



In Partnership with the US Forest Service

SierraAvalancheCenter.org

2012-2013 Annual Report

The winter of 2012 – 2013 marked another successful operating season. The Sierra Avalanche Center continues to function as a partnership between the Tahoe National Forest and a volunteer Board of Directors with 501(c)(3) not for profit organization status. This relationship continues to strengthen both operationally and financially while continuing to gain community support.

Some of the accomplishments from this past season include:

- ⌚ The Board of Directors successfully raised \$91,567 to support the Sierra Avalanche Center's operating budget.
- ⌚ The Tahoe National Forest provided \$6,847 in infrastructure support.
- ⌚ The USDA Forest Service provided \$46,650 for forecaster salaries in the form of \$17,000 from Region 5, \$23,000 from the Lake Tahoe Basin Management Unit, and \$6,650 from Region 4.
- ⌚ The SAC website was accessed over 501,067 times by over 83,068 unique visitors from July 15th through April 28th. Website traffic increased in page views by 2.5% and unique visitors by 17% over the previous busiest year.
- ⌚ A new record of 14,247 page loads in a single day was set on December 26, 2012.
- ⌚ The Sierra Avalanche Center issued 147 daily avalanche advisories and 5 early season snow condition reports.
- ⌚ The Sierra Avalanche Center launched a new website in the middle of April, collaborating on the design and construction of unified overall appearance and presentation with other avalanche centers in Colorado, Idaho, Utah, and Wyoming.
- ⌚ The forecasters continued to strengthen their working relationship with the National Weather Service in Reno, local ski patrols, and other professional organizations.
- ⌚ A Bill Foster Memorial Education Fund was developed to foster the growth of SAC education programs and honor Bill's memory.
- ⌚ The Board of Directors put on a very successful and well attended Professional Development Seminar in memory of Bill Foster.
- ⌚ The non-profit arm of SAC hired a Program Manager in September 2012 to implement events, manage non-profit correspondence and administrative tasks, and further develop the fundraising program.
- ⌚ A refreshed SAC logo was developed.

We would like to extend our gratitude to everyone who has put forth time and effort to support the Sierra Avalanche Center.

Advisories

From November 16th through April 14th, the Sierra Avalanche Center issued 147 daily avalanche advisories. The number of advisories issued for each danger level was: 50 Low, 80 Moderate, 13 Considerable, 4 High, and 0 Extreme. Additionally, five early season snow condition reports were posted during early November.

Advisories were available 24 hours a day, 7 seven days per week on the internet and by phone. The website experienced over 501,067 page loads this winter. During the forecasting season from November 16th to April 14th, the website was viewed an average of 3,115 times per day with a record single day maximum of 14,247 page loads occurring on December 26th. The recorded phone message was accessed over 3,000 times. Website traffic increased in page views by 2.5% and unique visitors by 17% over the previous busiest year. An online archive of advisories can be found at: <http://www.sierraavalanchecenter.org/archive>.

