

RESEARCH PROJECT SUMMARY

Project Title: Dietary preference and nutritional quality of annual forages planted during late summer for white-tailed deer in Eastern South Dakota.

Need: White-tailed deer (*Odocoileus virginianus*) are selective when choosing forages that are easily digestible, especially when resources are ubiquitous. Limited information exists regarding dietary preference of white-tailed deer and nutritional quality of annual forages planted during the late summer months in the Northern Great Plains. Planting of fall forage plots has become increasingly popular by private landowners and state agencies and are widely used to increase hunting opportunities, increase nutritional quality and quantity of available forage, and to attract deer away from depredated areas. Information on preference and dietary quality of plants commonly used in food plots would help land managers and wildlife damage personnel select the most preferred deer forage that would attract deer away from depredated areas and constitute the best nutritional value for the species.

Objectives:

1. Determine preference and use of purple top turnips, winter rye, Austrian winter pea, Chicory, Daikon radish, and Crimson clover by captive white-tailed deer.
2. Quantify physical and nutritional characteristics among forage types and determine crude protein, phosphorus, crude fat and digestible dry matter for each species.
3. Assess feasibility of which forage types would be most suitable for late summer planting conditions in eastern South Dakota.
4. Formulate management recommendations that directly apply to maximizing deer harvest in highly depredated areas using annual forage plots.
5. Determine what annual forage species would be the most successful at luring deer away from winter depredation areas (i.e., hay yards and feedlots).

Study Location: Wildlife and Fisheries Sciences Research Facility at South Dakota State University in Brookings, South Dakota

Expected Completion: June 2015

Principal Investigator: Dr. Jonathan A. Jenks, Distinguished Professor, South Dakota State University

Other Personnel:

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