

It's hard to believe that it's been three years since we all sat together learning about Open Top Chambers (OTC) and phenology. The APPLES team is in the process of updating the APPLES webpage and we want to include your experience.

The attached journal template that highlights the 2018 West Coast Apples Workshop has been shared with you as a starting point for your APPLES Google Doc Story. Posts from the Forum and Photo Journal have been copied and pasted into your story. Feel free to edit and add information as you like.

Please update the document by adding additional pictures, links to sample lessons, and information that will enhance your story of the APPLES experience and classroom implementation. Your Bio and the most recent story should appear at the top of the document.

To help others see the incredible work that you do as a teacher this document has been linked to your name on the APPLES webpage. Since it is viewable by the public on the Internet, please comply with federal and school guidelines for posting pictures of students and others. We look forward to updates of your incredible APPLES story!

Please let us know if you have collaborated with a colleague at your school on the APPLES concept. We would be happy to

reach out to them, and offer them support to continue engaging their students in phenology based projects.

If you have questions or need help please contact Cinda Murray  
[cmurray@nwsd.org](mailto:cmurray@nwsd.org)



## Who I Am...

**[Your Name Here]** is a XX

grade teacher at XX school in XX town...

Be creative and write a synopsis of who you are!

Possible information may include your favorite subjects, how you became interested in climate change research, awards you've received, how long you've been teaching, etc.

## What Is APPLES?

APPLES stands for Arctic Plant Phenology--Learning Through Engaged Science, but what does that really mean? APPLES prepares educators to use polar research to engage their students in similar studies in the classroom. Educators in this project will have access to, contribute to, and disseminate information from the long-term and ongoing research project which focuses on changes in the phenology of arctic plants and how this relates to climate change. APPLES will demonstrate, through training, the results obtained by phenological observation and experimentation.



## June 2018

My APPLES story began with the 2018 Workshop at UC Davis. At the workshop Eric Post introduced us to his phenology work in Greenland and Heidi Steltzer overviewed her mountainside snow melt studies. Throughout the week I was immersed in the lectures from experts and gained new ideas for bringing hands on, authentic learning experiences back to my classroom. Kathy Hill detailed Modeling Authentic Science, Technology, and Engineering Research as the MASTER model for scientific research. We experienced several field activities and learned how to set up and use time-lapse cameras.

I'm looking forward to future collaborations with my peers and the incredible APPLES Team.  
From the APPLES Photo Journal

## June 2018 West Coast APPLES Workshop

**We had a great time at West Coast APPLES! Here are some highlights from the week.**

[2018 West Coast APPLES Workshop SlideShow](#)





