
Sawtooth National Forest Avalanche Center

Annual Report 2012 - 2013



Photo courtesy of Patrick Graham



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Acknowledgements

*On behalf the Avalanche Center staff, **THANK YOU!!** to the Friends of the SNFAC and to all of you who contributed this season!*

The Avalanche Center could not operate in the capacity we do without the generous support of our community. We receive half of our funding from the Friends of the SNFAC, who raises money through Advisory Sponsorships and donations from individuals and organizations. For a list of private donors for the 2012-13 season please visit:

<http://www.sawtoothavalanche.com/docs/2012SNFACNewsletter.pdf>

This season's Advisory Sponsors:



We also want to recognize the support given to our fundraising effort by our community retailers:



The following organizations provided over 200 observations to our professional observations database this season. Many thanks to:



From the Director



This year was marked by staff in new jobs, great snow conditions in December, a lack-luster mid-season snow report, and our 3rd fatality free season in a row. I want to give credit to Blase and Scott for keeping up with the workload, and I want to thank all of you who helped with my transition into the director's seat. Chris and Janet left a lasting legacy; one that we will build upon in the future with your continued support.

Sincerely,

Simon Trautman
Director, Sawtooth Avalanche Center

Season Highlights

- It was a fatality-free season despite several close calls. Historically our area averages 1-2 fatalities per winter, this is the third consecutive accident free season!
- We issued Daily Advisories from December 1 through April 15th. In total, we produced 135 advisories this winter.
- Our advisory received ~160,000 views via the web, email subscription, and recorded hotline. Advisories were accessed an average of 1200 times each – a 10% jump over last season.
- We revised our logo and completed the 1st phase of a three part web redesign project.
- Public outreach continues to be very successful through the local newspaper, radio, and social media. Our "Likes" on Facebook increased from 1150 to 1268, and from 99 to 148 followers on Twitter.
- We expanded our recreational and professional education programs this season. All told we presented to over 1700 individuals.
- The Friends of the SNFAC became their own 501c(3) entity, hired a new executive director, now have 10 board members, and once again had a successful fundraising season.
- We ended the season with a snowpack representing roughly 87% of the 30-year average and 78% of last season. On average, only 25% of the season's snowfall fell after December 26th.

Staff

Chris Lundy moved on to greener pastures in 2012 and Simon Trautman stepped from seasonal forecaster into the Director position, which meant less field time and more time addressing all those...other things. He managed the transition with 'most' of his hair, and his sense of humor and composure remain intact. We replaced him with Scott Savage, formerly Snow Safety Director at Big Sky ski area. Thanks to Scott's experience and badger-like tenaciousness, he easily jumped from forecasting at the scale of a large ski area to forecasting for five mountain ranges he'd barely seen. Blase Reardon returned for his fifth winter at the center, and worked as the old hand who kept advisories engaging, coordinated avalanche classes, and steadily checked into numerous corners of our advisory area.

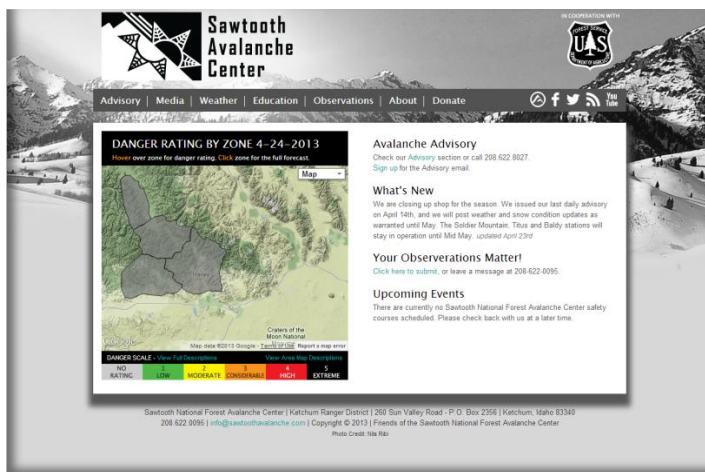


Blase (L) and Scott (R) logged 115 field observations, published 97 advisories, taught 21 classes, and successfully maintained our network of remote weather stations – oh, and they also volunteered for each of the Friends Fundraisers.

Nice work!

Innovation and Accomplishment

Our goal at the avalanche center is to take avalanche safety to the next level. We take pride in seeking out new, better, or more efficient ways to help backcountry recreationalists make good decisions in the mountains. Our innovation is what keeps us among the most respected avalanche centers in the country.