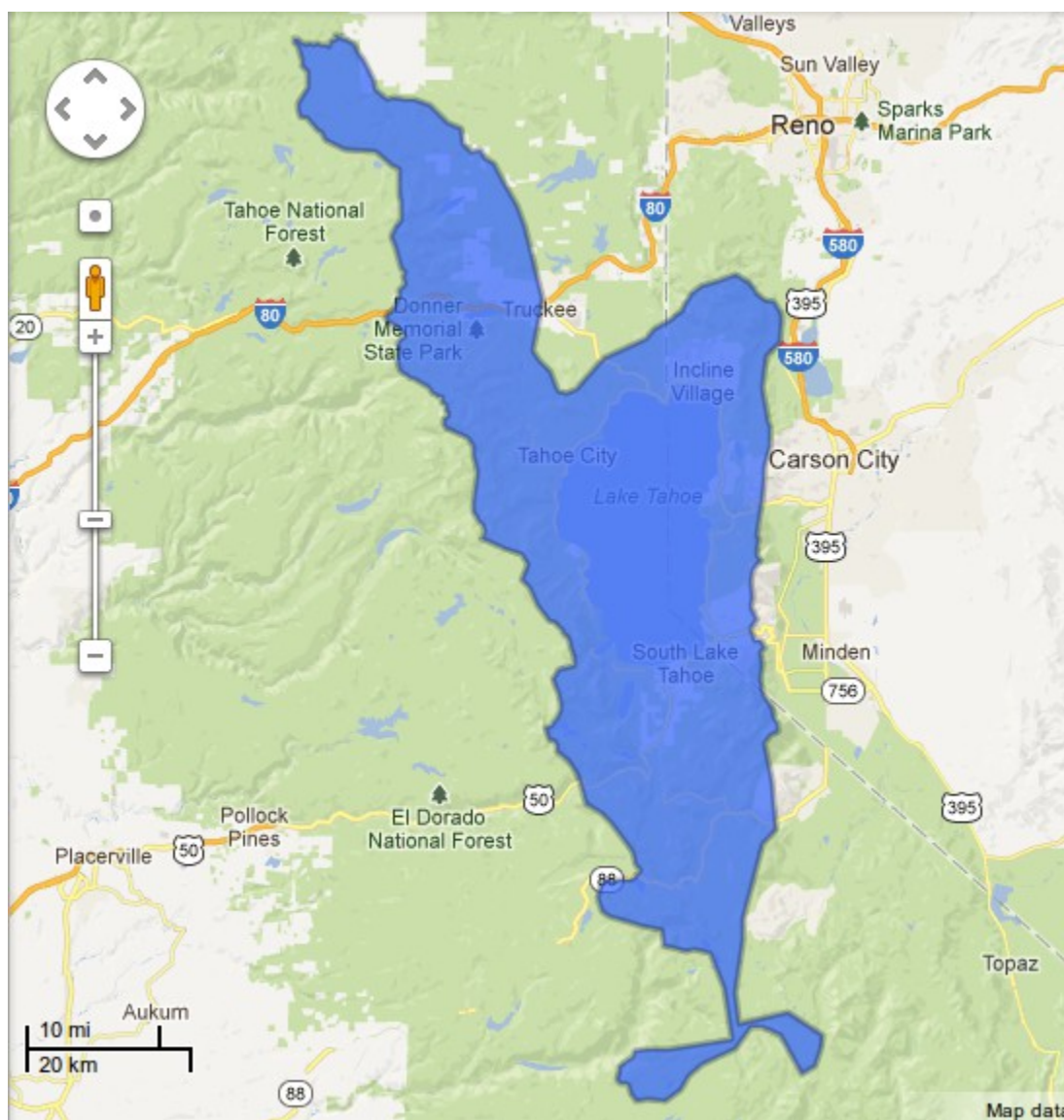


Dec 23, 2013 natural avalanche occurring in Drifter Bowl, failing on Dec 12 near crust facet layer. Photo by Andy Anderson.

Advisory Area

The advisory area of the Sierra Avalanche Center covers approximately 1,500 square miles of the Central Sierra Nevada Mountains of California and Nevada. The advisory area is bound by Hwy 49 Yuba Pass on the north and Hwy 4 Ebbetts Pass on the south. The advisory covers the avalanche terrain along the Sierra Crest and extends to the eastern slope of the Sierra Nevada. Two inroads to the west side of the Sierra Crest exist within in the advisory area at Carson Pass and at Ebbetts Pass, in order to include the backcountry terrain surrounding the established boundaries of the Kirkwood and Bear Valley ski areas.

Map of the Sierra Avalanche Center forecast area.



Field Observations

The avalanche center's formal program of avalanche, snowpack, and weather information remained largely unchanged this season. The website continued to allow public and professional users to include video, photos, and maps in their observations

The Central Sierra Snow Laboratory, Heavenly, Kirkwood, Mt. Rose, Squaw Valley, and Sugar Bowl submitted observations to the avalanche center on storm mornings with afternoon updates often submitted. Mountain Adventures Seminars, a guide service in Bear Valley, CA also shared its field observations with the avalanche center. This information, combined with observations submitted by the public, was an important supplement to the information gathered by forecasters Brandon Schwartz and Andy Anderson, as well as professional observers Steve Reynaud and Travis Feist.