West Coast APPLES Workshop Group Photo





UC Davis campus



West Coast APPLES June 2018



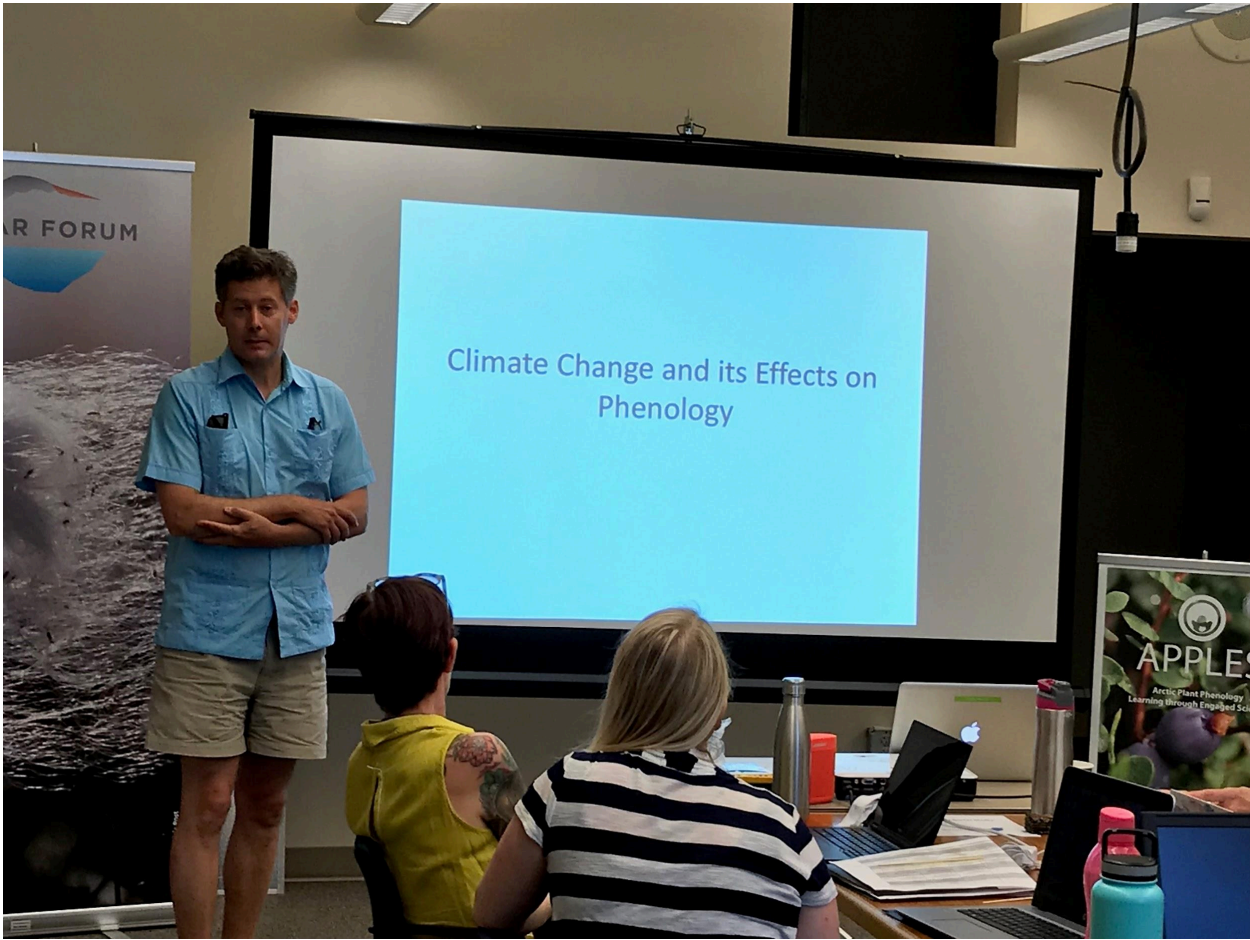














