## **ABSTRACT**

## THE SCALE AND COST OF SEASONAL TIMBER HARVESTING RESTRICTIONS IN WISCONSIN

Timber harvests in Wisconsin are commonly subject to seasonal restrictions imposed with the goal of maintaining forest health and protecting state-listed species. The combined impact of these restrictions may limit the availability of timber during portions of the year, reduce stumpage prices, increase timber harvesting costs, and alter timber procurement practices; furthermore, the ecological impacts of these restrictions are poorly understood. The goals of this study are to: 1) identify the most commonly imposed seasonal restrictions and the degree to which seasonal restrictions vary by geographic area, soil type, and forest types in Wisconsin; 2) estimate the cost of seasonal restrictions to loggers, forest landowners, and the forest products industry; and 3) summarize the known ecological consequences of seasonal timber harvesting restrictions. We will survey 500 timber sales scheduled during 2013 on state, county, and private forestland to identify the most commonly imposed restrictions. Using this data, we will produce Geographic Information System (GIS) map layers that present the likelihood of harvest restrictions by timber type, geographic management unit (GMU), and soil type. The cost of these restrictions will be estimated through surveys of mills and foresters, case studies of individual timber sales, and sensitivity analysis using existing logger data to demonstrate the impact of significant periods of seasonally-induced downtime on logging costs. A literature review will be conducted to identify known ecological consequences of seasonal restrictions. Prior to this study, there is limited information available regarding the scale of seasonal harvest restrictions in Wisconsin. The information from this study will inform the policy discussions about the scale and cost of these restrictions. Identification of specific combinations of conditions (soil type, GMU, forest type) will potentially identify conditions where alternative methods of risk abatement could be used to protect the resource at lower cost. A team of researchers from the University of Wisconsin-Stevens Point, including Dr. Mike Demchik, Dr. Joseph Conrad, and Dr. Melinda Vokoun, will be conducting the research.