

Margaret E. K. Evans

Using tree rings to anticipate and manage the effects of climate change on forests

Friday, April 28, 2017 - 12:00pm to 1:00pm Room: Bannister 110

Tree-ring Talk by Candidate for Ltrr Faculty Position

Tree-ring data can help resolve the scientific uncertainty surrounding the future behavior of forests and their contribution to the earth's carbon cycle. I describe work in my lab

- 1. using tree-ring data to forecast future tree growth given projections of future climate,
- 2. building an unbiased tree-ring data network throughout the interior western United States, and
- 3. assimilating tree-ring and forest inventory data together to inform models of tree growth and forest dynamics.

I emphasize the need to use tree-ring data carefully: to account for nonlinearities in tree response to climate, evaluate bias created by sampling practices, and examine climate responses in the context of multiple influences on tree growth. Used carefully and assimilated with other data streams, tree-ring data can generate information and tools to anticipate and manage the effects of climate change on forests, from the local to the continental and global scale.

