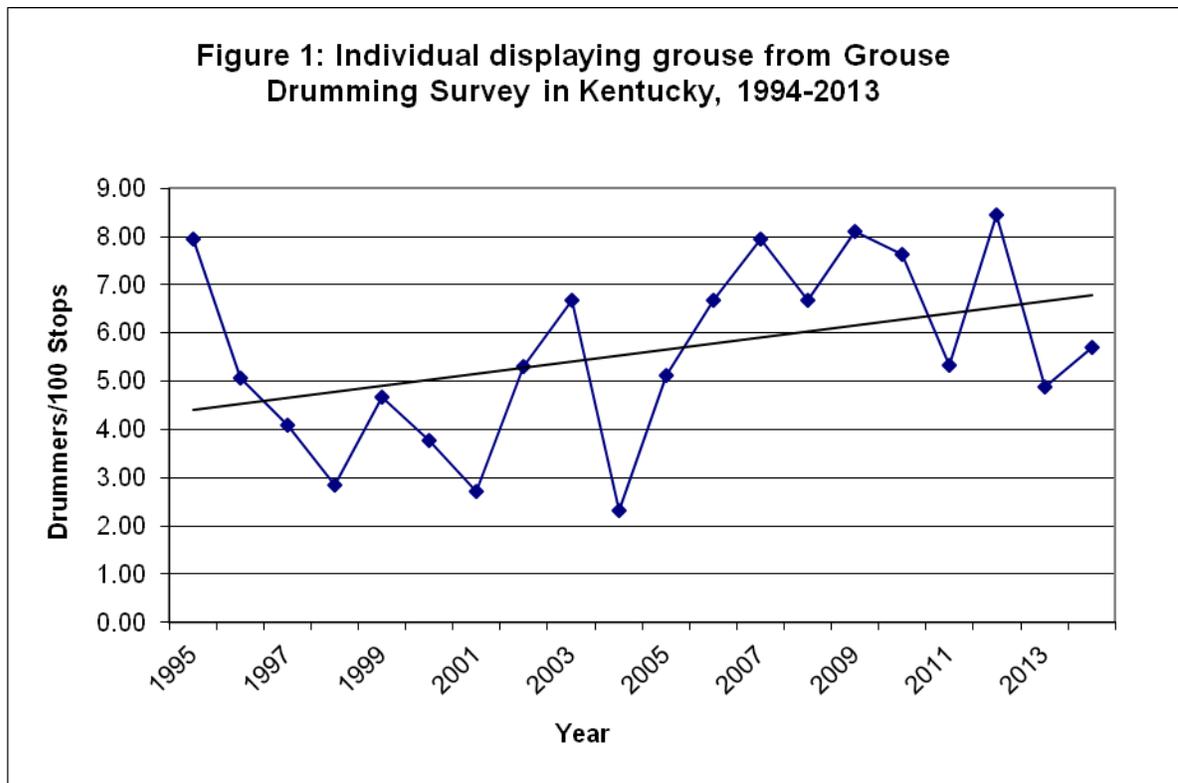
METHODS

The Ruffed Grouse Population Status Report is a compilation of two surveys that the Kentucky Department of Fish and Wildlife Resources (KDFWR) conducts annually to track the status of Kentucky's grouse population. First, a drumming survey utilizes KDFWR biologists to conduct 15-stop driving routes during the month of April to listen for and record the number of grouse drumming at each stop. Second, the Grouse Hunter Log Survey summarizes hunting activity and success of hunters across the state. Combining the information we receive from those 2 surveys, we can create population trends from flush and harvest data and track hunter effort and success.

Kentucky's 2012-13 ruffed grouse hunting season began Nov. 1, 2012 and ended Feb. 28, 2013. Hunters were able to pursue grouse in 53 eastern Kentucky counties. An early grouse season was open on 7 wildlife management areas (WMA) from Oct. 1 to Dec. 31, 2012 (90 days). Those WMAs included Beaver Creek, Big South Fork National River and Recreation Area, Cane Creek, Clay, Dix River, Fleming, and Lake Cumberland.