We rebuilt our website, completing the first phase of a three part project to modernize our brand and communication platform.

- Each of us presented at one of the Regional Snow and Avalanche Workshops – Simon at the USAW, Blase at ESAW, and Scott at NRS AW.
- Simon presented a comparison/history of the polar diagram and the avalanche danger rose at the National Avalanche Center Meeting in Anchorage.
- Blase served as a Guest Instructor at a NOLS Instructors' Level II Avalanche course in the Tetons.
- Scott co-authored two papers on decision making at ISSW, and presented a case study at the Gallatin NF Avalanche Center's Professional Development Seminar.
- Scott and Simon published an article on sidecountry skiing in *The Avalanche Review*.

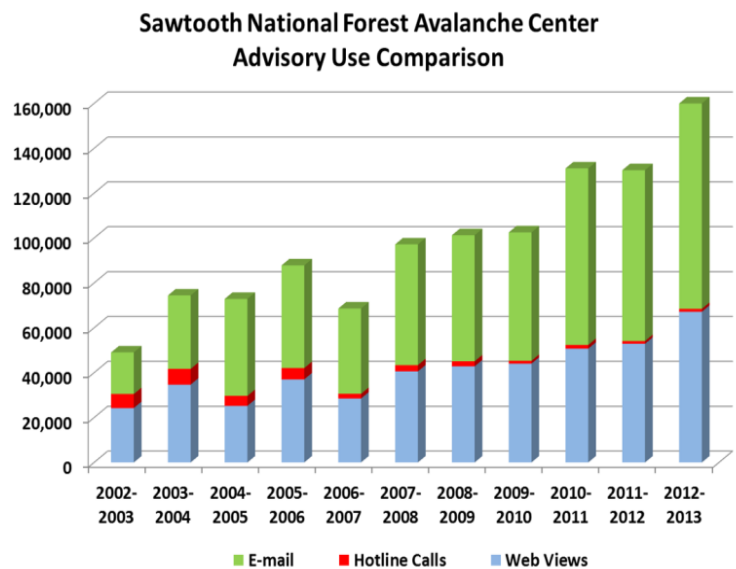
Advisory Use

We began advisories several weeks early this season, issuing 135 advisories (compared to 119 last season) and 8 general snow and avalanche updates.

Despite the below average conditions much of the winter, advisories were accessed an average of 1200 times each – a 10% jump over last season.

The number of email advisory subscribers increased 6% from 640 last year to 680 this season.

Accessing the advisory via the recorded hotline continues to become less common as web technology becomes more dominant in our daily lives.



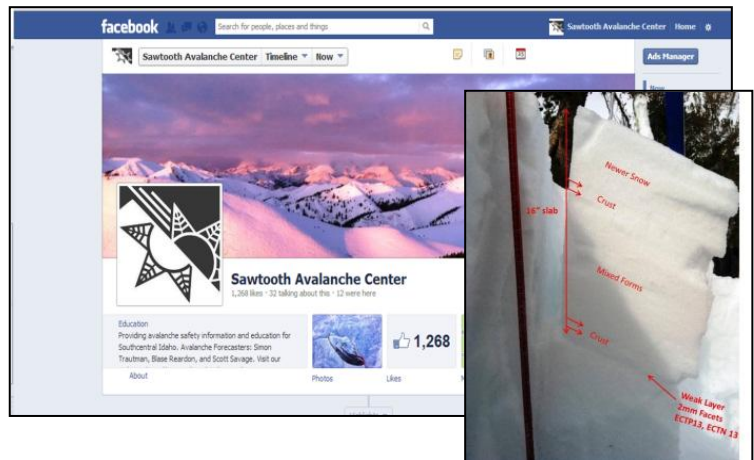
Advisory use totals show a steady increase over the last decade. Our numbers jumped 19% this year, 10% is attributed to increased internet traffic, and 9% to a longer advisory season.

Media & Outreach

This season was light on avalanches, and we learned that it is much harder to have a media presence without much to talk about! Nonetheless, we continued to use web-based social media to communicate avalanche conditions and event information. We now have 1268 “likes” on Facebook (up 9%), 148 followers on Twitter (up 33%), and 42 followers on YouTube with 3223 views this year and 47,025 total YouTube views.

Idaho Mountain Express and KECH Radio continue to be an invaluable resource, and helped us broadcast conditions during periods of heightened avalanche danger, and keep the public informed on fundraising events.

