

Climate Change Perceptions of Florida Forest Landowners

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Introduction

Climate variability and change have the potential to alter ecosystem health and productivity in Florida. While farmers have been greatly assisted by the Southeastern Climate Consortium and Florida Climate Institute, forest landowners have had fewer resources. Extension can help forest landowners: 1) manage a crop that will grow through whatever climate changes might occur, and 2) sequester carbon in considerable quantities, reducing atmospheric carbon. **The goal of this project is to identify programmatic strategies to enhance the ability of non-industrial forest landowners in Florida to adapt to changes in climate.**



“If you’re worried about writing a check and balancing your checkbook for this year, it’s kind of hard to prepare for something that might happen 10 or 20 years down the road.”

—Madison County Forest Landowner

“When it’s dry like now, we’re very, very careful not to let a fire get out. Because that could just totally wipe us out.”

—Madison County Forest Landowner

“What would be major causes of climate change, and what do they visualize as climate change? What does that really mean?”

—Leon County Forest Landowner

Literature

This goal is challenging because:

1. Public perceptions of climate change vary and are influenced by politics and emotion. For example, a quarter of respondents to the Six Americas survey said that the issue of global warming made them feel “depressed” or “guilty” (Leiserowitz et al., 2010).
2. Most climate science communication comes from scientists, who are not trained to communicate with the general public. Somerville and Hassol (2011) state that, “It is urgent that climate scientists improve the ways they convey their findings to a poorly informed and often indifferent public” (48).
3. The issue of climate change is rife with misconceptions, such as confusion about weather and climate, especially with regard to record snowstorms in recent years.
4. Forest landowners have limited options for adaptively managing trees.
5. Climate change is perceived to be a distant, future problem, and not something that will affect “me or my family.” For most Americans it is not a concrete or relevant problem and is therefore a low priority (Leiserowitz, 2006).
6. Empowering people to action often requires relevant information that creates understanding, building efficacy, and establishing options for action taking (Kaplan and Kaplan 2009). When information is offered in a group context, social learning may change community norms (Wals et al., 2009).

A series of focus groups with family forest landowners in the Pacific Northwest found that the most common themes were uncertainty, complexity, and skepticism. Most landowners were confused by the science behind climate change, because the complex climate models made it difficult for them (Creighton et al., 2011).

Methods

We conducted two focus groups to identify what type and focus of Extension program forest landowners would find useful and empowering. They were held in Leon and Madison Counties with 10 participants. Three researchers helped facilitate the discussions and asked a series of questions to understand each forest landowner’s situation before exploring their concerns about climate (see Box 1).

The Focus Groups

These focus groups yielded interesting results about what participants would like to know about climate change to develop a relevant climate-related program in these counties. In each county, different types of participants were in attendance. In Madison County, participants were large forest landowners working solely in timber and pulp production, with some supplementing timber income with an off-farm job. In Leon County, all participants were small forest landowners; some were uninvolved in the management of their land.



1. Tell us about your forest . . .
 - a. How many acres?
 - b. How many acres are planted, how much is natural (old-growth or natural regeneration)?
2. People have been talking about and reporting on odd weather, unusual droughts, rainstorms, etc., and attributing this to “climate variability.” What have you observed on your land?
 - a. What kind of questions do you have about climate variability?
3. How do you think climate variability may or may not impact your forest?
 - a. What would you like to know about this?
4. Are you aware of management changes that you might implement to protect you/your forest from potential future climate variability?
 - a. Would you like to know more?
5. There’s a lot of information out there—how do you decide what to believe about climate?
6. Where do you get most of your information about climate change?
7. Extension plans to develop information for forest landowners on climate change. In what form would you like to get this information?
8. Do you have any further questions?

Box 1. Questioning Route for Focus Groups

Results

Large forest landowners seemed to be most concerned with breaking even or perhaps making a profit; understanding climate change was not important enough. Drought, rainfall at planting time, and the price of pulpwood were on their minds. They were interested in learning about:

- Finances, decreasing costs, and increasing income from pine plantations, such as biomass energy or conservation easements
- Insect management,
- Climate forecasts, especially wet and/or drought periods, and
- Species and varieties of pine to plant for future climate,
- Management techniques for drought stress and prolonged drought.

These landowners trust the information that comes out of the University of Florida (UF) Extension and the Water Management Districts.

Small forest landowners were less involved in management, less concerned about generating income, and less aware of Extension materials. They were curious about:

- The major causes of climate change,
- What “climate change” really means,
- The source of weird weather phenomena,
- Population and climate change,
- Fossil fuels, carbon and climate change.

Conclusion

A forest landowner climate program should ideally include:

- Basic information about climate and climate change,
- Management information about strategies for accommodating drought and insect pests without high costs, and that enable landowners to wait until prices rise to sell their wood, and
- Practical and relevant information that can be applied to their situations.

The information should be delivered in a format that enables people to ask questions, hear new ideas, and feel respected. They want to learn, but are not interested in being overwhelmed with irrelevant data.

Next Steps

Based on the results from these focus groups, we are developing a multi-county extension program combining a presentation by the state climatologist and a question and answer session with a panel of forest researchers and managers. Because of the diversity and number of questions that small and large landowners had, this question and answer discussion format should help set them at ease and enable them to ask what they wish to know.

Lessons from other peer-to-peer forest landowner programs and learning communities with row crop farmers may help us create and sustain an effective climate change education program with Florida forest landowners.

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