

TAHOE: STATE OF THE LAKE REPORT 2018

EDUCATION AND OUTREACH



UC DAVIS

Tahoe Environmental
Research Center

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EDUCATION AND OUTREACH

TERC education and outreach

In 2017

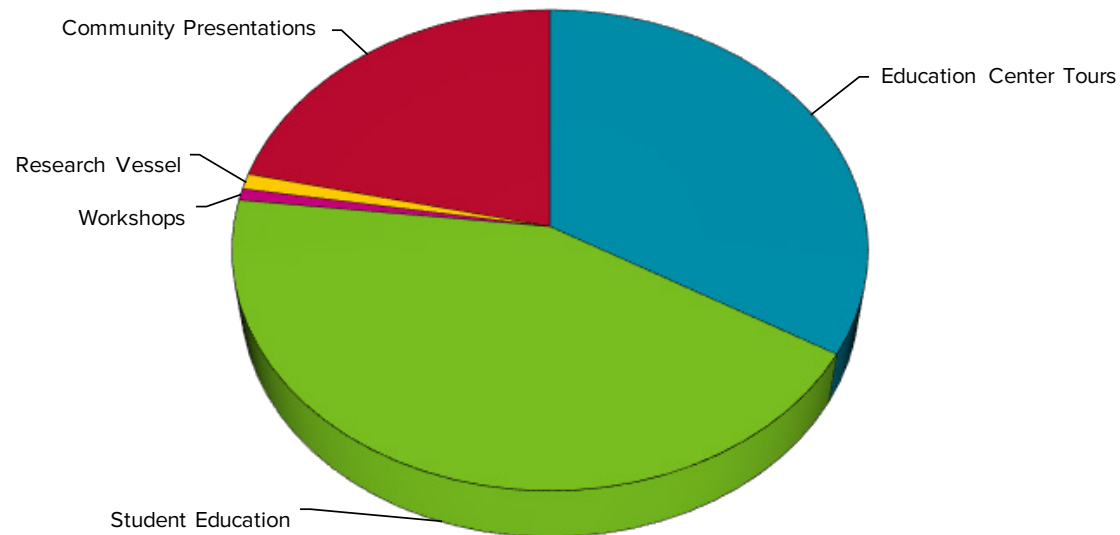
Part of TERC’s mission is education and outreach. Our public, K-12, teacher professional development, and volunteer programs are designed to provide science-based information about the Lake Tahoe region in order to foster responsible action and stewardship.

During 2017, TERC recorded 14,204 individual visitor contacts. The majority represented student field trips and visitors to the Tahoe Science Center at Incline Village. In addition, TERC hosts

monthly public lectures and workshops, makes presentations to local community organizations, and takes a limited number of visitors out on our research vessels. TERC organizes and hosts annual events and programs including the North Lake Tahoe Science Expo, South Lake Tahoe Science Expo, Youth Science Institute, Trout in the Classroom teacher training program, and a volunteer docent training program.

TERC also partners with numerous

groups to deliver environmental science education in the Tahoe basin. In 2017, these included AmeriCorps, Lake Tahoe Outreach Committee, North Tahoe Environmental Education Coalition, Sierra Nevada College, Sierra Watershed Education Partnerships (SWEP), South Tahoe Environmental Education Coalition, Tahoe Fund, and many others.



EDUCATION AND OUTREACH

TERC educational exhibits

In 2017

Each year, TERC works to improve our exhibits and increase the offerings available in the UC Davis Tahoe Science Center. During 2017, we developed a new “Fire in Lake Tahoe’s Forests” wall exhibit, updated the “Green Building”

exhibit, expanded the “Take Care Tahoe” exhibit, and improved other signage. These activities all aid in our mission to provide engaging exhibits and interactive hands-on educational activities.



The “Fire in Lake Tahoe’s Forests” wall exhibit describes changes in Tahoe’s forests due to clear-cutting and fire suppression, impacts of climate change, actions to prevent wildfires, and common tree killers including bark beetles, with actual beetles on display. Photo: H. Segale



The new “Green Building” exhibit highlights the U.S. Green Building System LEED categories, specific green features of the Tahoe Center for Environmental Sciences building, including energy-saving, water-conserving, and indoor environmental air-quality features, and includes samples of the recycled building materials used. Photo: H. Segale



Utilizing the Take Care™ (TakeCareTahoe.org) stewardship messages, TERC staff created a pledge bin so that visitors can commit to various stewardship actions such as Be Bear Aware, Drink Tahoe Tap™, Leave No Trace®, and more ways to take care.

