William R. Love Anderegg

Graduate Institution: Stanford University Graduate Discipline: Ecosystem Ecology Hometown: Cortez, CO

Relevant SC Research: Biological and Environmental Research



Research Interest:

My research focuses around two central themes:

1. What is the future of forests in the western United States? Massive mortality events of many tree species in the last decade prompt concerns that drought, insects, and wildfire may devastate western forests in the coming decades. I study how drought and climate change directly affect trembling aspen trees in the Rocky Mountains and what the future climate holds for the emblematic tree of the American West. This project aims to inform carbon-cycle and vegetation models to help inform how the biosphere might respond to climate change in coming decades, and the role of forests as carbon sinks in future climates.

2. How do we communicate climate science to the public and policy-makers? Communicating expert consensus and scientific understanding, even with inherent uncertainties, is critical to addressing climate change. Recently, I've explored the dynamics of expert agreement in communicating the state of climate science.

About Me:

I intend to finish my doctoral graduate research at Stanford University. I hope to do post-doctoral research on large-scale ecosystem modeling based on robust understanding of plant physiology to better project ecosystem impacts with climate change. After this, I intend to work towards becoming a professor in intersection between biology and earth sciences, looking at the interactions between the eocsystems and climate change.

I feel strongly that academics must make a concerted effort to engage with real-world problem-solving and develop relationships that transcend disciplines and academic boundaries. Both in my writing and outreach efforts, I have already started down this path and consider this to be an important professional and personal interest. I have written several popular science pieces about my research on aspen decline and expert perspective in climate science.

Furthermore, I think that education and service to one's community are equally important as communication and have been teaching both in my hometown area in Colorado and in California.

My personal interests include many outdoor activities, such as backpacking, fishing, hunting, hiking and spending time with my family in the Colorado wilderness, and creative writing.

