The latest forest mapping and harvest planning technologies were the topic of the day at ForestTECHX in Vancouver Wednesday. The sold out event was packed full of information on the pace of change and how satellite, LiDAR and photogrammetric imagery is changing how we measure and manage our forests. As well as how automated measuring and monitoring systems in harvesters have been proven to lift log grades and outturn. The conference was sponsored by long-time tech transfer specialist John Stulen of Innovatek, New Zealand in partnership with Rob Stanhope’s Logging & Sawmilling Journal. A few highlights follow.

With respect to how forest managers can harness improvements in mobile connectivity and satellite imagery:

- **David Herries** of Interpine Innovation (New Zealand) showed how his company uses readily available and free imagery from EOS.com and Panel.com to look at forest blocks before and after disturbance (e.g., fire or harvesting), in a manner similar to the way we use Google’s Street View today.

- **Philip Reece** of InDro Robotics (Canada) provided the audience with a roadmap to meet Transport Canada’s new regulations for unmanned aerial vehicles and his view of the future of drones (fixed wing and rotary with VTOL—vertical take-off and landing—capability).

- **Mike Sutton** of Forestry Corporation (Australia) spoke of the how his company has successfully integrated drone technology into their forestry operations via four years of trials, testing and training.

On matters related to big data and remote sensing:

- **Cam Brown** of Forsite (Canada) explained how LiDAR gets to the holy grail of inventory information - individual tree attributes. Although it can’t see tree defects or all the small trees, compared to traditional cruising methods the benefits include full tree population measurement allowing for: the stand measurements to be grown into the future; enhanced intel on merchantability and block ROI; and cost and time savings.

- In a passionate presentation, **Dr. Nicholas Coops** of UBC (Associate Dean of Research and Innovation) talked about the research he and his cast of graduate students are working on.
Most notable is early progress on assessing the consistency of LiDAR results on timber types across the country. The objective being universally applicable growth curves. For more on his projects go to AWARE.forestry.ubc.ca (AWARE = Assessment of Wood Attributes from Remote Sensing).

- **Zack Parisa** of SilviaTerra (USA) provided a reality check, given the fire hose of innovation coming at us. Not surprisingly, his talk on how not to waste money with remote sensing focused on incremental benefits (e.g., better inventory and merchandising information) vs. incremental costs (e.g., reduced losses from bad management decisions).

**Focusing on harvest planning tools:**

- **Ian Wilson** of Interpine Innovation (New Zealand), contractor **Ian Reid** of Austimber Harvesting (Australia), Waratah Operations Manager **Jules Larsen** (Australia) and **Juha Kappi**, Trimble Forestry (Finland) provided their perspectives on using harvester head data. Wilson spoke of value-bucking and better data capture add value. Reid provided a contractor’s perspective and how the enhanced data has revolutionized their relationship with the licensee or landowner. Larsen emphasized the struggle between contractors and forest growers and how Waratah’s harvester head data collection provides benefits to both parties. Finally, Kappi spoke of how the information can be used to reduce log inventories significantly, at the roadside and in the mill.

For more information on the event and speakers, please contact the coordinators, Innovatek and Logging & Sawmilling Journal.