

## TITLE: The Future is NOW

Current Applications of Lidar in Forest Inventory.

**Speaker:** Joseph G Crudo B.Sc., F.I.T. – Graduate Student Master of Soil Science

**Supervisor:** Dr. Maja Krzic and Dr. Richard Kazbems (MFLNRO)

**Date:** Friday October 23, 3:00 – 4:00 PST

### Bio:

Joe was born and raised in Vancouver B.C. and completed the B.Sc. in Natural Resource Conservation (Science and Management Major) at UBC in December of 2016 and since January 2017 has been living in northern British Columbia (Fort. St. John) working as a field supervisor for a forestry consultant. He is currently a practicing FIT (forester in training) with the Association on BC Forest Professionals. Joseph is studying soil science under the joint supervision of Dr. Maja Krzic (UBC) and Dr. Richard Kazbems (MFLNRO – Dawson Creek) and will be doing a soil quality analysis on two sites in northeastern B.C. Joseph will however be talking about an interesting technology that he recently assisted in implementing as part of his career as a forester.

### Abstract:

Lidar is a remote sensing technology that is being applied to the practice of forestry in exciting ways! It uses pulses of light which are emitted, bounce off objects, and are regathered by a sensor resulting in a virtual representation or model of the object or area being scanned. Lidar technology is highly applicable to the natural resource sector and particularly to forestry. Traditionally, Lidar technology has been air based i.e. “flown” from a sensor attached to the bottom of an aircraft or more recently, ground based – collected by an individual or vehicle from the ground. However, where things get interesting for forestry is in hybridizing these two systems in order to get a better virtual representation of the stand structure overall. This has huge impacts operationally in terms of planning, efficiency, and ultimately the safety of the crews who are carrying out required fieldwork. It also results in an extremely accurate virtual representation of the land base which can be leveraged across a range of objectives.

