USE CIT SCI

The latest news and updates from the USE Cit Sci Network.



Photo by Curiosophotography



IN THIS ISSUE

ANNOUNCEMENTS

INSTRUCTOR SPOTLIGHT: DR. MIKE JABOT Hosting our site on the QUBES platform provides an open and inclusive virtual space for sharing STEM classroom activities and resources, discussing teaching and the adaptation of educational materials, and working together to develop new ideas and insights. To participate, you will need to:

1.create a QUBES Hub account

- 2. confirm receipt of a confirmation email
- 3. join as a USE Cit Sci member using this link.

Please do this today to ensure you continue to receive communications and updates from the Network!



WHILE YOU'RE AT IT, <u>PLEASE ALSO FOLLOW US ON TWITTER</u>! @USE_CIT_SCI_NET

USE-CIT-SCI-NETWORK.ORG

FEBRUARY 2022

🕂 Announcements

The Network has started two new working groups:

- the role of citizen science in online classes
- the role of citizen science in social justice

Both groups are enthusiastic and getting down to work! We'll feature more information on these working groups and their members in a future newsletter. Be on the lookout for a blog and webinar hosted by each working group later this year.

An early subgroup of the Network has a <u>new paper</u> out in BioScience, entitled "Citizen Science in Postsecondary Education: Current Practices and Knowledge Gaps". It is available in the new March 2022 issue!

The Citizen Science Association will be convening virtually again this year to learn, share, and build connections that strengthen this field. The event will take place May 23-26th, 2022 and will feature keynotes, symposia, and poster presentations.



Tweets by @use cit sci net



USE Cit Sci Network Retweeted

American Institute of Biological Sciences @AIBSbiology

Using a literature review & a survey, @terryagates, @CoopSciScoop, @science hitch & others describe how & why citizen science is being used in postsecondary courses, as well as the impacts on student learning. academic.oup.com/bioscience/adv...

Systematically searched Google Scholar for peer-reviewed papers using the following search terms (citizen science" OR "public science" OR "community science" OR "public participation in science") AND ("higher education" OR "undergraduate" OR "post-secondary")

Systematically examined the references provided in each of the relevant papers found in the prior search

Inclusion Criteria

Must use citizen science with students in a college or university setting

IF YOU HAVE PUBLICATIONS OR ANNOUNCEMENTS TO SHARE IN A FUTURE NEWSLETTER, EMAIL THEM TO HEATHER VANCE-CHALCRAFT

AT: VANCECHALCRAFTH@ECU.EDU

FEBRUARY 2022

Instructor Spotlight: Dr. Mike Jabot



Dr. Mike Jabot is a distinguished teaching professor at State University of New York (SUNY) at Fredonia, with 35 years of experience in science education. Dr. Jabot has built the citizen science project called the GLOBE Program into two face-to-face courses he teaches. One is his Science Methods course, typically taken by Seniors the semester prior to their student teaching, and his Earth Systems course, taken primarily by Freshman and Sophomores. The GLOBE Program affords students the opportunity to contribute to developing geospatial knowledge locally, and at the same time, globally. The GLOBE Observer Program currently accepts cloud, mosquito habitat, and land cover observations. Protocols developed by GLOBE Program allowed his students to approach coursework from an earth systems science lens to develop their understanding of the interconnectedness between earth spheres as well as with the human element.

Why did you decide to integrate citizen science into this course?

C ¥.

"I can't think of a more authentic way to develop an understanding of science, and its role in our lives, than citizen science. In particular for future teachers, experience with this approach allows them to develop efficacy in building practice in their own classrooms in the same way. The GLOBE Program is an incredible way for them to see the broad scope of topics that can be approached. I also build in a number of other citizen science projects (iNaturalist, Budburst, Crowd the Tap, GLOBE at Night, etc) that both intersect with the GLOBE protocols as well as expanding the reach of citizen science. I also have a focus on the use of GIS [Geographic Information Systems] in the course, so the students also learn to use simple examples of Survey123 as a way to empower their work to take advantage of local investigations and actions."

How do you feel the involvement in this project has impacted your students' engagement and learning? "...when I ask students why they have chosen to take my course, they share that they were excited because of the citizen science work that they have heard we do. I also am just so blessed to have students come back and see me to share that they have joined in on other citizen science projects or to share what they are doing with the students in their classrooms."



Y

USE-CIT-SCI-NETWORK,ORG

Project Spotlight: Boulder Apple Tree Project

About

FEBRUARY 2022

We study the age, health, history, and genetics of apple trees across Colorado through course-based undergraduate research experiences and community participation. Through a collaboration with researchers from University of Colorado, Front Range Community College, students, community members, and apple industry stakeholders, we are able to map, measure, and identify historic cultivars of apple found throughout northern Colorado.

Ideas for how instructors could implement project with students?

Instructors can use the tree mapping and measuring protocol through the website or data collection app (available March 2022) to engage students in tree mapping and conducting morphological measurements of apple trees in their community. Instructors can also assist students in conducting ecological measurements and observations in the area immediately around their focal tree to gain an understanding of the potential ecosystem services of the apple tree to its habitat.

What tools are available to help	Boulder Apple Tree <u>Project website</u> and <u>interactive map;</u> APPle
instructors ?	Tree data collection app (available March 2022)
What is the best time of year to complete this project?	Summer and Autumn
Are there any materials needed?	Mobile phone with GPS and camera, transect tape, cutting board and knife
How much time should an	This is quite variable! Instructors could spend two hours outside
instructor anticipate dedicating	with the students measuring a few trees or up to a semester
to this project with students?	investigating the ecosystem services.
Who to contact for further	Amy Dunbar-Wallis, Community Project Coordinator
questions?	amy.dunbarwallis@colorado.edu





Rediscovering the past, together

A team of scientists, citizens, and students working together to discover Boulder's apple history and shape the culinary and...

🙈 The Boulder Apple Tree Project

Please Note

Instructors should always have permission from property owners or permits from government agencies if on public property before conducting any research away from campus.