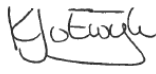



AWARE Quarterly Progress Report Project ID: Q05 Core Site: Ontario Title: How well do existing LiDAR metrics developed in the Eastern Mixedwood Boreal forests transfer to Western Mixedwood Boreal forest types?		Institution: Queen's University Project Supervisor: Paul Treitz HQP Name: Karin van Ewijk (PDF)	
		Committee Members <input type="checkbox"/> See Progress Report Year: ____ Q ____ <input type="checkbox"/> Names: _____	
Report Period Year:2018 x S1 S2 S3 Jan- Apr May-Aug Sep-Dec		Number of Courses Left to Complete NA	
Research Progress During this Reporting Period <ol style="list-style-type: none"> 1. Submitted core metrics manuscript to <i>Rem. Sens. of Environ.</i> On January 16 (in review). 2. Working on a hybrid ITC-ABA approach for species specific diameter distribution modeling using the 2016 multi-spectral ALS data. Continue to develop a two-step segmentation approach depending on canopy layering. Once trees in upper canopy have been identified, they are stored as individual trees and removed from the plot point cloud. A second segmentation approach is then applied on the remaining returns in the plot. Currently a comparison between a watershed and point cloud approach of this second segmentation approach is being tested. This is a collaboration with the remote sensing group at the Swedish University of Agricultural Sciences, Umeå, Sweden. 3. Intensity correction: Still waiting for missing flight line from Optech. 4. Started work on transferability of FRI variable models between the Eastern and Western boreal forest. Received all field and ALS data from both study sites and did some exploratory analysis. Testing the transferability of FRI variable - Lorey's height (LH) - with four statistical approaches to establish a methodology. 5. Submitted abstract to ForestSat conference in October 2018 (Maryland, USA). <p>Presentations Done: - Papers Submitted: Manuscript submitted to RSE on Jan 16 2018.</p>			
Annual General Meetings AGM1 X Attended X Reported results		AGM2 X Attended X Reported results	
		AGM3 <input type="checkbox"/> Attended <input type="checkbox"/> Reported results	
Research Targets for next Reporting Period Continue working on ABA-ITC Diameter distribution modeling approach Continue working on FRI variable (LH, BA, QMDBH, SD, VOL) transferability between Hearst (ON) and Slave Lake (AB). Testing of various modeling approaches and assessing the effects of species composition (and disturbance) on the resulting models.			
HQP Signature: 		Project Supervisor Signature: 	
Date: May 1, 2018		Date: May 5, 2018	