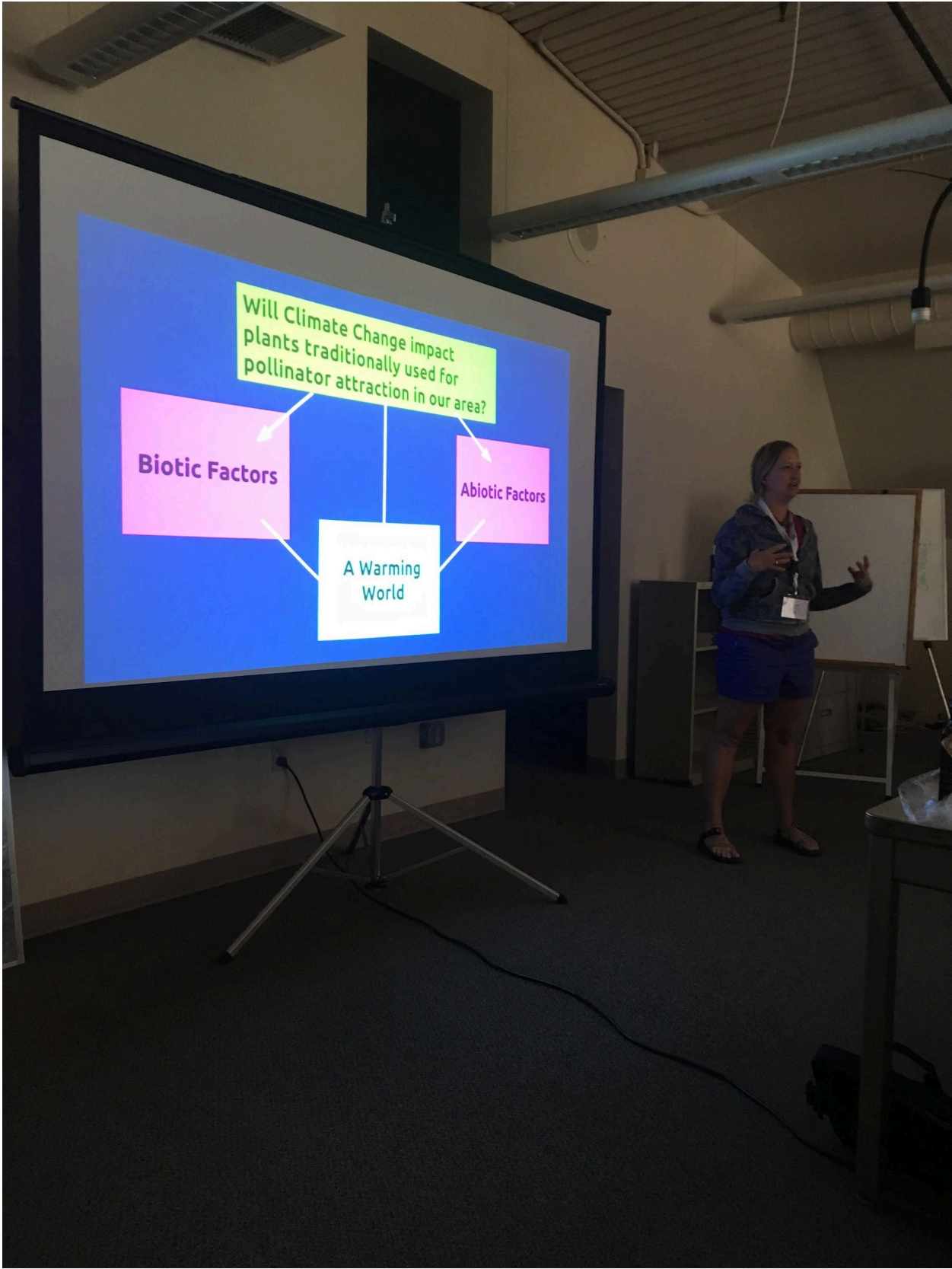






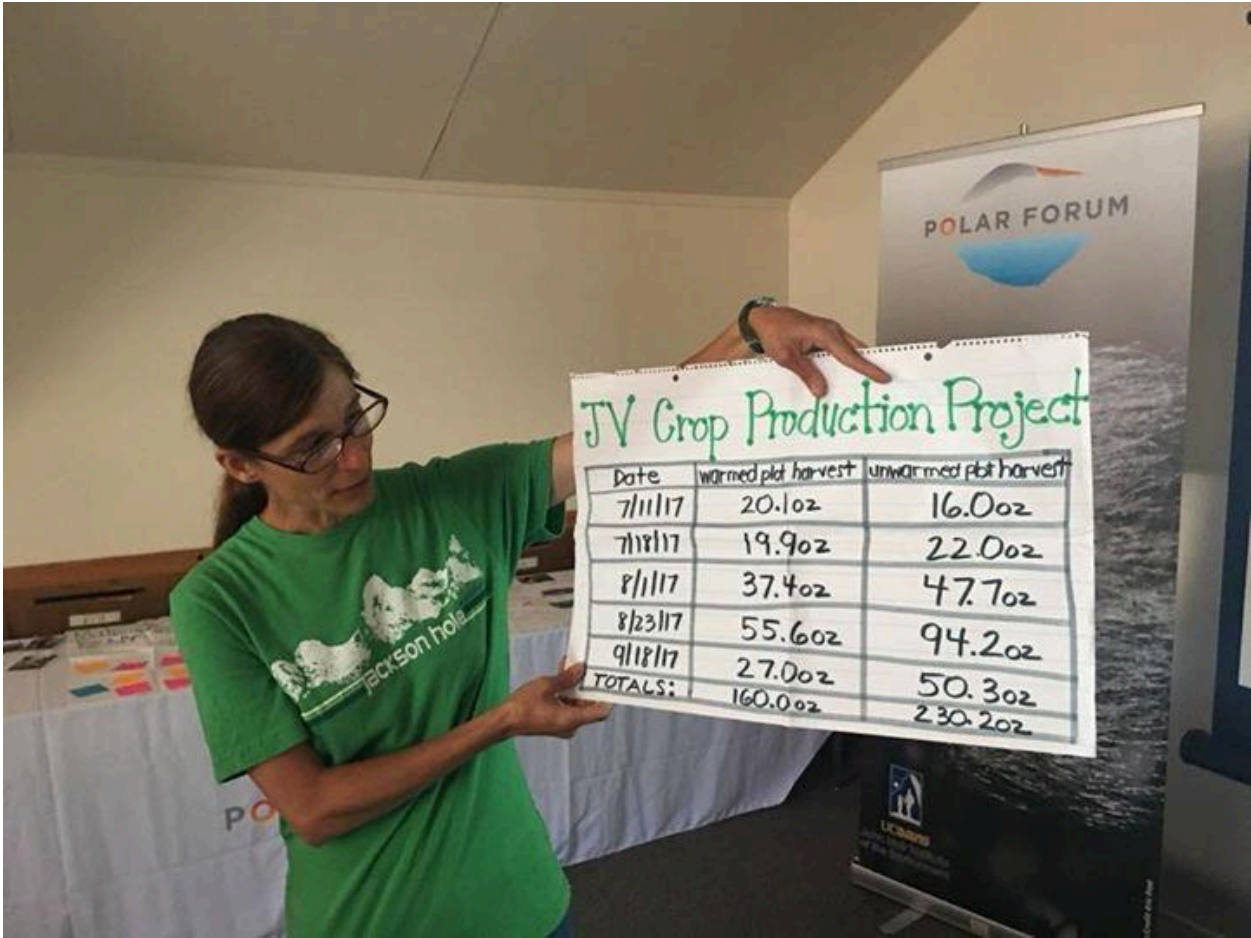
We had a great time at West Coast APPLES! Here are some highlights from the week.











