

TAHOE:
**STATE
OF THE
LAKE**
REPORT
2020

EDUCATION AND OUTREACH

TERC education and outreach

In 2019

As part of our mission to achieve healthy aquatic and terrestrial ecosystem conditions, TERC incorporates education and outreach to benefit the community locally and globally. Our education programs are designed to provide science-based information about the Lake Tahoe basin to people of all ages and backgrounds and to foster responsible action and stewardship.

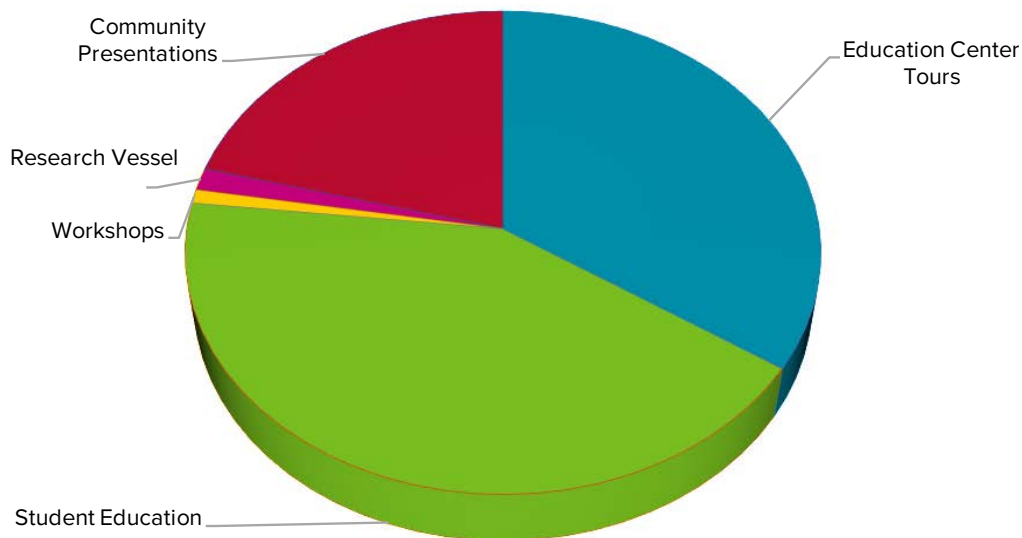
In 2019, TERC interacted with nearly 13,000 visitors through tours, field trips, and events. Student field trips and public tours accounted for a little over 67% of these interactions. TERC also reached the

public through monthly public lectures, events, workshops, and presentations to community organizations. Our events in 2019 included Science Expos in both North Lake Tahoe and South Lake Tahoe, Trout in the Classroom teacher training program, Project WET workshops, High Elevation Garden workshops, Weird Wednesdays at the Incline Village Library, the Science of Cocktails fundraiser, Boys and Girls Club Gardening program, and volunteer docent training program.

TERC also partners with numerous organizations to deliver environmental science education and complete

interpretive projects in the Tahoe basin. In 2019, we partnered with the Sierra Nevada AmeriCorps Partnership, Boys and Girls Club, California Tahoe Conservancy, Desert Research Institute, Incline Village General Improvement District, Lake Tahoe Outreach Committee, League to Save Lake Tahoe, North Tahoe Environmental Education Coalition, Sierra Nevada University, Sierra Watershed Education Partnerships, South Tahoe Environmental Education Coalition, Take Care Tahoe, Tahoe Institute for Natural Sciences, Tahoe Public Art, and many others.

TOTAL VISITOR CONTACTS = 12,946



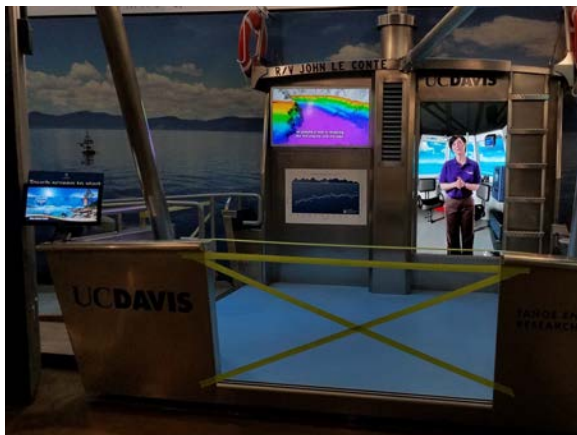
TERC educational exhibits

In 2019

Continuing the goal of heightening and enriching the experience of all Tahoe visitors, TERC has expanded educational offerings available inside and outside of the UC Davis Tahoe Science Center.

Our educators are working with Tahoe Public Art and the California Tahoe Conservancy (CTC) to develop an Environmental Art Master Plan for CTC lands in the Tahoe Basin.