GROUSE POPULATION STATUS

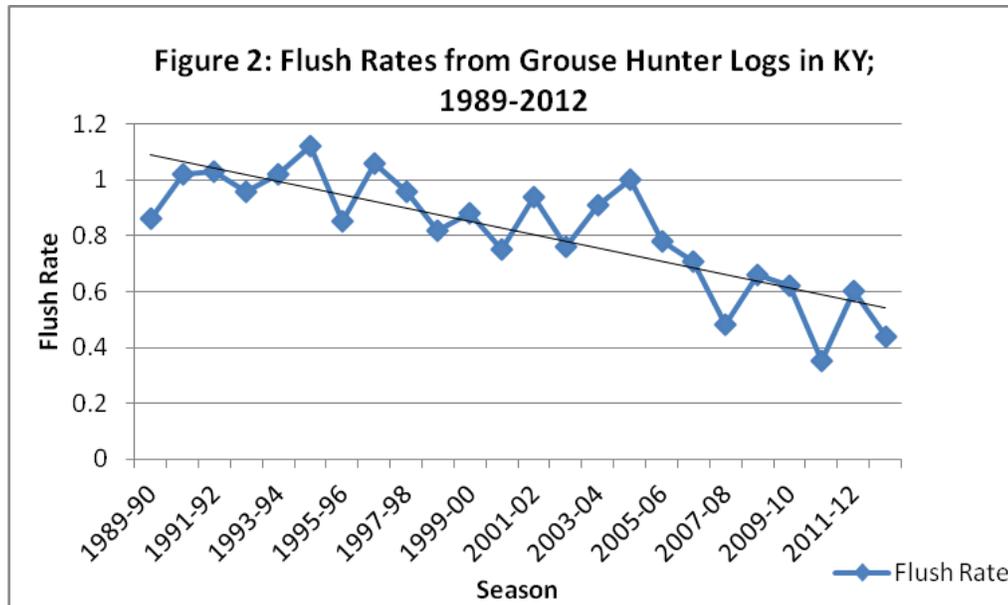
Drumming Survey – The number of drummers heard this year showed a slight increase when compared to the previous year (Figure 1 & Appendix A). The long-term trend continues to show an increase (note: trend line on chart). This year's average of 5.71 drummers/100 stops is almost identical to the 20 year average of 5.61.



Increases in drumming that occurred between 2000-2002 and 2003-2006 were likely the result of ice storm damage. Weather events such as ice storms or tornados open the forest canopy which results in a dense understory creating good grouse habitat. Two tornadoes traveled across parts of Northeastern Kentucky in March 2012 creating some excellent grouse cover.

We expect to see an increase in the number of drummers in these areas over the next several years.