Date	warmed plot harvest	unwarmed plot harvest
7/11/17	20.1oz	16.0oz
7/18/17	19.9oz	22.0oz
8/1/17	37.4oz	47.7oz
8/23/17	55.6oz	94.2oz
9/18/17	27.0oz	50.3oz
TOTALS:	160.0oz	230.2oz







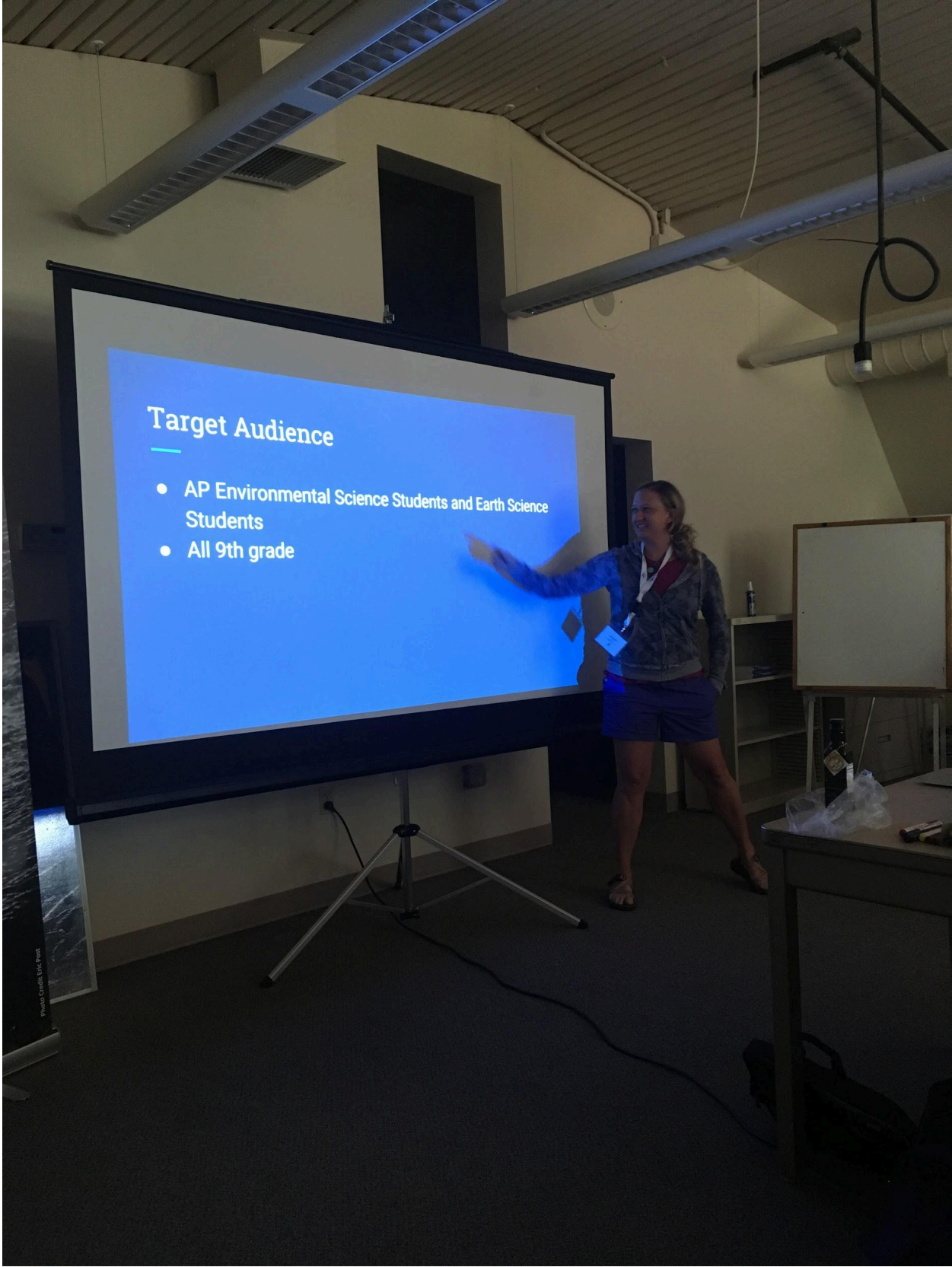












## Target Audience

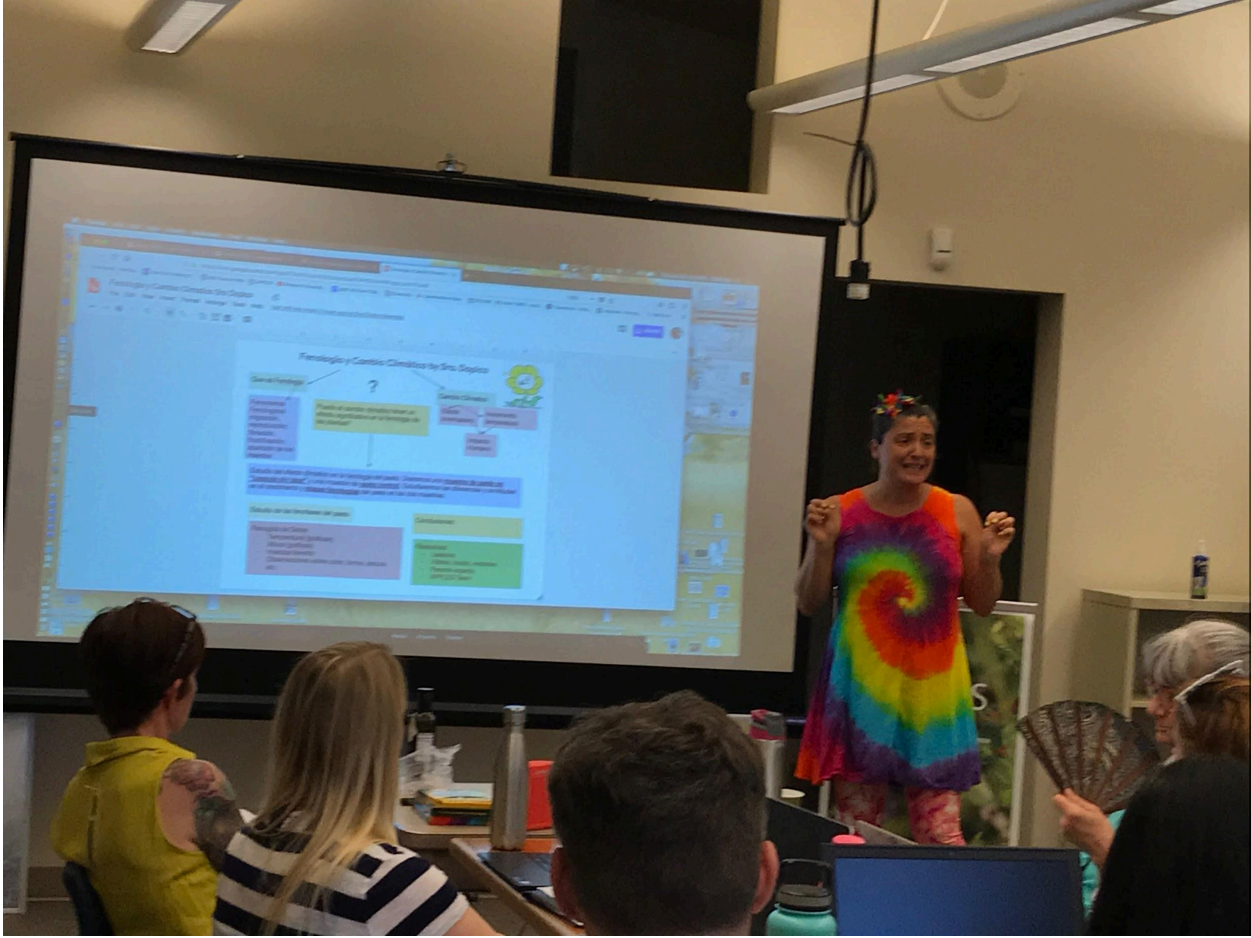
- AP Environmental Science Students and Earth Science Students
- All 9th grade





















