

Women's Perceptions of Forest Management and Climate Change in the Eastern US

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Introduction

Women have the potential to contribute to climate change solutions through forest management. However, historical gender discrimination has led to male-dominated ownership of forestland in the United States.

Many women eventually come into ownership by inheriting the land or purchasing land on their own. However, most are unprepared for engaging in land, farm and forest management.

Barriers to women in forestry is expected to further contribute to gender inequality and climate change. Research is needed to better understand the role women may have in supporting forests and climate change solutions in the US (Butler et al. 2007).



Figure 1: Women in Pennsylvania learning how to measure the height of a tree using a Biltmore stick.

Research Approach

Sociological Framework: Community Identity and Response to Threats (Dalby et al. 1997)

Questions:

- Which values about forests do women share?
- What do women risk losing by not being engaged forest owners?
- What are the barriers to women taking action in this space?

Data Collection and Analysis

Data Collection

- 19 nominations were solicited through the Women Owning Woodlands (WOW) network in Pennsylvania and South Carolina.
- 12 volunteers were selected to represent women forest owners and community leaders.
- Semi-structured questions were used in one hour interviews on zoom.
- A total of 72,551 words were transcribed from 12 hours of recorded interviews.



Figure 2: Request for nominations from community leaders associated with Women Owning Woodlands.

Data Analysis

- Line by line coding of key words and phrases were conducted using NVivo software
- Codes were further constructed into themes and sub-themes associated with the theoretical framework.

Conclusions

- Women see forests as interconnected systems important for people and nature.
- Women appear divided as to the level of the threat climate change may have on forests.
- Outreach and education should focus on (1) helping women connect their values to climate change mitigation/adaptation efforts and (2) empower women to take action as forest stewards.

Preliminary Findings

What Women Value

- Biodiversity
- Ecosystem Services
- Family bonding
- Recreation/being outside

"I value tremendous diversity of life in the forest."

"The major forest value for me is the sense of peace and quiet that I get from walking the trails in my woods and just being outside and smelling all the smells and hearing all the sounds and seeing all the colors."

"I feel like trees are the lifeblood of this earth because they are sequestering carbon, they are producing oxygen, they are creating habitat for critters that sustain an entire food web."

"I value family bonding. When we have our family picnics, or when we bring our grandchildren for hunting. I think most women are into that nurturing thing."

I haven't really thought about how to protect my own trees from whatever happens in climate.

"We've heard a lot about bio char and it's something that I'm really interested in."

Climate Change Perceptions

- Not a tangible issue
- Climate change could be part of forest management

"Strategies would include maintaining a consistently healthy overstory and more of an uneven age management strategy and so that I have desirable region coming up through the understory and maintaining an overstory depending on my species composition."

"We are very slow to harvest."

Climate Change Impacts

- Emotional distress
- No change in lifestyle
- Passive acceptance
- Concern for future generations

"I think it would be a sadness for my children and my grandchildren that are not even here yet that they wouldn't have had the opportunity to experience a park or something."

"We would just probably accept the fact that the earth heals itself and eventually those little seedlings would start popping up again."

"It would make us sad."

"And it would not affect our lives per say."

"Tools and equipment certainly takes capital. We didn't have a whole lot of capital to buy any equipment to take care of the land. It's a challenge."

"I think finding some trusted advisors in the forestry community that you can call, and they can come out, take a look and can give you advice or guidance that you really understand and have that relationship with, is very challenging."

Challenges for Women

- Knowledge barriers
- Language barriers
- Lack of capital
- Lack of trust

"The language with federal and state assistance programs can be pretty overwhelming for people like us, who has never participated in those before."

"I definitely think that acquiring knowledge at first was a huge challenge because it was very overwhelming to own a forest and even know where to start and what to do first."