

Iowa's 2013 Summer Wild Turkey Survey

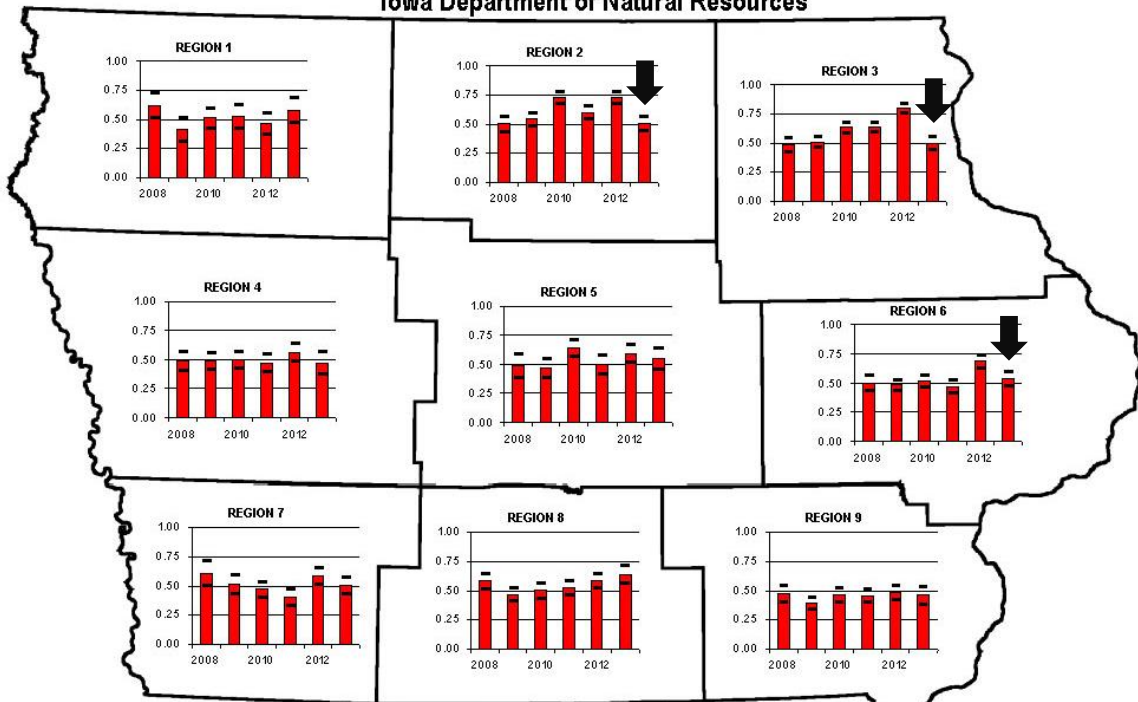
Todd Gosselink & Chris Jennelle, Iowa Department of Natural Resources

In July-August, cooperators recorded turkey observations, documenting the number of hens, poults, and toms observed throughout Iowa. In the figures below, 2008-2013 results are displayed for percent of successful hens (hen turkeys observed with broods) and the average number of turkey poults observed in a brood. On the second page is turkey survey information from the bowhunter observation survey over the past 8 years. Each statistically significant change is identified with a ↓ for a decrease in observations or a ↑ for an increase in observations between the last two years. Regions lacking these arrows did not have a significant change in reproduction this past year.

The information received from the summer turkey brood survey is essential in order to help monitor turkey reproduction in Iowa. This information is crucial for successful turkey management in Iowa, and could not be accomplished without volunteer & staff assistance. We thank those who helped with the survey this year and encourage other volunteers to help with the survey in future years.

