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THE UNIVERSITY
OF BRITISH COLUMBIA
Faculty of Forestry



NOTES FROM THE FIELD

SISCO Fall Field Tour

‘Moving at the speed of trust’:
Wildfire risk reduction through silviculture

Oct 1-2, 2024 Pemberton, BC



Left to right: Hsiao-Chi (Kiki) Lo, Natalie MacMillan, Rachel Pekelney, Hanno Southam, Sadie Heartman, Sarah Smith-Tripp, Mike Stefanuk



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The Faculty of Forestry at UBC supports graduate students in completing high-quality research through connections with forest practitioners. UBC supported five master's and doctoral students to attend the 2024 SISCO fall field tour near Pemberton BC in Lil'wat territory. These are their reflections.

Mike Stefanuk, PhD candidate, Tree-Ring Lab

Rachel Pekelney, MSc student, Tree-Ring Lab and Forest Biometrics Lab

Hsiao-Chi (Kiki) Lo, MSc student, Forest Biometrics Lab

Hanno Southam, MSc student, Hamelin (Forest Pathology) Lab

Natalie MacMillan, MSc student, Forest Biometrics Lab

Back-to-back record-breaking wildfire seasons are bringing fire to the forefront of forest management in BC. Silvicultural 'fuels treatments' – the removal of burnable fuels by hand, machinery, or prescribed fire – are a tactic that communities in BC are adopting to reduce wildfire risk. The idea of 'thinning the forest' to reduce wildfire risk is not new, but the area that has been treated across BC does not meet the scale of community wildfire risk. Lessons remain to be learned about how to tailor prescriptions to meet local needs.

The goal of the 2024 SISCO field tour was to explore the integration of wildfire risk mitigation and forest management in forests adjacent to communities. Practitioners from across the southern interior came together on the field tour to visit three sites: a recent (2024) partial harvest on Lil'wat reserve lands, a set of thinning treatments (2017) in the Cheakamus Community Forest, and an older set of thinning and prescribed fire treatments (2001) near Haylmore and the N'Quatqua band reserve.

Lessons Learned

Visiting a variety of old and new wildfire risk reduction treatments provided a unique opportunity to compare past and present practices. The older Haylmore treatments showed that in a coastal-interior transition zone, a combination of thinning and prescribed burning created an open forest structure with wildfire resistant characteristics that have persisted for 20 years. Bruce Blackwell, who was on the team that wrote the prescription for the Haylmore treatments, emphasized viewing these treatments both for their successes and as a case study for planning maintenance treatments, which will be needed in the coming years.



Commercial thinning treatment completed in 2015.

While the Halymore treatments provided a proof-of-concept, other speakers emphasized that we must consider local contexts and goals instead of copy-pasting old prescriptions into new settings. For example, a common principle of fuel treatments is to preserve fire tolerant tree species. However, in addition to retaining fire tolerant species like Douglas-fir in the Mount Currie partial cutting block, Lil'wat Forestry Ventures chose to retain western red cedar – a thin-barked fire-intolerant species – for its cultural significance. In this instance, the local cultural value of cedar directly informed prescription decisions.

Treatments at Cheakamus and Mount Currie met their objectives and sparked other important questions. Was stand density reduced enough to actually decrease wildfire risk? How can we facilitate the return of berry bushes and other food and medicine plants? What do we want these forests to look like in the long term? These questions capture some of the diverse values in BC's forests. Research across the UBC Faculty of Forestry, including some of our graduate research, seeks to address these questions. What we heard from forest managers on the field tour was the importance of a "learn as you go approach," which will be key as we continue to build a knowledge base for this type of silviculture.

A common theme between treatments was the importance of fostering the social license to do proactive forest management. Trust in both the N'Quatqua and Lil'wat cases required time to develop and was built upon individual relationships between forest managers and community members. Likewise in Whistler, successful treatment implementation hinged on residents' cooperation with the community forest. When reflecting on the Lil'wat reserve treatment process, Dr. Tonya Smith said that such efforts "move at the speed of trust".



Dr. Lori Daniels moderating a lively discussion!

Future Steps

The threat that wildfire poses to BC's communities is immense, and buy-in for careful silviculture as a method of community wildfire protection is growing. So, what then are the next steps to expand this practice? Scaling up was a frequent discussion topic on the field tour. Provincial regulations – e.g., permitting, stocking standards, and stumpage – and funding limitations restrict foresters from writing creative prescriptions that consider wildfire and other non-timber values. These systemic barriers should undoubtedly change. But if these practices are going to work at scale, trust needs to be built in tandem. Despite these barriers, there was a solid consensus in the conversations we heard at SISCO that BC needs treatments that respond to diverse priorities.

We suggest reframing the question of scale. Rather than asking “how can we take prescriptions like the ones we are seeing and scale them up?”, we should instead ask “**how can we connect quality relationships and treatment efforts across BC to meet local needs?**”.

Our biggest takeaway from the SISCO field tour was that it takes strong relationships between individuals in communities to implement high-quality, multi-value silvicultural treatments. Expanding the use of silviculture for wildfire risk reduction will require relationship building between communities, especially First Nations, and forest managers. We left the SISCO field tour feeling inspired to put trust at the forefront of our future practice. The SISCO field tour offered us a fantastic chance to see cutting-edge silviculture first hand and connect with the practitioners translating research into practice.



Partial cutting for ecosystem restoration completed in 2001.



Jordan Gabriel and Simon Craig describing the recent fuel treatment completed in 2024.

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If your Community Forest would like to be included in the next “Notes From The Field” series, please reach out to:

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