The Board of Directors obtained sponsorship of the avalanche center by Polaris Industries. Two brand new 2013 Polaris 600 RMK 155 snowmobiles were donated to the avalanche center. With these snowmobiles, the forecasters were able to make observations in high snowmobile use portions of the forecast area that are difficult to access on skis alone in a single day.

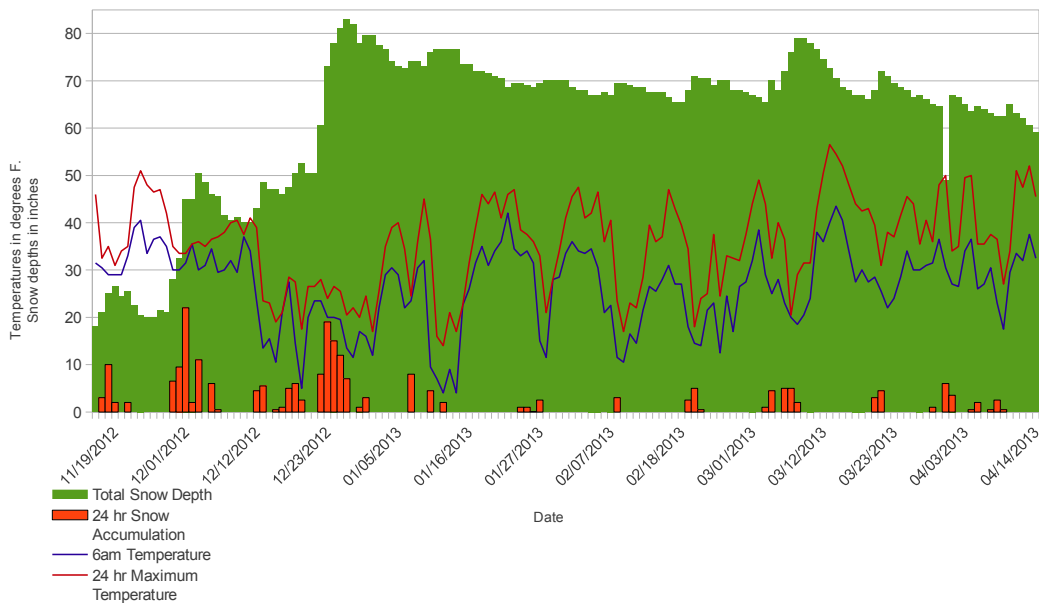


New snowmobiles at work on Relay Peak, NV. Photo by Brandon Schwartz

Winter got off to an early start. The first storm of the season deposited 1.5 to 3 feet of snow in late October. Additional snowfall events during the month of November lead us to start daily avalanche advisories on November 16. Storm events continued to impact the forecast area with a rain changing to snow event on December 2, setting the stage for a persistent weak layer of near crust facets. Snowpit data targeting December 2 and December 12 near crust facet layers with the Propagation Saw Test (PST) and Extended Column Test (ECT) gave a 10 to 14 day lead time on forecasting persistent slab avalanches in various locations around the forecast area. A large storm cycle in late December deposited 4 feet of snow across the forecast area. During this time numerous persistent deep slab avalanches occurred across the forecast area with crown height ranging from 4 to 7 feet. Two fatalities resulted from deep slab avalanches inside ski area boundaries during this avalanche cycle. While no fatal incidents occurred in the backcountry, nine close calls did get reported to the avalanche center over the course of the season. The cold weather that persisted through mid January kept the snow cold and dry for an extended period. Many backcountry travelers sought out new terrain during the first few weeks of what would become a record dry spell. The period of January 1 through March 31 turned out to be the driest on record for that time of year. On January 1 the snowpack was at 146% of average for the date. On April 1 the snowpack was reduced to 52% of average for the date. The significant snowfall from October through December provided the base and usable snowpack for the remainder of the season.