**Field trip to the Bat Bridge**





**Group Photo at the Bat Bridge Excursion.**



**Alysha presented her APPLES project proposal for the upcoming school year.**

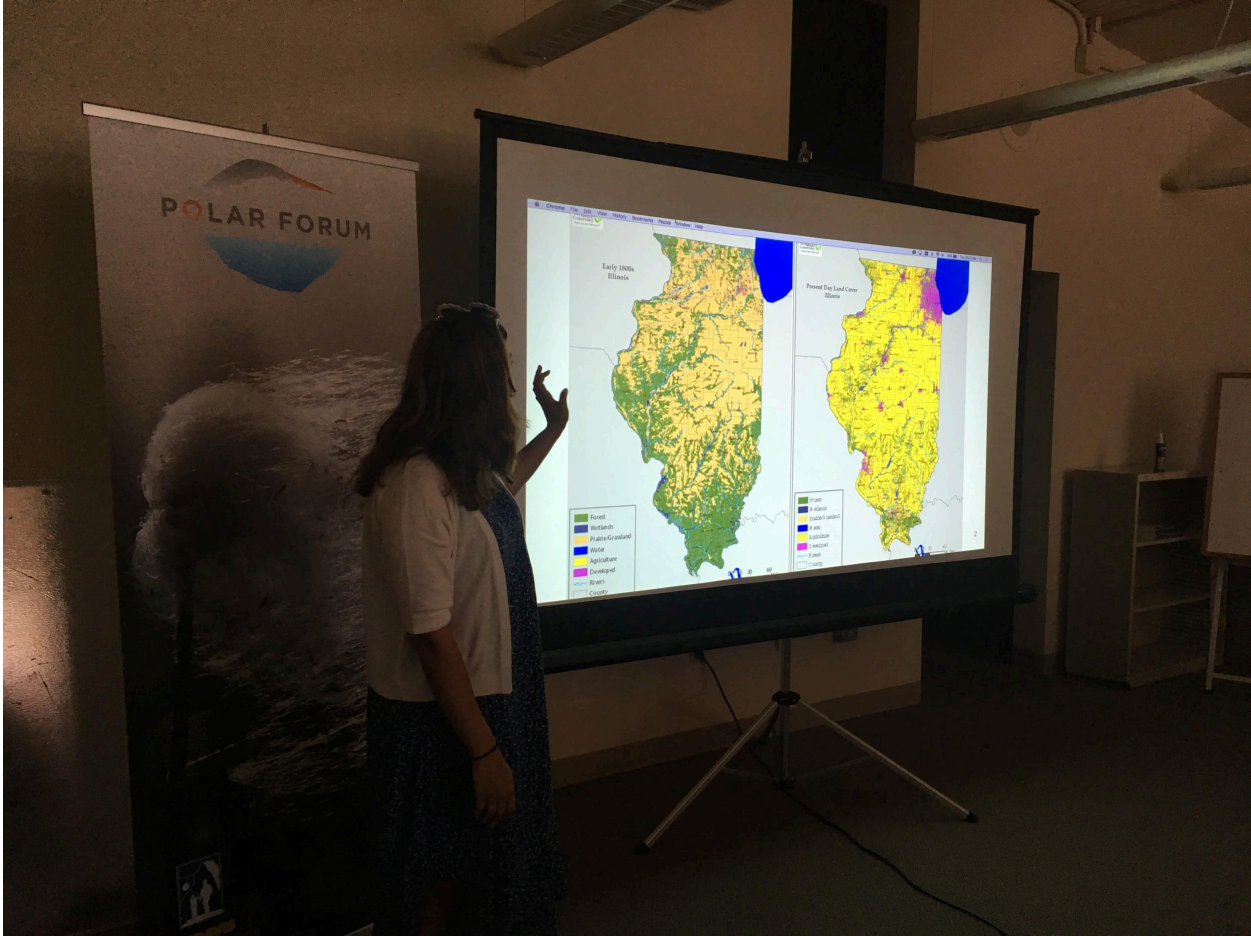


POLAR FORUM

# Prescribed Prairie Burning

Ayesha T. Qazi  
Chicago, IL









POLAR FORUM

### Step 1

- Pick 3 control plots
- Count species richness and diversity

Prep Work: Native Midwestern Fall Field Guides, Data Sheet, Phenology Lesson

Resource:  
<https://fieldguides.fieldmuseum.org/guides>