Percent of Successful Wild Turkey Hens, 2008-2013

Iowa Summer Wild Turkey Survey
Iowa Department of Natural Resources

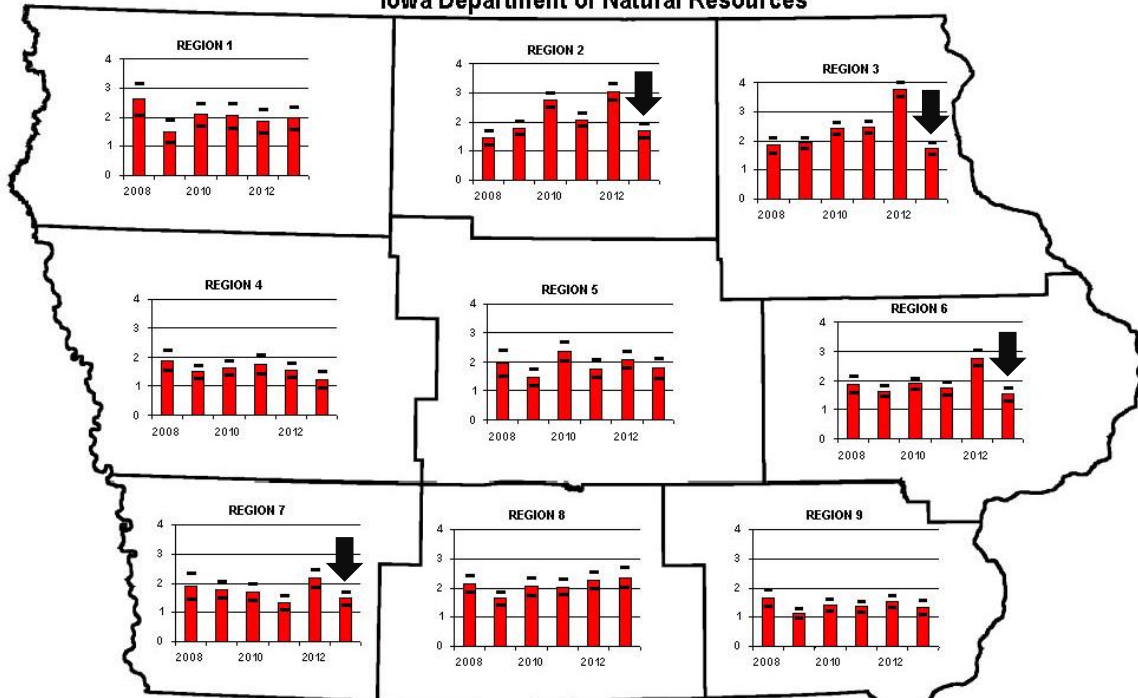


Many factors can influence the sightability of animals, such as population density, habitat characteristics, topography, land use, etc. As a result, differences between regions can NOT be attributed solely to population size/density.



Wild Turkey Poults per Hen, 2008-2013

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Each bar in the graph has two lines that represent upper and lower confidence bounds around the mean estimate. These bounds account for variability in the sample data, and can be interpreted to mean that if we repeated the data collection process (with random sampling) and analysis, 95% of the time the true mean of the estimate will fall within those error bounds. Bars from different years where these two lines do not overlap can be considered to be statistically significant (meaning that the differences observed between the years were statistically meaningful).

Wild Turkey Statewide Reproduction

	2012	2013	Change
Hens w/broods	60.6%	52.3%	-13.7%
Poults/Hens	2.3	1.7	-26.1%
# of Obs	3434	2494	

Results from Iowa's 2013 summer wild turkey survey indicated a general statewide decrease in turkey reproduction from the previous year. Statewide, the average number of hens observed with a brood decreased by 14% (not statistically significant). The average number of poults observed per hen significantly decreased by 26%. Regionally, north central, northeast, east central, and southwest Iowa all experienced a significant decrease in turkey reproduction in nearly all categories. These areas had all experienced a significant increase in reproduction in 2012. All other regions did not experience a significant change either way. Northwest and south central regions were the only regions that showed an increasing trend in reproduction, although not a statistically significant change. The wet weather patterns in the spring and summer of 2013 likely impacted turkey reproduction throughout the state. May rainfall was 200-300% above average throughout most of the state. Northwest Iowa experienced 200-400% increase in rainfall during the month of June. During June, the rest of the state had normal rainfall. Additional rainfall summaries are located at: <http://www.ncdc.noaa.gov/temp-and-precip/maps.php>.