November 16 - November 30						
Total Snowfall	Number of Storms	Dates of Storms	Storm Snowfall	Dates of Avalanche Cycles	Reported burials	
17	2	11/17 – 11/19 11/21	15 2	11/18		0
December						
Total Snowfall	Number of Storms	Dates of Storms	Storm Snowfall	Dates of Avalanche Cycles	Reported burials	
148	6	11/29 – 12/3 12/5 – 12/6 12/12 – 12/13 12/15 – 12/19 12/22 – 12/27 12/29 – 12/30	51 6.5 10 15 61 4	12/2 – 12/3 12/15 – 12/17 12/21 – 12/27 12/29 – 12/ 30		0 0 2 * in bounds 2
January						
Total Snowfall	Number of Storms	Dates of Storms	Storm Snowfall	Dates of Avalanche Cycles	Reported burials	
19	4	1/7 1/10 1/12 1/24 – 1/27	8 5 2 5	1/5 1/14 1/25 1/28		2 0 0 0
February						
Total Snowfall	Number of Storms	Dates of Storms	Storm Snowfall	Dates of Avalanche Cycles	Reported burials	
11	2	2/8 2/19 – 2/21	3 8			
March						
Total Snowfall	Number of Storms	Dates of Storms	Storm Snowfall	Dates of Avalanche Cycles	Reported burials	
26	4	3/3 – 3/4 3/6 – 3/8 3/20 – 3/21 3/29	6 12 8 1	3/6 – 3/7 3/9 – 3/10 3/16 3/20 – 3/21		1 2 1 0
April 1 - April 14						
Total Snowfall	Number of Storms	Dates of Storms	Storm Snowfall	Dates of Avalanche Cycles	Reported burials	
16	3	3/31 – 4/1 4/4 – 4/5 4/7 – 4/9	10 3 4	4/1		0

Weather Observations from along the Sierra Crest between 8200 ft. and 8800 ft.
sub-title



Board of Directors

The Sierra Avalanche Center operates as a partnership between a Board of Directors with 501(3)(c) not-for-profit status and the Tahoe National Forest. The mission of the Sierra Avalanche Center includes disseminating current snowpack stability information to the general public; providing educational information, knowledge, and understanding of avalanches to recreational users and groups; and facilitating communication in the region to reduce the impact of avalanches on recreation, industry, and transportation. The Board of Directors includes Don Triplat (CEO), Bob Moore (Secretary), Randall Osterhuber (CFO), Mark Bunge, David Fiore, Jeremy Jacobson, Chip Morrill, Jason Oelkers, Todd Offenbacher, Dave Paradysz, John Swanson, and Holly Syocum. The Advisory Committee to the Board of Directors includes: Dave Beck, Cameron Bordner (Legal Advisor), Debby Broback, Justin Broglio, and Larry Heywood. During the 2012-2013 season the Board of Directors employed Program Manager Jenny Hatch.

The Board of Directors is the financial backbone of the Sierra Avalanche Center. Through soliciting donations from the public and organizing/marketing fund raising events, they are the major source of funding for the Sierra Avalanche Center. Money raised by the Board of Directors covered approximately 50% of the operational costs for the Avalanche Center in 2012-2013. In past seasons, Board of Directors contributions have accounted for up to 95% of the avalanche center's annual operating costs when less USDAFS money was contributed. Through a collection agreement with the Tahoe National Forest, these funds pay for forecaster salaries and the costs of professional level continuing education. Additionally, the Board of Directors provides compensation for contracted professional observers and some equipment needs for the forecasters.



Long shooting crack on Silver Peak, CA. Photo by Brandon Schwartz

Financial Summary

The Board of Directors successfully raised \$91,567 from the local community this season. These funds were used to pay 50% of the operating costs of the avalanche center including \$38,560 towards salaries for two Tahoe National Forest avalanche forecasters and \$13,910 for two contracted professional field observers. The Board of Directors of the Sierra Avalanche Center raised funds for the season through several different avenues including private donations, online donations, resort donations for the SAC Ski/Ride Days, advertising, and fund raising parties/movie premiers. A complete itemized budget of Sierra Avalanche Center expenditures is listed below. The remaining 50% of this year's operating funds were government contributions in the form of \$6,847 in infrastructure support from the Tahoe National Forest, \$17,000 in salary funding from USDA Forest Service Region 5, \$6,650 in salary funding from USDA Forest Service Region 4, and \$23,000 in salary funding from the Lake Tahoe Basin Management Unit.

