



THE LABORATORY OF TREE-RING RESEARCH

presents a talk by

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*Drought in the rainforest? A shifting perspective on
water scarcity in coastal British Columbia from
tree-ring records*

Friday, September 4, 2015 - 12:00pm to 1:00pm

Room: Bannister 110

Summer streamflow droughts on British Columbia's rainforest coast have worsened dramatically over the last two decades, impacting human and ecological water supply. This region's unique hydroclimatology means that the "wettest part of Canada" is often the most water-scarce during summer, when demand is highest. The perception of being water-rich consistently undermines water conservation efforts in this densely populated area.

We developed stream-specific and regional-scale dendrohydrological records for a suite of watersheds to evaluate worst-case scenario natural droughts in the coastal region. The absence of moisture-limited trees, and the small sizes of the catchment areas, present particular challenges for dendrohydrological modeling. We found that combining winter snow and summer drought sensitive proxies as model predictors can optimize tree ring-based reconstructions in small watersheds in temperate environments. Our findings suggest worst-case scenario natural droughts are seriously underestimated by water managers.