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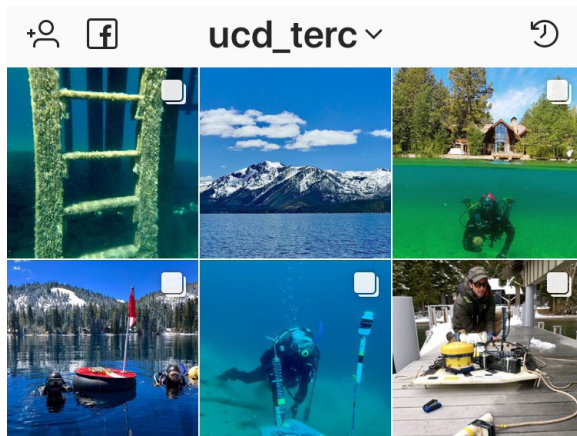
TERC outreach

In 2017

TERC and our partners continue to promote the smartphone app, “Citizen Science Tahoe,” to encourage beach-goers to “add a splash of science” to their beach day. We need citizen scientists of all ages to help us understand conditions around the lake and share what they observe (CitizenScienceTahoe.com).

We promote the work of the UC Davis Tahoe Environmental Research Center through various methods including our website (<http://tahoe.ucdavis.edu>), Facebook page (<https://www.facebook.com/terc.ucdavis/>), Twitter (https://twitter.com/UCD_TERC), and Instagram (https://www.instagram.com/ucd_terc/).

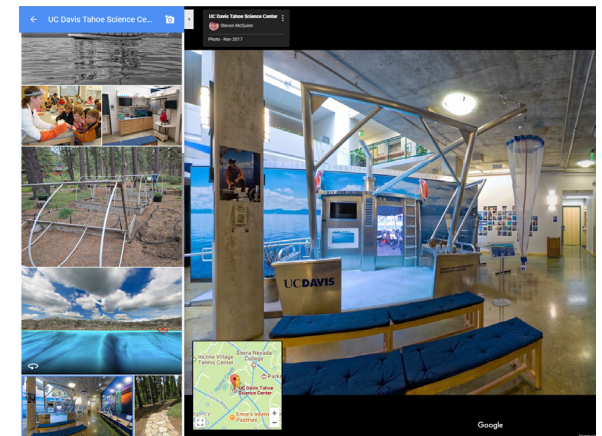
You can also check out the amazing photosphere images (360-degree panoramas) taken by Steven McQuinn and Joe Proudman in Google Maps or Google Streetview by going to <http://maps.google.com> and searching for the UC Davis Tahoe Science Center or UC Davis Tahoe City Field Station.



See some amazing photos from the UC Davis TERC field research team hard at work on the lake and underwater @ucd_terc on Instagram.



Visit the new Take Care Tahoe website at www.TakeCareTahoe.org for information on the latest environmental events and volunteer opportunities around the lake. TERC events are now being posted on the TakeCareTahoe.org website.



At <http://maps.google.com>, photosphere images (360-panoramas) take you on a virtual tour of our science centers and demonstration garden. Click on the little yellow “peg man” in the bottom right corner of the screen. All of those little blue dots are photospheres. Some of them inside and outside the science center building are connected to take you on a virtual tour.

EDUCATION AND OUTREACH

TERC educational programs

In 2017

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

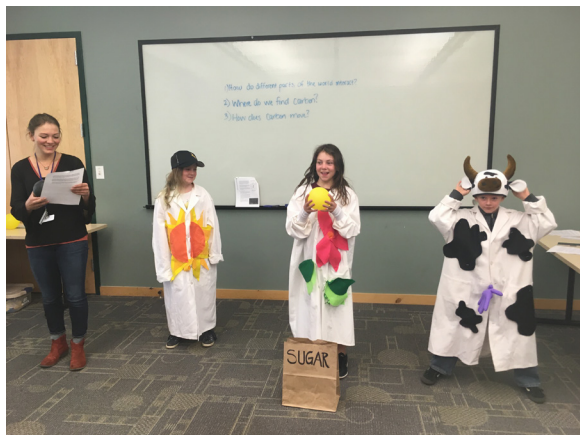
Our K-12 education programs include school field trips, Trout in the Classroom program, the Youth Science

Institute afterschool program for high school students, and the annual Science Expo. The TERC education team provided informal science education to more than 5,919 third- through twelfth-grade students by hosting over 100 field trips during the 2017 calendar year.