The "Ski Days" continue to serve as the primary fund raising events for the Sierra Avalanche Center. The Board of Directors used their connections in the Tahoe ski industry to partner with nine ski resorts for these Ski Days. Each resort donated between 150 and 500 lift tickets for a specific day. The Board of Directors set a fixed public donation amount necessary to receive a lift ticket for the Ski Day as a thank you gift.

Backcountry ski gear was donated by Backcountry Access, Gecko, Voile USA, H2O Gear, Black Diamond, and Praxis. These items were used as raffle prizes throughout the season. Several local organizations made cash donations to the avalanche center. The El Dorado Nordic Ski Patrol, South Lake Tahoe Crossfit, Tahoe Adventure Film Festival, Tahoe Nordic Search and Rescue, On the Snow, Auburn Ski Club, TGR, The Echo Lakes Splitfest, The Divided Sky, Pacific Crest Bar and Grill, Pacific Sierra Group, 101.5 Truckee Tahoe Radio, Lake Tahoe TV, and the Heavenly Ski Patrol were all significant contributors.

The Board of Directors encouraged donations from the general public via the website, by mail, or in person. The Board of Directors accepted cash, checks, and donations via credit card or electronic transfers through a PayPal donation link on our website. Through these avenues, the Board of Directors received \$30,808 in donations.

On a smaller scale, the Board of Directors raised awareness for each of the SAC Ski/Ride Days and the possibility of online donations through donated advertising received from local newspaper stories, radio and TV public service announcements, local utility bill mailers, and through several online communities (i.e. – forums and discount websites).

Sierra Avalanche Center Ski Days - 2013

Final Sales Report as of 04/21/13								
	Squaw/Alpine	Northstar	Heavenly	Homewood	Kirkwood	Mt. Rose	Sugar Bowl	Sierra at Tahoe
Ticket Price	\$45	\$50	\$50	\$35	\$50	\$35	\$35	\$35
Tickets Sold	300	170	250	48	63	316	324	25
Gross Revenue	\$13,500	\$8,500	\$12,500	\$1,680	\$3,150	\$11,060	\$11,340	\$875
Commission	3%	3%	3%	3%	3%	3%	3%	3%
Commission Paid	\$405.00	\$255.00	\$375.00	\$50.40	\$94.50	\$331.80	\$340.20	\$26.25
Net Revenue	Complete \$13,095.00	Complete \$8,245.00	Projected \$12,125.00	Projected \$1,629.60	Projected \$3,055.50	Projected \$10,728.20	Projected \$10,999.80	Projected \$848.75
Total Revenue for the season	\$60,726.85							

Fundraising partners and the services they provided:

Liftoptia

☪ Primary e-ticketing partner. Donated their service to facilitate online lift ticket distribution for the SAC Ski/Ride Days. Through these services the Sierra Avalanche Center raised \$46,919.

Porters Tahoe

☪ Cash donation of \$2,000. Product donation of \$1,000 for giveaway during SAC Ski/Ride Day fundraisers.

Polaris Industries

☪ Permanent donation of two Polaris RMK 600cc 155" snowmobiles. Estimated product value of \$21,000.

Backcountry Access

☪ Product sponsorship. Donated product for giveaway during SAC fundraisers. Estimated product value \$2,000.

KTKE 101.5 Truckee and Tahoe's Independent Radio

☪ Product sponsorship. Donated services to broadcast the avalanche advisory and to advertise SAC fundraisers. Estimated product value \$3000.

Lake Tahoe TV

☪ Product sponsorship. Donated advertising services to advertise SAC fundraisers. Estimated product value \$3000.

TGR

☪ Provided movies and venues for movie night fund raisers.

