
EXECUTIVE SUMMARY

CLIMATE CHANGE AND IDAHO FAMILY FOREST LANDOWNERS: A NEEDS ASSESSMENT

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INTRODUCTION

Family forest landowners control 12% (nearly 2 million acres) of Idaho forests. Family forests are critical to timber, water, wildlife, and many other shared values. To make sure new research and extension programming related to climate change and Idaho forests is as useful as possible for family forest owners, we conducted a needs assessment to determine Idaho family forest owners' related perceptions and educational needs. This effort was part of a larger study of family forest owners in Idaho, Oregon, Washington and Alaska that was funded with support from the US Forest Service PNW Research Station.

Idaho family forest landowner needs were assessed through a series of focus group discussions held in six northern Idaho locations from December, 2009 through January, 2010. Each focus group consisted of eight to ten family forest landowners who were recruited by local UI Extension faculty and staff. Each session was videotaped with participants' consent. Recordings were transcribed verbatim then analyzed using computer assisted qualitative data analysis software.

RESULTS AND EXTENSION IMPLICATIONS

Themes that emerged from focus group analysis and some implications for UI Extension programming related to climate change for forest owners are listed below:

Information Sources. Participants cited many sources of climate change information. Some individuals sought out in-depth climate change information, but most commented on the general flow of climate change information they received passively through the media. Participants consistently expressed concern related to how much the research or the presentation of it was being driven by politics, money, ideology, or some combination of these.

Personal Observations. Discussions about climate change often referenced personal observations, including current weather, climate over the course of their lives, historical records, and conversations with long-time residents. Some participants did not discern a clear climate trend, especially considering broad weather fluctuations and cycles common to their region.

Skepticism. Participants' expressed mixed views on climate change, but skepticism was common. Many participants acknowledged that climate was changing and that carbon dioxide levels were increasing.

But many also questioned the extent to which climate changes were being driven by natural cycles or processes (e.g. volcanoes or sun activity) versus human activity. Some skepticism emanated from a view that humans aren't able to significantly alter the planet's climate. Conversely, some participants indicated human activity has grown so large we must be influencing the planet's climate.

Climate Science. Most of the groups discussed critically assessing research related to climate change. Some participants believed some scientists were skewing research results to get grant funding. Others expressed trust for scientists generally. Some participants also critiqued the role modeling plays in climate science.

Local Information. Participants consistently emphasized the need for local climate change information, including effects on temperature, precipitation, forest conditions, hydrological cycles, springs, fire, insects, disease, and invasive species. Several participants wanted to see comparisons of future projections to baseline data for past local climate and weather, to see if projections fall within the historic range of variation.

Climate Change Effects on Forests. Participants discussed a range of issues regarding how climate change might affect their forests. North central Idaho participants often spoke about the future becoming warmer and drier. Some participants believed more Co₂, local warming, or more moisture could benefit their forests. Several participants believed climate change would be slow, giving them time to react.

Adaptation Strategies. Most participants were not currently managing their forests differently in anticipation of climate change. Many indicated they didn't have enough solid information to significantly change their management. Managing for a healthy, resilient, diverse, less-dense forest was often considered the best strategy regardless of what climate change might bring. Some north central Idaho participants indicated the best strategy was managing for the most difficult periods their sites had seen in the past. Some participants also mentioned experimentation with non locally-native species. Most participants discussed climate change and possible strategies in relation to ongoing forest management activities, rather than taking action primarily on the basis of climate change projections. Structuring extension programming in this manner (e.g., integrate climate change information into existing programs on thinning or insects and disease) may make sense as well.

Prescription Alternatives. Some participants wanted prescriptive forest management alternatives for different types of sites and stands, keyed to best, middle, and worst-case climate change projections and related political or market forces. Some participants also wanted information on different species or seed sources to consider planting.

Mitigation Strategies. Some participants were concerned climate change mitigation efforts could cause economic hardship, both to larger society and to forest owners specifically if they had to adjust to new regulations related to climate change. Participants were simultaneously interested and suspicious about carbon markets. Several landowners were positive about being rewarded for carbon sequestration and other benefits they were currently providing without financial compensation. But many were also concerned about landowners' hands being tied by participation in carbon markets. Some participants

expressed pride in what forest owners were already doing voluntarily to mitigate climate change and indicated they would welcome more information about forest carbon management.

Regulations. Several participants indicated they would be looking at regulatory changes more than climate change effects per se'. Some participants wanted to learn about potential regulations related to climate change, whether they are government regulations or the fine print associated with carbon markets. Programming that enables forest owners to anticipate new state or federal regulations would be highly valued. Training that helps forest owners participate in development of such regulations or incentive programs may be also appropriate.

Economics. Participants in several groups emphasized integrating economics into climate change responses. Programs that help forest owners assess new markets that develop in relation to climate change (carbon credits, biomass fuels, etc.) would be welcome. Such programming should emphasize key questions and language forest owners should understand before participating in such markets.

Future Generations. Participants commonly considered how their actions were going to affect future generations. Some participants were also concerned whether the next generation of forest owners would share their knowledge, attitudes, and interests regarding the forest.

Educational Format. There wasn't a clear preference or any one kind of educational format. While many participants saw things inevitably drifting to electronic media, many confessed preference for reading printed materials over reading from a screen. To this end, online material should be "printable". Peer to peer learning was also cited as a valuable component of extension programming, in part because it reduces the risk for an extension educator to be seen as a condescending expert.

Citizen Science. Some participants were interested in helping to generate data on climate, weather and adaptation strategies for it, including hosting provenance trials for non-native species and seed sources. Enlisting forest owners in efforts to assess local climate change could engage their natural learning through observation and provide meaningful data to others. Establishing provenance tests could simultaneously provide long-term data on different species' and seed sources' adaptability to evolving climates, enfranchise forest owners in climate science, and provide sites that could be visited in future field programs that include the suitability of different genetic sources to evolving local climate.

CONCLUSION

While there were varying degrees of skepticism about climate science, there was consistent interest in learning more about it, to the extent participants could trust the information was not unduly influenced by political or economic agendas. Many participants wanted UI Extension to act as a screen or referee of climate science information for forest owners. An alternative or companion response could be to give forest owners better tools to assess the quality of climate change information. Because of the perception of politics, money, and ideology many forest owners associate with climate change discussions, extension programming should strive to make climate science as transparent and accessible as possible. Extension curricula that increases literacy on modeling could also help this and benefit other extension program areas using science that is increasingly includes modeling.

Information from these focus groups will be used to adjust existing programming to include climate change as needed and to develop new extension curricula on climate change. Curricula may be standalone or it may be developed or added to as part of ongoing existing efforts such as the eXtension Climate, Forests, & Woodlands Community of Practice.