

VESR Strengths and Assets

Location

The locations of SNARL and Valentine Camp at the base of the eastern Sierra Nevada and the western edge of the Great Basin ecosystem, provide access to a wide array of habitats and tens of thousands of acres of public lands. Valentine Camp is a small, pristine site that preserves a remnant of the diverse natural vegetation in the region; providing a baseline for biodiversity is rare elsewhere in the Sierra Nevada region. SNARL is located at the foot of the eastern escarpment of the Sierra Nevada and serves as a unique base from which to access a broad range of habitats for research and teaching. This includes the nearby Convict Creek, which flows through SNARL, and multiple other ecosystems in the region with rich research histories. Lands nearby and adjacent to VESR include three national parks (Sequoia, Kings Canyon, and Yosemite), extensive areas managed by the US Forest Service (USFS) and Bureau of Land Management (BLM), and to the east -- the mountains and valleys of the Great Basin. Fifty kilometers north of SNARL lies Mono Lake, a large saline water body that has been the subject of intensive study by SNARL-based researchers for the last thirty years.

Infrastructure

VESR has extensive facilities for research and teaching at both Valentine Camp and SNARL (see Appendix 2 for details on these facilities). Valentine Camp has housing for 20 in three renovated log cabins constructed in the 1920's, a wet lab, and a classroom building that can accommodate classes of up to 30 students. SNARL's world class support of the research and education community is in large part due to an extensive array of field and laboratory facilities, overnight accommodations for up to 45 persons and in-house science expertise, a recently renovated modern laboratory, experimental stream channel systems and a mountain-based snow science laboratory. SNARL's new Page Center, a net-zero energy, high tech classroom and lecture hall, provides state-of-the-art meeting space for 200 people, modular meeting and classroom furniture, high tech audio/video capabilities, and high-speed wireless internet (Figure 2).



Left: Page Center and other facilities at SNARL. *Right:* Education Center at Valentine Camp.

Research Expertise and Legacy Datasets

Due to the unique location of the reserves and the rich array of natural resources and facilities, SNARL has attracted researchers from all over the world. Resident researchers, Drs. David Herbst and Roland Knapp have established research programs at SNARL over the years and are an integral part of the Reserve’s activities. Dr. Jeff Dozier, an expert in the field of snow science has based much of his research out of Mammoth Lakes and SNARL and has attracted other snow scientists to this region, including Dr. Tom Painter, of the NASA Jet Propulsion Laboratory, who directs the Airborne Snow Observatory program utilizing SNARL’s facilities. Through a collaborative relationship with Mammoth Resorts and the US Forest service, SNARL oversees the Cold Regions Research and Engineering Laboratory – UCSB (CUES) Snow Study and energy balance site on Mammoth Mountain. In addition to these resident experts, SNARL has been the home to many long-term research projects that have focused on the ecology, hydrology and biodiversity of the Sierra Nevada and Great Basin regions. This work includes seminal water resources research at Mono Lake through the work done by UCSB Professor John Melack and others, as well as studies on many of the high alpine Sierra lakes and streams. These datasets provide invaluable references and starting points for researchers working on related issues.

Education and Public Engagement

By utilizing the resources at both SNARL and Valentine Camp, VESR provides active outreach programs for the region. The Spring Seminar Series at SNARL hosts visiting scientists who give presentations on scientific topics of interest to local and regional public audiences of approximately 75-100 people per week. The Outdoor Science Education program, which operates both at Valentine Camp and SNARL, provides hands-on science lessons for K-12 students from Inyo and Mono counties as well as remote locations of western Nevada.

Supporters and Volunteers

The programs, activities and infrastructure at VESR rely upon the generous support of many entities, individuals and volunteers. Since 1994, Mammoth Resorts, under the leadership of Rusty Gregory, the recent CEO of Mammoth (currently now the CEO of Alterra Mountain Company, the parent company of Mammoth Resorts) generously supports environmental education programs and key operations at VESR. Mr. Gregory is also the Chairman of the Valentine Reserve Fund (VRF), a donor group that provides financial support for the reserves (see Appendix 6 for further details on the VRF). Paul and Kate Page, who helped to found the VRF and have provided long-term support to VESR serve on the Executive Committee of the VRF. The VRF is comprised of local VESR stakeholders who share a common vision with the science and environmental based goals of VESR. In addition to the VRF, the VESR programs are supported by a corps of volunteers that support VESR’s many Outdoor Science Education Programs, seminar series and other activities at VESR.

