

Factors associated with the abundance and spatial distribution of high antler scoring white-tailed deer

Principle Investigator(s): Julie A. Blanchong
 Graduate Student: To be recruited
 Collaborators: Iowa Department of Natural Resources
 Duration: January 2015 to May 2018

Objectives:

1. Identify spatial and temporal trends in the harvest of trophy deer in Iowa.
2. Identify relationships between antler characteristics of contemporarily harvested deer and habitat features.

PROGRESS: Antler characteristics of white-tailed deer are determined by genetics, but influenced by environmental characteristics particularly nutrition. Studies in the southern US have demonstrated that variation in environmental conditions is associated with deer antler characteristics. Iowa is recognized as a top state for producing large-antlered deer and high quality hunting opportunities. Record bucks, however, are not uniformly distributed. The graduate student on this project, Willie Suchy died unexpectedly in mid-November. Prior to his death, we had begun to analyze historical records of trophy deer harvested in Iowa for spatial and temporal trends using the Iowa Trophy Deer Database and the Boone and Crockett and Pope and Young databases. Willie had developed an ambitious sampling plan to be deployed during the first shotgun season in 2015. This sampling relied on the DNR wildlife staff to collect the data. Due to his unexpected passing, the DNR does not consider implementation of the full scope of Willie’s plan to be feasible. I met with the DNR in late November and we have developed a pilot season for this year. The results of this pilot season will be used to develop a sampling strategy that will be logistically feasible for the DNR staff to implement for the subsequent deer harvest seasons.

Because Willie was already employed and did not need a stipend we had planned to use the funds allocated to a stipend to add a third objective investigating the relationship between genetic characteristics and antler score. This objective is currently tabled.

IMPACTS: This project is facilitating close collaboration with the DNR. I worked with the DNR’s CWD surveillance team during the shotgun season opening weekend to collect samples and talk with hunters about the purpose of the project.

FUTURE PLANS: I have begun efforts to recruit a new graduate student. We will continue to analyze the trophy deer databases for spatial and temporal trends. Based on the results of this year’s pilot season we will work in close collaboration with the DNR to design subsequent field seasons.

Total number of record deer in each county in Iowa from 1990-2014

