

**Wisconsin Department of Natural Resources
Natural Resources Board Agenda Item**

SUBJECT: Information presentation regarding the Northern Wisconsin Deer Density and Forest Management Experiment, located on the Ontonagon River Block.

FOR: April 2014 Board meeting

TO BE PRESENTED BY: Karl Martin (WDNR, Wildlife and Forestry Research Section Chief) and Dustin Bronson (WDNR, Forest Research Scientist)

SUMMARY:

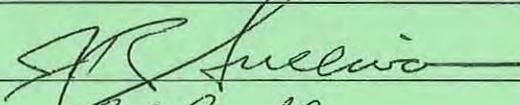
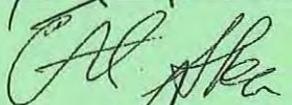
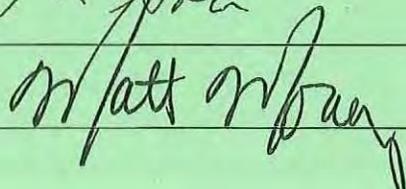
The 2012 Deer Trustee Report (DTR) highlighted the need to develop metrics to further improve our management of the white-tailed deer population. The DTR also cites the need to quantify the impact of forest management on white-tailed deer productivity and health. In addition, the Deer 2000 Report highlighted the need to evaluate the relationship between deer populations and forest habitat conditions. Based on these recommendations we have developed the Northern Wisconsin Deer Abundance and Forest Management Experiment. The experiment is designed to simulate low, moderate, and high deer abundances (11-32 deer/sq. mile overwinter). These abundances equate to maintaining between two and five deer per enclosure, with enclosures ranging in size between 80 and 120 acres. Nested within each deer abundance treatment are forest cutting treatments, which create differing habitat conditions.

This study will provide information on the relationship between forest habitat conditions, deer health and productivity as well as the impact of deer on tree and understory vegetation under differing deer abundance levels and habitat conditions. So not only do we learn how differing deer abundances impact habitat, but we also gain important insight on how differing habitat conditions impact deer at varying population levels. This study will provide critical information on how to manage these separate but closely related components for both a healthy, productive forest ecosystem and a healthy and socially acceptable deer herd. This experiment will also provide critical information for the development and calibration of browse metrics to assess forest biodiversity and tree regeneration, but also act as a metric to assess deer populations across broad areas. Finally, we plan to develop a series of deer health metrics calibrated for Wisconsin's northern hardwood forests that could additionally be used as a monitoring tool to maintain a healthy, sustainable deer herd.

RECOMMENDATION: Information Only

LIST OF ATTACHED MATERIALS (check all that are applicable):

- Background memo
- Type name of attachment or type N/A if not applicable
- Type name of attachment or type N/A if not applicable
- Type name of attachment or type N/A if not applicable

Approved by	Signature	Date
Jack Sullivan, Bureau Director		4/1/14
Al Shea, Office of Business Sustainability and Science		4/1/14
Cathy Stepp, Secretary		4/1/14