Divided Sky

☪ Hosted a fund raising party and collected over \$1000 in donations.

Bar of America

☪ Hosted a fund raising party and collected over \$1000 in donations.

Echo Lakes Splitfest

🕒 Hosted a raffle and collected over \$1000 in donations.

Heavenly Professional Ski Patrol

☪ Pending cash donation from their annual fundraising party.

Tahoe Adventure Film Festival

☪ Hosted a raffle and collected over \$1500 in donations.

South Lake Tahoe Cross Fit

☪ Hosted a fund-raising workout day and collected over \$1000 in donations.

Pacific Sierra Group

☪ Product sponsorship. Donated product for giveaway during SAC fundraisers.
Estimated product value \$1,000.

Extreme - Sponsors who donated more than \$3000 to SAC



In

Honor of
Bill Foster

High - Sponsors who donated between \$1000 and \$2999 to SAC



Pacific Sierra Group



Considerable - Sponsors who donated between \$500 and \$999 to SAC





VOILE-USA

Julia and Kevin
Norris

Bryan O'Sullivan

Peter Loer

Ryan Pinjuv

Moderate - Sponsors who donated between \$100 and \$499 to SAC

Gregory Tirdel	Marshall Hawks	Deborah Ameen	Harry Richardson	Nicolar Beres
Jim Sloves	Mike Hench	Kristin Kuyper	Gabriel Westheimer	Marvin Shaw
Brian Ahlers	Mark Bunge	Dean Schaecher	Jay Anderson	Michael Bechauf
John Anderson	Jennifer O'Neill	Mike Heirch	Pierre Redmond	Tai Boutell
Christina Dong	Timothy Bogardus	Yesser Belgacem	Snowpals	Walter Benoit
Joshua Masur	Jennifer Gleckman	Jonathan Creighton	Fernando Pereira	Heather Thompson
Louise Wholey	In Honor of Esther Eun Kyu Kim's & Peter Gunzenhauses Wedding	Douglas Sherman	Travis Ritchie	Alan Ramadan
Sierra Pacific Coffee Company	Bruce La Belle	Matt Tucker	Nicholas Beres	Tucker Heiner
Marvin Summer	Katherine Gross	Hope Rinehimer	Duncan Sisson	Michael McLaughlin
George Maier	Anna Siebelink	Dan Haas	Brian Forbes	Jeffrey Lock
Kevin McKennan	David Penndorf	Karl Marlowe	John Swanson	Michael McGroarty
Nicoli Ames	Scott Sadlon	Peter Czerpak	Terri McGuigan	Park City Mountain Resort Ski Patrol

Martin Waters	Matthew Potts	Timothy Pfafman	Lara Pearson	Andy Kaufer
Bret Dezordo	Cameron Stewart	Nicole Gulati	Joe Liszewski	Paul White
Joshua Michaels	Rodney Carpenter	Robert Morrow	Belle Rosin	Cyndi Lee
John Hillstrom	Duncan Findlay	Justin Munoz	Booker Bense	Anthony Guerrero
Roderick Beaton	Matt Eccles	Shaydar Edelman	Peter Comerford	

Low - Sponsors who donated between \$20 and \$99 to SAC

John Porensky	Eric Biber	Bettye Carmichael	Brian Quines	Eli Levine
Daniel Friel	Paul Fox	Connie Kobayashi	Stephen Etchemendy	Debbie Whitcher
John Allen	Brad Altman	Shasta Software	Julian Wixson	Robert Bergstrom
John Scott	Mary Peterson	Robert Zanetti	Ryan Haverstock	Stephen Popper
Jacob Palmer	David Passmore	Rob Stone	Patrick Sullivan	Roberta Hagerman
Judith Shaw	Cheryl Hackworth	Helen McDermott	Andy Miller	Colin Robinson
Dave McNeil	Kathy Kohberger	Jim Dickinson	Sheiloa Pangilnan	Caleb MacCready
David Sterry	Alan Walls	Nathan Corona	Jason McLachlan	Brett Hagadorn
Gail Irvine	Nancy Davis			