

COMBINING ECOLOGICAL FORESTRY AND INDIGENOUS KNOWLEDGES TO ADAPT FORESTRY TECHNIQUES TO A CHANGING PNW CLIMATE

Session: In-Person

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Climate change is threatening PNW forests with drought, wildfire, pests, and disease. Many people in the PNW rely on forests for cultural, economic, and recreation purposes. Indigenous knowledges help us understand forests at the ecosystem scale which advances the goal of ecological forestry, making forests more resilient to climate change. The aim of this study was to evaluate whether Western and Indigenous forestry techniques can work together to adapt forestry to a changing climate. In my internship, I collected snowpack data from an experimental forest for Northwest Natural Resource Group to find out if patch cuts are an effective drought management technique. Because patch cuts essentially mimic the outcomes of Indigenous fire management, I also interviewed tribal and non-tribal foresters to find out how Indigenous knowledges can be combined with Western forestry science.

Ecological forestry techniques like patch cuts are effective at adapting forests to climate change. These types of techniques are “rediscovered” practices that Indigenous people have been using since time immemorial. Recognizing the value of Indigenous knowledges can give insights into ecosystem management, help adapt forests to climate change, and improve tribal wellbeing. Adapting forests to climate change allow them to continue existing for future cultural uses, economic extraction, recreational purposes, and as carbon sinks. Involving Indigenous people in management decisions and recognizing the usefulness of traditional place-based knowledges to these decisions increases tribal wellbeing by acknowledging the role Indigenous people have played in shaping our landscapes, promotes collaborative management, and builds reciprocal relationships that honor Indigenous sovereignty, rights, and sacred knowledges.