We upgraded and remodeled the equipment driving our iconic virtual research vessel and laboratory exhibits, that were originally installed in 2006. We are continuing to work towards the next step of updating video content to feature the newest research findings. Through the creation and improvement of engaging hands-on educational activities we are making a real contribution to transferring knowledge and understanding of Lake Tahoe to an ever-widening audience.



The virtual research vessel exhibit was updated with new technology and now includes a touchscreen. Upgrades were funded by support from private donors and the Parasol Tahoe Community Foundation. Photo: A. Toy



The Virtual Laboratory exhibit was also updated with new technology and now includes a touchscreen. Upgrades were funded by support from private donors and the Parasol Tahoe Community Foundation. Photo: A. Toy



A 360-degree virtual reality exhibit and video was developed in partnership with the UC Davis Office of Strategic Communications for the Tahoe Federal Summit and showcased at the Capital Public Radio "Tahoe Land" special event (pictured above). Photo: A. Toy

TERC outreach

In 2019

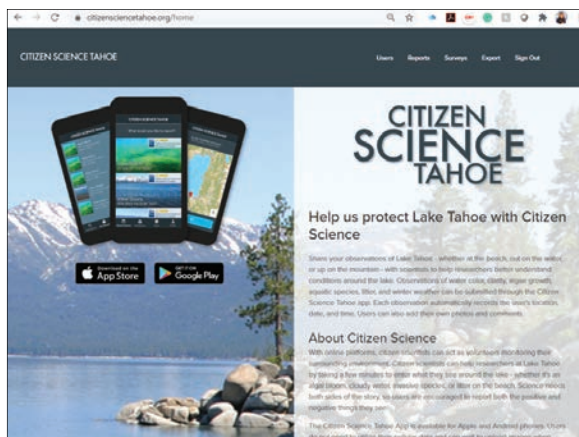
TERC continues to promote the “Citizen Science Tahoe” mobile app. Citizen scientists help lake researchers collect observations by simply taking a few minutes to enter the conditions they observe around the Tahoe Basin.

Promotion of all TERC education and research efforts continue and grow through various virtual methods including our website, Instagram (@UCDavisTahoe), Facebook, YouTube Channel, and more. We have pushed for greater consistency and themes in our content and posts. Our Instagram account now has 1,495 followers which is nearly a 50% increase from last

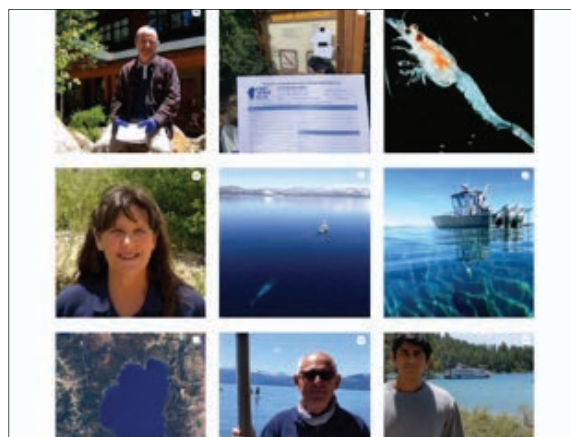
year. Combined with Facebook and Twitter, there is now a total of over 4,200 members in our social media community.

Find the UC Davis Tahoe Environmental Research Center through various methods including:

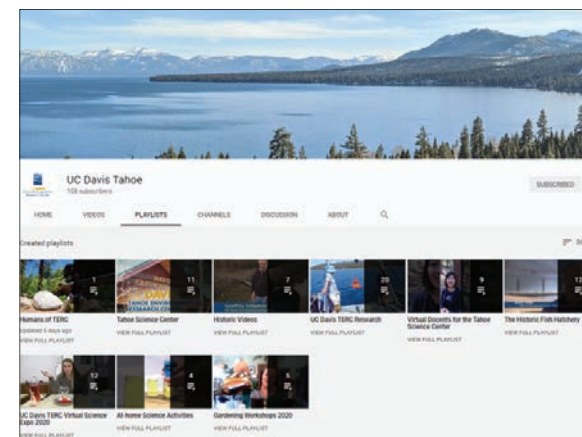
- Website (<https://tahoe.ucdavis.edu>),
- Instagram (<https://www.instagram.com/UCDavisTahoe/>),
- Facebook (<https://www.facebook.com/UCDavisTahoe/>),
- Twitter (<https://twitter.com/UCDavisTahoe/>), and
- YouTube (<https://www.youtube.com/c/UCDavisTahoe/>).



After a total overhaul of the Citizen Science Tahoe mobile app, version 3.0.2 became available in Spring 2019. This completely new version of the app for citizen scientists in our region helps us gather information and images about algae, water quality, litter, aquatic invasive species, stormwater pollution, and meteorology.



@UCDavisTahoe Instagram now includes “virtual docent” interviews, humans of TERC, quizzes, and increased content to share with the broader audience at Lake Tahoe and beyond.



The new YouTube Channel @UCDavisTahoe includes playlists such as research, historic videos, Tahoe Science Center videos, virtual docent videos, humans of TERC, and more.

