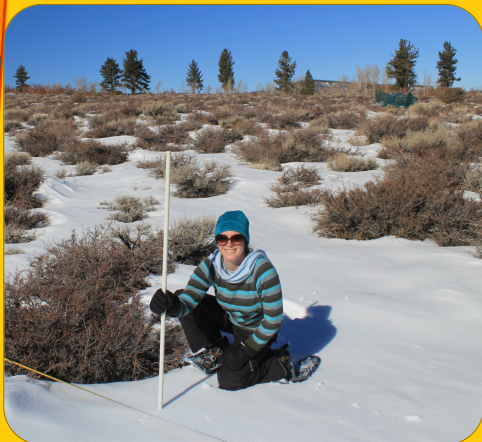


...PRESENTS: **CATHERINE WADE**
 WHS SCIENTIST IN RESIDENCE, 2013-2015

Some stuff about me:

- **Age:** 30
- **Where I grew up:** Bethesda, Maryland
- **High School:** Walt Whitman High School
- **Favorite subjects in high school:** Art History, Calculus, Spanish
- **College (undergraduate):** University of Maryland
- **Some of my favorite things:** Running, hiking, biking, playing tennis, gardening, cooking and eating delicious food, and hanging out with family and friends
- **Something weird about me:** I can only hear in one ear!
- **What I think or do when I get frustrated:** I remind myself to keep a positive attitude, and then I put on some great music and go for a jog along the ocean!



Here I am measuring snow depth!



During the winter, I use snow fences to increase and decrease snow depth and I do watering experiments in the spring.



Measuring photosynthesis!

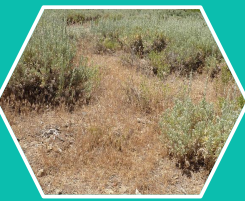
Cheatgrass (*Bromus tectorum*)



Sagebrush steppe invaded by cheatgrass (a.k.a. where I spend lots of time)



Cheatgrass can change an ecosystem from this...



...to this! Yikes!

What I study

My research examines the effects of climate change on the spread of a flammable non-native grass species in a sagebrush steppe ecosystem. Cheatgrass (*Bromus tectorum*) is one of the most widespread invasive plant species in the western U.S. It is especially harmful to ecosystems because it fills in bare ground between shrubs, completes its life cycle much earlier than native vegetation, and then dies and dries out to become extremely flammable by early summer. This causes a positive feedback loop where fires become too frequent for native species to survive, allowing cheatgrass to take over and keep increasing fire hazards. Cheatgrass is expanding into higher elevations, where climate change is likely to influence its future spread and impacts. I am studying how the amount and timing of snow and rain affect cheatgrass and native plants to better understand possible future impacts and provide a scientific basis for management strategies. Read more here: <http://people.ucsc.edu/~cwade>

Getting hands-on research experience inspired me to get into environmental science. I am excited to work, learn, and have fun with the teachers and students at Watsonville High School this year!



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<http://scwibles.ucsc.edu>