During the summer months, we offer programs at the Tahoe City Field Station

and Native Plant Demonstration Garden.

The second annual High Elevation Growing workshop series at the Tahoe City Field Station and native plant demonstration garden. Topics included potatoes, onions, raspberries/gooseberries, kale/lettuce, and tomatoes.



Our field trip activities are continually improved with the goal of increasing student engagement and linking learning goals to the science standards. One of our favorite field trips is “Earth System Science” which highlights how energy flows, matter cycles, and all organisms on the planet are connected.

Photo: L. Bronson



Students witness the early life stages of Lahontan cutthroat trout as part of the Trout in the Classroom program. Students (pictured above) are releasing their small Lahontan cutthroat trout into Lake Tahoe in hopes that they will thrive in their native Lake Tahoe.

Photo: A. Toy



Each year a small group of select high school students participate in the annual Youth Science Institute from January through May. During this after-school program participants work with scientists, conduct experiments, and share science activities with other students. Photo: A. Toy

EDUCATION AND OUTREACH

TERC educational programs, continued

In 2017

TERC hosts monthly lectures throughout the year on various environmental issues, new scientific research, and related regional topics of interest. Some of the topics during 2017 included “Political Polarization,” “Global Climate Change,” “Recovering the Endangered Mountain Yellow-legged Frog,” “Winter is Coming,” and “Ice Shelf Collapse.”

During the summer months, we offer programs at the Tahoe City Field Station. Led by volunteer docent Dave Long, TERC hosted High Elevation Gardening workshops bringing specific varieties of fruits and vegetables to Tahoe gardeners who submit phenology data based on what does well in their own garden.

Each year we train new volunteer

docents at our annual June Docent Training. Volunteer docents become local experts and lead public tours at our two science centers. This year, all of the Docent Training presentations were recorded and are available on the TERC website at <http://tahoe.ucdavis.edu/ed-outreach/ed-programs/docents.html>.



Thanks to a philanthropic donation to purchase the equipment needed, the TERC monthly science lectures are now being recorded and select lectures are available online at <http://tahoe.ucdavis.edu/events/archive-events/>. Photo: A. Toy



The High Elevation Growing workshop series at the Tahoe City Field Station and native plant demonstration garden were highly attended. Topics included potatoes, onions, raspberries/gooseberries, kale/lettuce, and tomatoes. Photo: A. Toy



The TERC docent training program is held annually each June and provides new volunteers with all of the information they need to be Lake Tahoe experts and to successfully share their love of Lake Tahoe with others. Photo: A. Toy

EDUCATION AND OUTREACH

TERC special events

In 2017

Special events hosted annually include the Science of Cocktails (February), North Tahoe Science Expo (March), South Tahoe Science Expo (April), Garden workshops (June - August), Summer Teacher Institute (June - July), and Children's Environmental Science Day (August).

The Science of Cocktails event was a

sold out event this year. Tickets went fast for this fundraising event.

TERC also hosted "The Last Straw" community event with partners from IVGID Waste Not, League to Save Lake Tahoe, Keep Truckee Green, SOS Outreach, Sierra Watershed Education Partnerships, and Tahoe Institute for Natural Science. Local students joined

the regional and global movement to eliminate plastic drinking straws from our landfills, streams, oceans, and beaches. Students hosted educational tables, presented on local programs to reduce single-use plastic waste, and hosted screenings of the short films "Straws" and "Everything Connects."



At the second annual Science of Cocktails event, themed drinks taught about fluid dynamics (shown here), density, pH, fluorescence, sublimation, polymers, latent heat, fermentation, and alcohol science.

Photo: J. Markle



At the 13th annual North Tahoe Science Expo (Life Science and Health) students learned about organisms and ecosystems, inheritance and adaptation, health and nutrition. This year was also the 3rd annual Science Expo held at Lake Tahoe Community College Photo: A. Toy



Local students get active in the community and host an event at the Tahoe Science Center. At "The Last Straw" event, local students showcase their community outreach efforts to enlist businesses to stop giving out plastic straws, unless requested, in order to minimize single-use plastic waste.