

Climate Change Perceptions of Southern Foresters: Preliminary Survey Results

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Professional foresters in the southeastern United States are an important stakeholder group for PINEMAP. This group, comprised of professionally trained individuals from private industry, consulting firms, public agencies, universities, and nonprofits will need to provide several critical services if PINEMAP is to accomplish its goals and objectives. Many professional foresters are in the business of serving private family forest owners. They provide oversight in the development of management plans, recommend and oversee implementation of preferred silvicultural practices, and initiate several other practices on behalf of the landowner. There is currently little to no information available regarding the receptivity of foresters to climate change (CC) concepts and their willingness to implement 'climate-smart' forest management strategies.

Methods

A team of professionals from the Extension AIM group (Aim 6) developed an online survey for professional foresters in the South. Recent surveys such as PINEMAP's Southeast Extension Professional's Climate Change Perceptions survey (Wojcik et al., in review) and a survey of farmers conducted through the 25x'25 Alliance (Fink, 2012) were reviewed to ensure consistency of questions and format. Twenty-four questions on observations, perceptions, beliefs, and continuing education needs were included in the survey in areas related to changing climatic conditions, weather, and resilient forest management strategies. Eight questions were used to collect demographic information. Most of the questions used Likert scales with open-ended options to offer participants an opportunity to provide additional information. The Tailored Design Method (Dillman, 2009) was utilized to ensure proper implementation of the Internet survey. A comprehensive working database of about 6,700 professionally trained foresters from 13 southern states was developed through Internet searches and direct contacts. The survey, which was conducted January through March 2013, was sent to all individuals in this database.

Preliminary Results

More than 1,700 foresters completed the survey by the end of the survey period (27% response rate). A few key preliminary results include the following:

- 30% of respondents believe that there is not sufficient evidence to say that climate is changing; 46% agree that CC is occurring but attribute it to unknown or mostly natural causes; and 16% agree climate is changing and caused by humans (Figure 1).
- 60% of respondents feel 'somewhat' to 'very knowledgeable' about climate and CC, and 65% are 'somewhat' to 'very interested' in learning more.
- Only 25% of respondents responded that their clients have asked about CC.
- 45% of respondents think that changes in forest management strategies are necessary to respond to climate uncertainty.
- Respondents' acceptance or doubt of anthropomorphic (human-caused) CC was a highly significant predictor of personal CC observations, concern about forestry impacts, and perceived needs for adaptive management strategies.

Potential Application of Findings

Results from this survey will be used to work with forestry stakeholders on a variety of levels, including continuing education and material development. It is evident from the results that many foresters are interested in educational programs that would help them increase forest resiliency on their client's properties. Results from this survey will help frame Aim 6's approach to generating and implementing better educational programs.

References

Wojcik, D.J., M.C. Monroe, D.C. Adams, and R.R. Plate. Message in a bottleneck?: Attitudes and perceptions of climate change in the U.S. Cooperative Extension Service. *Climatic Change*, in review.

Dillman, D., J.D. Smyth, and L.M. Christian. 2009. *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method, Third Edition*. John Wiley and Sons, Inc. Hoboken, NJ.

Foresters Perceptions of Climate Change (CC) by Percent of Population

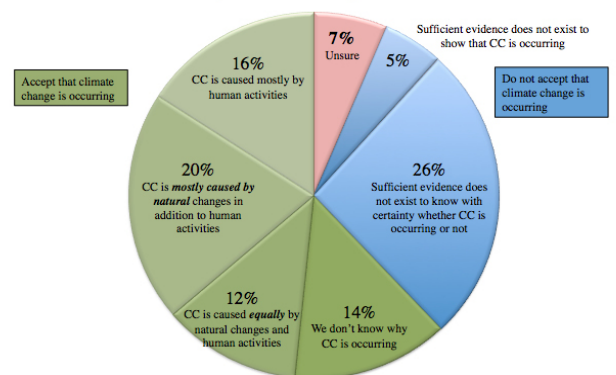


Figure 1. Foresters selected the statement that best reflected their views on climate change. About 62% agree that the climate is changing but have different notions about its cause, and only 16% think that it is mostly human-induced. 31% of foresters do not think that the climate is changing or that there is enough evidence to know with certainty.

This handout accompanies a presentation given at the 2013 PINEMAP Annual Meeting. For more information, visit the project web site: <http://www.pinemap.org>.