

The Ontario Core Site:

The Ontario core site consists of a number of forest management areas, where previous research has taken place, resulting in a significant amount of existing forest inventory and LiDAR data. To date, the Ontario sites have been the focus of a large number of research and demonstration projects involving LiDAR in collaboration with the CWFC, the provincial government, and a number of Ontario universities, including Queens University and the University of Toronto. The Hearst Forest is a 1,300,000- ha Crown forest situated in northeastern Ontario and managed by Hearst Forest Management Inc. Representative of the eastern boreal, black spruce is a dominant species in the forest, occurring in association with cedar and tamarack on lowland sites, and with white spruce, balsam fir, jack pine, trembling aspen, white birch and balsam poplar elsewhere. Both pure and mixed species combinations occur, as do natural and artificially regenerated stand conditions. Wood is harvested using a combination of clear- and partial-cutting (often as strips) and used in local SPF sawmills and pulp mills. The Petawawa Research Forest is a 10,000- ha federal forest situated in northeastern Ontario (west of Ottawa) and is the oldest continuously operated research forest in Canada. Representative of the Great Lakes St. Lawrence forest, mixes of natural white and red pine stands dominate the landscape. Both mid-tolerant and tolerant hardwoods are also well represented. Extensive areas of plantations of various species and treatments (spacing, mid-rotation thinning) occur in the forest. In addition, partial harvesting systems that are commonly practiced in the Great Lakes St. Lawrence forest are represented. This national forest supports both an active research component and operational harvesting activities. The Romeo Malette Forest is a 630,000-ha Crown forest situated near Timmins and managed by Tembec. Representative of the boreal-Great Lakes St. Lawrence transition zone, this forest consists of mixes and pure stands of black spruce, white spruce, jack pine, balsam fir, trembling aspen, white birch, and balsam poplar, with occasional pockets of white and red pine and yellow birch. Wood is harvested using clear-cutting methods and used in local SPF sawmills, pulp mills, and oriented strand board (OSB) plants. This forest was involved in Ontario's first operational-scale ALS acquisition in 2004-2005. While these data are likely too dated to be useful on their own, the province of Ontario is currently planning new provincial acquisitions to coincide with the forest resource inventory refresh cycle scheduled to start in 2015-2016.