

## ***New Brunswick Core Site***

The Black Brook Forest is a 200,000- ha freehold forest situated in northwestern New Brunswick, managed by J.D. Irving Limited (JDI). The forest supplies conifer (spruce and fir) and tolerant hardwood (sugar maple and yellow birch) saw material to JDI's St. Leonard and Veneer sawmills, respectively. A variety of other forest products are sold in adjustment markets to Quebec and the state of Maine. The forest is somewhat unique in that white, red, black and Norway spruce planted stands total more than 40% of the landbase. Many of these stands have been subjected to a regimen of precommercial cleaning and one to three commercial thinnings, through rotation ages of 40 years or more. Tolerant hardwood stands make up 28% of the landbase and are managed under the selection and shelterwood systems to promote high-valued products. The remaining forest consists of natural mixes of spruce, fir and intolerant hardwoods. JDI has been an early adopter of the LiDAR technology integrating it into its forest management system, and using the airborne LiDAR data output for stem and volume calculations. At this site, specific attention will focus on the utilization of LiDAR data, wet area mapping predictions, and forest structural observations to refine forest productivity classes. In order to do this, the field program within the Black Brook Forest will focus on soil sampling and analysis to derive forest soil productivity assessments, which will be linked to forest growth and productivity estimates to produce a new site productivity classification systems for the area.