TERC educational programs

In 2019

TERC provides educational programs for the general public, K-12 students, teachers, and volunteers. Public programs include science center tours, monthly lecture series, citizen science programs, and garden workshops.

K-12 education efforts include school field trips, Trout in the Classroom, Science Expo, in-classroom presentations, and outdoor education programs. In 2019, the education team provided informal science education to 4,358 third- through

twelfth-grade students. The average interaction time with each student was 4.25 hours.

Science activities and thematic field trips continued to be modified and updated annually. Of the students surveyed, 93 percent had a 25 percent or more increase in knowledge. Responding teachers indicated that they were satisfied with their overall field trip experience and that the activities presented were appropriate for the grade level being taught.



Our engaging Earth System Science field trip (concept developed by Dr. Art Sussman, WestEd) includes a simple three-part play with students in costumes acting out the scientific process of photosynthesis as the roles of sun, flower, and cow.
Photo: B. Goodwin



AmeriCorps member Baylee Goodwin teaches about weather and cloud formation at Science Expo with fun activities.
Photo: A. Graham



Our field trip activities are continually improved with the goal of increasing student engagement and linking learning goals to the NGSS science standards. The Environmental Detectives field trip presents a mystery for students to solve.
Photo: B. Goodwin

TERC educational programs, continued

In 2019

During the summer months, UC Davis TERC and Lake Tahoe Master Gardeners hosted the High Elevation Gardening workshop series at the Tahoe City Field Station and provided guidance on lake-friendly practices for growing fruits and vegetables in the challenging Tahoe climate.

Additionally, this year TERC assumed the management of the North Tahoe Demonstration Garden in collaboration with the Incline Village General Improvement District and Sierra Nevada University. This outdoor space is an extension to tours and content of the Tahoe Science Center and allows for outdoor education programming in summer and fall with the local Boys and Girls Club and other summer camp programs.

Another popular program was the outdoor education presented at the Junior Waterman's camp in Carnelian Bay. Hosted by Waterman's founders Jay and Anik Wild, our education team members had the opportunity to incorporate science and stewardship into this outdoor program.

Each year, new volunteer docents participate in a multi-day docent training workshop. The docents become local experts, lead public tours at our science centers, help maintain the Tahoe City Field Station's native plant demonstration garden as a beautiful community resource, and assist us with many events and activities throughout the year.



The High Elevation Gardening workshops at the Tahoe City Field Station and native plant demonstration garden were highly attended. Following a discussion of growing techniques and cultural anthropology, participants take home a selection of seedlings.
Photo: A. Toy



The TERC education team teaches fun and engaging outdoor activities to the Junior Waterman's camp over the course of three weeks. Topics included Citizen Science, watersheds, stream monitoring, and benthic macroinvertebrates.
Photo: B. Harris



The annual docent training program includes an in-depth presentation about TERC's research and monitoring programs on Lake Tahoe with boat captain Brant Allen aboard the UC Davis Research Vessel John LeConte.
Photo: A. Toy

TERC special events

In 2019

TERC hosts monthly lectures throughout the year on various environmental issues, new scientific research, and related regional topics of interest. One special lecture in partnership with Classical Tahoe was presented by University of California President and former Director of Homeland Security Janet Napolitano.

This year, TERC hosted three special film screenings. *The Human Element* highlighted Americans on the front lines of climate change and featured director Matthew Testa for a virtual question and answer session. Award-winning *Screenagers* documentary explored bringing up children in the digital era and included a post-film discussion. The third movie, *Wilder than Wild*, dealt with fire suppression and how the combined effects with climate change

have exposed our forest and communities to large, high-severity wildfires. Following the screening a panel of experts discussed the direct effects of wildfire to the Tahoe Basin.

In 2019 we partnered with the Tahoe Film Fest to support TERC research and education. This festival showcased and celebrated American independent films, new films from Latin America, and a filmmaker tribute. A series of environmental films were shown to educate audiences and celebrate the efforts of everyone who helps to maintain the beauty of the Lake Tahoe basin and the Sierra Nevada. The festival brought actors, directors, producers to mingle with Tahoe locals, creating an unforgettable experience that we are excited to be a part of in future years.



Classical Tahoe and TERC combined efforts to host “A Conversation with Janet Napolitano: How Safe Are We?” on July 25, 2019 in the Classical Tahoe Pavilion. Photo: H. Segale



Tahoe Film Fest and TERC hosted “The Human Element” film screening on August 16, 2019 in the Crystal Bay Club Crown Room with a virtual discussion with Director Matthew Tiesta. Photo: H. Segale



Heather Segale welcomes attendees to opening night of the 5th annual Tahoe Film Fest hosted at multiple venues including Incline Cinemas (shown here), Crystal Bay Club, and Northstar Theaters during December 5-8 for a selection of award-winning films. Photo: R. Roussel