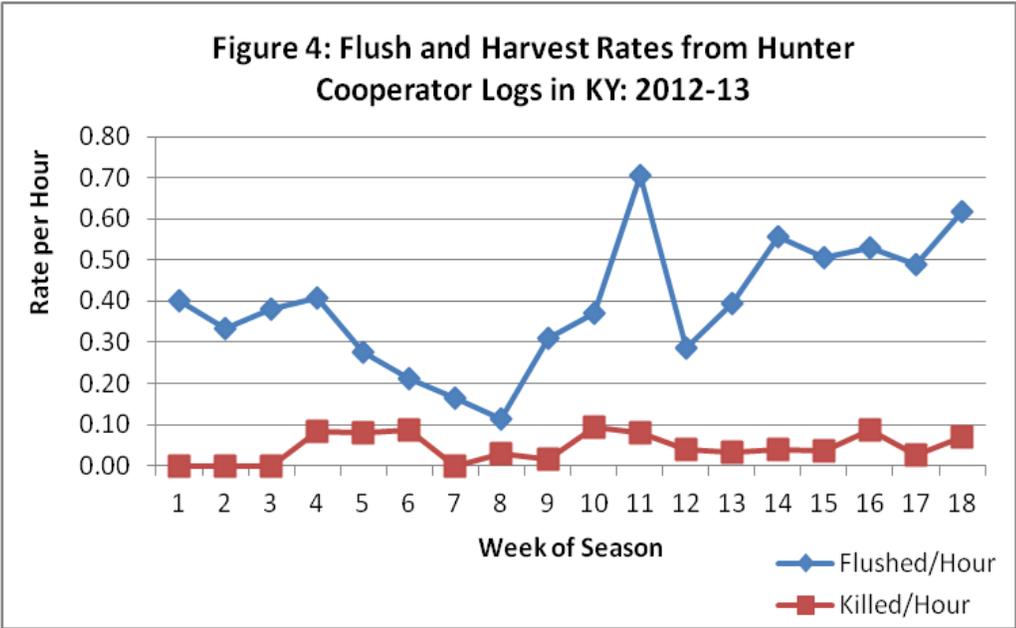
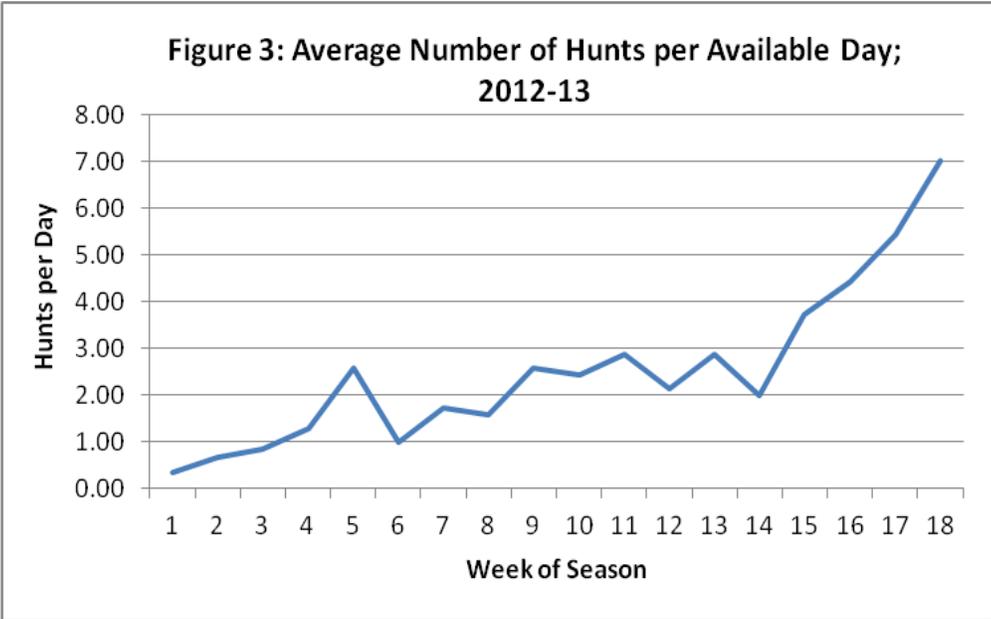
Flush Rate – The flush rate for the 2012-13 season decreased when compared to the previous year (Figure 2). The flush rate of 0.44 birds per hour was below the long-term average of 0.82 birds per hour. The overall trend of the grouse population based on flush rates is slowly decreasing, yet the drumming survey is showing an increase. Flush rate data is the most reliable indicator of the grouse population if sample sizes are adequate. **In order to obtain a more accurate estimate, we need to recruit more hunter cooperators!**



HUNT AND HARVEST DYNAMICS

Hunt Characteristics 2012-13 Season –

- Hunters reported data from 311 hunts.
- The average hunt was 3.1 hours.
- Dogs were used on 99% of hunts.
- Hunters killed an average of 0.15 grouse per hunt.
- Hunting effort increased as the season advanced, which seems to remain constant each year (Figure 3).
- Harvest rates remained constant throughout the season, with a slight increase during the first few weeks (Figure 4).



