Office of Applied Science

Understanding Relationships Between Forests and Deer Health Through DMAP Partnerships

EXTERNAL STAKEHOLDERS

Deer Hunters

General Public

CDACs

Private Landowners Conservation Congress

The main goal of this project is to improve our understanding of the linkages between habitat quality, deer health and population performance.

TIMELINE

Launch: July 2016 Completion: June 2019

FUNDING

Pittman-Robertson

DNR PARTNER BUREAU

Wildlife Management Forestry

Deer nutritional condition influences deer survival and reproduction, and nutritional condition depends on habitat quality and quantity. We are exploring which habitat attributes are potentially limiting deer condition. We do this by comparing measures of deer habitat to measures of deer condition. We assess nutritional condition of hunter-harvested deer and measure habitat attributes from areas surrounding locations of those harvested deer.

DNR staff are working closely with DMAP cooperators to collect deer and habitat data. By working with DMAP cooperators, researchers can ensure direct comparisons of deer health to the habitats where the deer lived through access to private lands.

KEY POINTS

- » The overall research goal of the study is to understand the influence of habitat quality on deer health and population performance.
- » DNR staff are working closely with DMAP cooperators to collect body condition data from deer harvested on DMAP-enrolled properties to understand nutritional condition of deer in the autumn.
- » DNR staff visit DMAP properties to make measurements of available deer forage, which will allow researchers to estimate available energy for deer on the landscape.
- » Study results will be used to develop useful management recommendations for deer and deer habitat across Wisconsin.
- » We are grateful to the DMAP cooperators who have joined the study. Their participation is crucial for our success, and we appreciate their support in making this study possible.







Office of Applied Science

Effectiveness of Prescribed Fire as a Management Tool In Wisconsin's Fire Dependent Landscapes

The goal of this project is to better understand the effectiveness of prescribed burns in Wisconsin using metrics like weather, season and intensity to promote optimal health for woodlands and wildlife.

TIMELINE

Launch: July 2013 Funded Through: June 2019

FUNDING

Pitman-Robertson Wildlife Restoration Program

DNR PARTNER BUREAU Wildlife Management

EXTERNAL STAKEHOLDERS Interested Public Users of Public Lands Hunters Wildlife Enthusiasts

This project consists of several related parts. First, we are conducting interviews of burn coordinators throughout southern Wisconsin to identify burn objectives, information needs and management challenges. Second, we are collecting burn and climate records for database development and subsequent evaluation of prescribed burn windows by season. Third, we are relating fire behavior to fire effects by examining fire metrics (residence time, intensity, weather, season) and connecting them to fire's effect on woody vegetation suppression. Lastly, we are evaluating historical seasonality of fires throughout Wisconsin and linking this information to current and historical conditions.

The WI DNR 2013-15 Biennial Research Agenda, specifically the "Fire Suppression and Fire Management" theme, includes a Research Focus to "identify alternative management options for prescribed burning on both public and private lands, including alternatives for the timing and frequency of prescribed burns." This project meets this research need and evaluates the effectiveness of the states burn program in meeting wildlife management objectives.



KEY POINTS

- This project meets past research needs to identify alternative management options for prescribed burning by looking at the effectiveness of burns across the state throughout various seasons.
- » Results of this study will benefit wildlife restoration and management by notifying burn coordinators of when burns should take place, and what the fire conditions should be to ensure the highest rate of success.





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