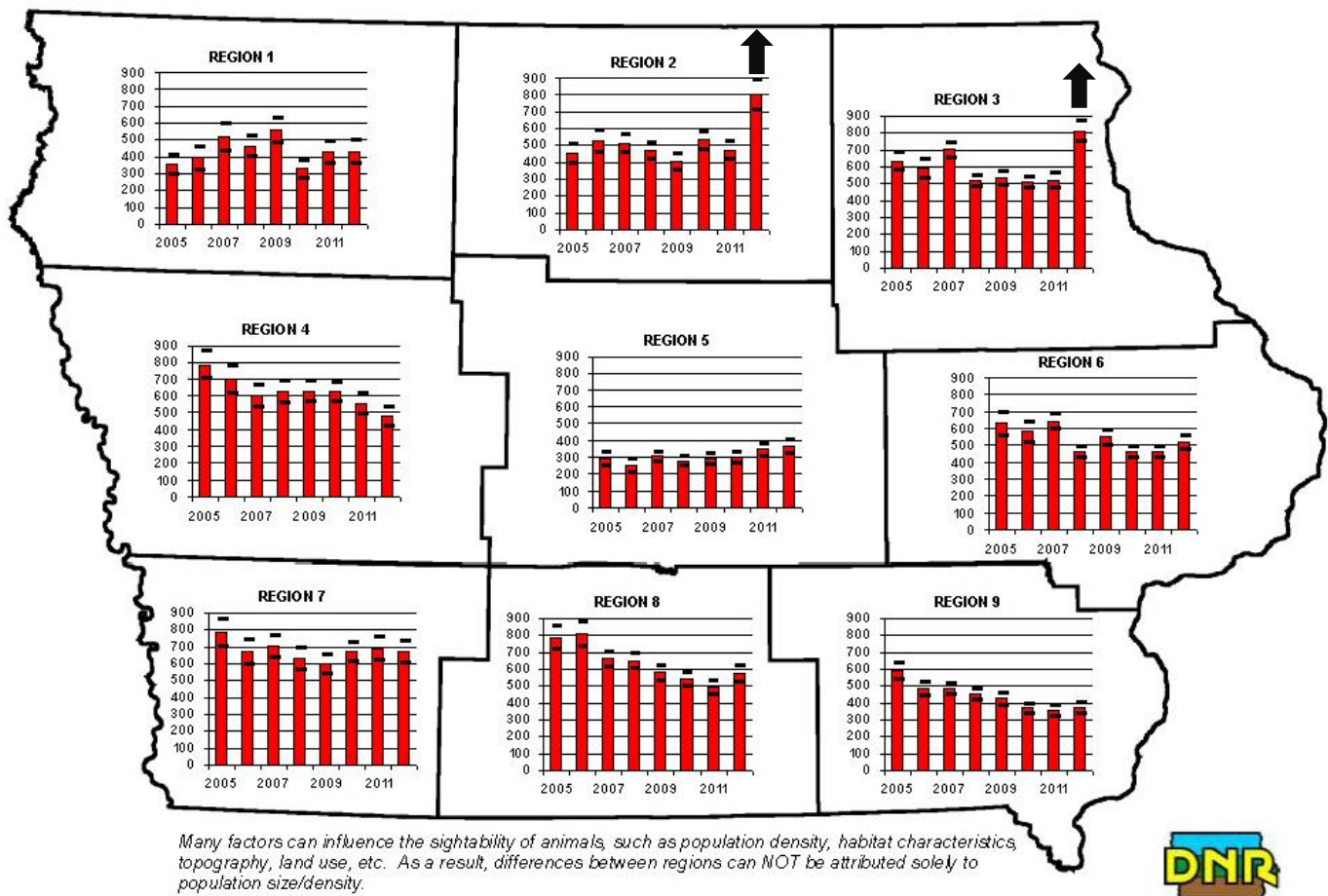
Bowhunter Observation Survey

The bowhunter observation survey recorded an increase in turkey observations in the fall of 2012 in north central and northeast Iowa, which mirrored the 2012 summer turkey surveys increase in turkey reproduction in these regions. Prior to 2012, a general decline in turkey numbers in most regions of Iowa had been recorded since 2005, due to several years of above normal spring rainfall. This year's reproduction results show significant decreases in regions of Iowa with high rainfall (northeast Iowa), and minimal changes throughout the rest of the state, which had closer to normal rainfall. The 2013 bowhunter observation survey is currently being analyzed, and will supplement information on turkey population trends across the state.

Turkey reproduction has been reduced over the past few years in several parts of Iowa, with the exception of the drought year of 2012. This year's regional decrease in turkey reproduction is discouraging, but Iowa's turkey population remains very good, especially when compared to other regions of the U.S. Hunter harvest success rates and proportion of adult toms harvested have remained similar for the past few years, indicating hunters still have great opportunity finding and harvesting turkeys. Iowa's turkey population continues to provide abundant viewing and hunting opportunities.

Wild Turkey Observations Per 1,000 Hours Hunted

Bowhunter Observation Survey, Iowa Dept. of Natural Resources



Todd Gosselink, Ph.D.
 Forest Wildlife Research Biologist
 24570 US HWY 34
 Chariton, IA 50049
 641-774-2958, Todd.Gosselink@dnr.iowa.gov

Chris Jennelle, Ph.D.
 IDNR Biometrician
 1436 255th Street
 Boone, IA 50036