

## Meeting Minutes for AB Core Site Meeting (Y3M2)

**Date:** 24-Jan-2018

**Chair:** Nicholas Coops

**Minutes:** Curtis Marr

**In attendance:** Chris Bater (AB), Todd Bailey (WF), Joanne White (CFS), Piotr Tompalski (UBC), Paul Treitz (Queens), Denis Cormier (FPI), Nicholas Coops (UBC), and Curtis Marr (UBC).

**Regrets:** Peter Marshall (UBC)

### AWARE Update

ON – Tembec has been taken over by Rayonier. According to Grant, there have been no changes in operations so far, apart from new email addresses for Tembec staff. The spruce budworm work has finished, resulting in a paper that is ready for submission. Rayonier is also interested in DAPs and has provided very high resolution imagery to AWARE researchers at UBC for further analysis.

ON is planning on using single photon (SPL) for wall to wall coverage of the province, primarily to improve the accuracy of the DEM. This is expected to take 8 years to complete and the ministry is putting together a procurement for this. Details of this are still cloudy, but selection of SPL is likely due to cost considerations. Joanne White and Murray Woods are putting in an LOI to evaluate metrics of SPL. There are questions on canopy penetration and a need for benchmarking.

Grant from Rayonier is interested in looking at the accuracy of provincial inventory and submitted an LOI for this. There are two inventories in Hearst and these may be useful for comparison purposes.

NB – New Brunswick has been quiet lately, due to the loss of Daniel Arsenault. In addition, the CFS cross country roundup has not been announced this year and there has been no confirmation of its continuation from Vincent Roy. Work is still ongoing, primarily with Benoit's group in species ID, as UNB projects are beginning to wrap up.

NL – Richard continues his work in Newfoundland. A student has been recruited at UBC for Q18 and work has started on this research question. Jeff is also working on Q9 in NL. Richard's PhD student for Q20 backed out. Q20 may need to be reallocated instead of going through another lengthy recruitment process. One possibility is to shift some of the objectives to Bastien Vandendaele, who is working on Q24 but has recently lost funding from Belgium for the second half of his project.

### AB Projects

Q07 – Chris Mulverhill modelled stem size distributions using ALS data from 2007 as the T1 measurement. Chris M led a manuscript based on this work but it was found to be not ready for publication, with misgivings identified related to the selected and applied methods. Based on comments from the reviewer, Chris M has gone back and developed a new approach and is currently completing this work. Chris M wants to convert to a PhD and proposes to use ground based photogrammetry to build a photographic point cloud. The new cameras, made by Ricoh, are very fast to use and this technology has some potential for future applications.

This research is of strong interest to WF and Todd indicated the possibility of sending WF staff during data collection for destructive sampling.

Q12 – Joe continues to work on growth but disturbance has added complexity to the modelling. Due to slow growth and negative volume growth (fire, mortality, etc.) there are high levels of noise. Better results come from height increments rather than volume increments.

A second paper for this topic is being worked on. This will need to have a field season for verification of growth increment.

Q13 – Piotr is finished with the project, has submitted a paper and is waiting for reviewer comments. The next step is to build a model using ALS for T1 and DAP for T2 and comparing these results with GYPSY.

Q5 – Karin is just starting work on this research. With a goal of comparing ON and AB boreal forests, there is data in Hearst and Slave Lake that can be used. Outside these two forests, Todd suggested that Whitecourt and a new acquisition, Manning, may be suitable candidates.

### **FRIAA proposal and 2018 Field Season**

FRIAA funding has been confirmed by Todd and it is in processing. This funding will go towards field work in 2018. The field work will be useful for all AB research questions.

### **AGM**

The next AGM will be held in Montreal from June 5-7<sup>th</sup>, 2018. The first two days will be similar to previous technical sessions. The last day will be open to non-AWARE participants and will feature the research that has been done at AWARE since the start of the project. Registration will open in two or three weeks.

### **fRI Remote Sensing Workshop**

fRI just received funding for a remote sensing workshop. This is to be held in Edmonton near the end of October. Chris Bater would like to have AWARE conduct a LiDAR workshop at this event and has offered to charge fees to cover the costs of travel. He would also like to get AWARE to be a keynote at this workshop. Topics of the workshop likely will include forest inventory, forest health and fire.

### **Action Items**

- 1) Todd – determine whether there is support for destructive sampling for this field season.
- 2) Curtis – open registration for AGM 2018.
- 3) Nicholas – invite Chris Bater's colleague to 2018 field data collection with Ricoh cameras.