OUTLOOK FOR THE 2013-14 GROUSE HUNTING SEASON

Kentucky grouse hunters should expect their season to be better than last year. The number of drummers heard during the April survey increased from the previous year. Biologists in Rowan, Lewis, and Greenup counties have reported seeing a number of grouse broods during the spring and early summer months. Aside from beech, the 2012 mast crop was good. Research has shown that the productivity of hens is linked to the fall mast crop. Healthy hens lay better eggs and are better able to raise a brood. Simply put, more mast and other food equals more birds.

Hunters should target areas that may have experienced extensive storm damage within the last several years, such as ice or high wind. Areas that have seen a timber harvest within the last 3-10 years are also good places to seek out for grouse. As mentioned above, the northeast portion of the state experienced extensive tornado damage in March 2012. It is estimated that more than 23,000 acres of forest were damaged. As these areas begin regenerate, grouse should take advantage of the quality cover. As always, there will be local areas where grouse are plentiful, and areas where grouse are scarce. Get outside and scout to find the best areas in your neck of the woods!

ADDITIONAL HELP IS NEEDED

Grouse hunters can improve the survey information used to track Kentucky's grouse population by recruiting new participants. **More survey participants are needed!** Please prompt your friends and neighbors to track their hunts and pass that information on to KDFWR. Forms are available from the Department by calling (1-800-858-1549) or by visiting the Department website: fw.ky.gov/smallgamelogs.asp. We remain pleased with the Hunter Log Cooperator Survey and hope to see it expand with every passing season. The KDFWR Wildlife Division sincerely thanks the grouse hunters who have participated in the grouse surveys for many years. Your dedication makes this report possible and helps track grouse populations across the state.

Good luck and have a safe and productive season!

<u>Route</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
NORTHEAST REGION																				
Bracken County	0	.	.	.	.	2	1	0	2	0	0	1	1	1	0	0	0	0	0	0
Grayson Lake WMA	6	7	1	0	1	1	0	4	1	0	1	5	2	2	0	3	0	4	4	4
Fleming WMA	1	0	2	3	2	2	3	4	5	.	1	.	10	7	16	12	9	9	10	9
Paintsville Lake WMA	6	1	2	3	1	1	2	5	2	0	1	0	0	3	0	2	0	.	0	.
Yatesville Lake WMA	7	2	3	0	2	1	0	1	1	1	5	5	4	0	2	0	1	2	1	1
Clay WMA	2	3	2	1	5	.	4	2	.	.	.	.	1	0	1	2	1	4	4	1
Fishtrap Lake WMA	8	4	7	4	6	4	2	6	6	.	3	.	1	.	1	.	.	10	.	.
N. Grouse Demo Area	1	1	1	0	0	0	0	2	2	2	4	5	5	4	9	7	3	2	1	4
SOUTHEAST REGION																				
Beech Creek	.	0	0	0	.	1	1	1	0	1	2	0	0	0	0	0	0	0	0	0
Mill Creek WMA	2	3	2	1	1	3	3	3	3	0	2	2	2	3	3	2	3	1	0	0
War Fork	4	2	1	2	2	3	2	3	4	1	2	2	2	4	2	1	3	1	1	1
Cane Creek	0	0	1	1	1	4	1	3	3	2	2	1	2	2	0	0	0	0	0	0
Redbird WMA (Crest Trail)	11	9	3	.	2	3	1	5	9	.	.	2	.	0	.	.	1	1	0	0
South Fork	2	3	1	1	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Buck Knob	0	0	1	2	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Stephens Knob	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	3	4	1	4
Total	50	35	27	18	26	26	20	39	38	8	23	23	31	26	34	32	24	38	22	24
Stops	630	690	660	630	555	690	735	735	570	345	450	345	390	390	420	420	450	450	450	420
Drummers/100 Stops	7.94	5.07	4.09	2.86	4.68	3.77	2.72	5.31	6.67	2.32	5.11	6.67	7.95	6.67	8.10	7.62	5.33	8.44	4.89	5.71

*Drummers heard on consecutive days at same station assumed to be the same individual

**Long-term
Mean** 5.60