This year we published 3 articles in the paper and issued 95 morning avalanche condition summaries at 7:45am on KECH radio.



Facebook continued to be a successful way to communicate avalanche information. A goal for next year is a more strategic use of Facebook as a means to rapidly inform the public of changing conditions, and to use Twitter as a public observation platform.

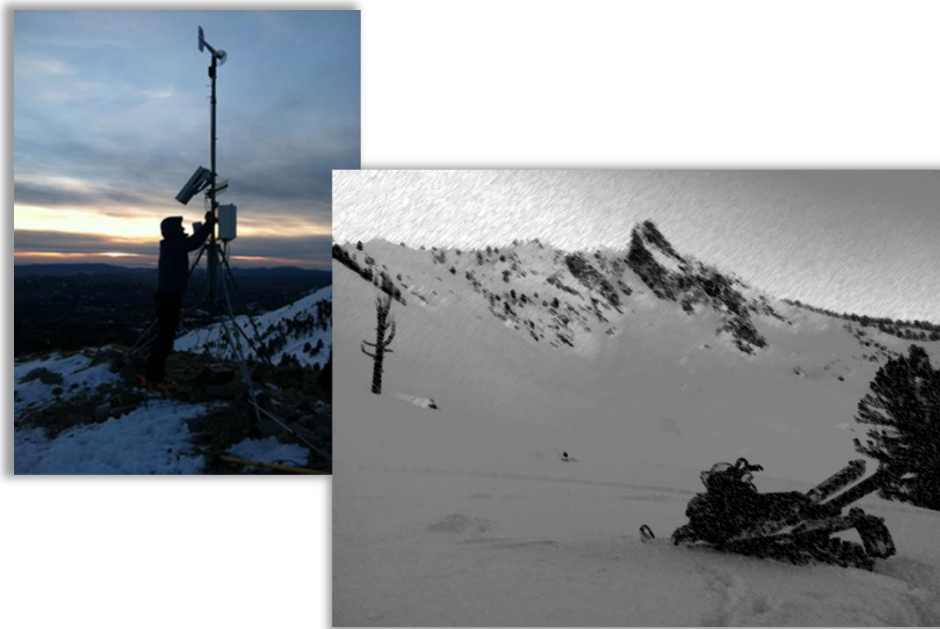
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Operations

Things Fall Apart is the most famous novel by Chinua Achebe, a Nigerian novelist who died this winter. The title's also an apt theme for a series of equipment challenges that marked our winter. First, lightning strikes fried radios at two of our five automated weather stations. The strike at our Peak 2 station also blasted the anemometer into the next county, but miraculously spared the ancient CR10 data logger. We were able to get both stations back running before the forecasting season started in earnest, though the Peak 2 repairs involved moonlit skiing on just a foot or so of snow. In February, we discovered it is possible for two snowmobiles to die within seconds of each other...which also resulted in some moonlit skiing...



We logged 145 days in the field, which exceeded a field day to advisory ratio of 1:1, and used snowmobiles for ~20 percent of that fieldwork. This year local ski guides and snow safety workers submitted over 200 observations to our professional observations database. A big thank-you to the guides at Sawtooth Mountain Guides, Sun Valley Heli Ski, and Sun Valley Trekking, and the ski patrols at Bald Mountain and Soldier Mountain ski areas. The public also contributed an additional 77 observations. Next season we want to increase that number, with a focus on motorized areas and the backcountry access areas around Bald Mountain.

Educational Programs

Our staff made 28 education presentations, evenly split between professional and recreational audiences. Each of us presented at one of the Regional Snow and Avalanche Workshops – Simon at the Utah Snow and Avalanche Workshop (USAW), Blase at the Eastern Snow and Avalanche Workshop (ESAW), and Scott at the Northern Rockies Snow and Avalanche Workshop (NRSAW). Over 1000 people heard those presentations. In addition, Simon presented at the National Avalanche Center meeting in Anchorage, AK; Scott co-authored two papers at the International Snow Science Workshop (ISSW), and presented a case study at the Gallatin NF Avalanche Center's Professional Development Seminar, and Blase served as a Guest Instructor at a National Outdoor Leadership School (NOLS) Instructors' Level II Avalanche course in the Tetons.

Closer to home, we hosted a professional development seminar of our own in early December, with the goal of transferring interesting research presented at the International Snow Science Workshop to our local snow and avalanche workers. We also developed an Urban Avalanches and Rescue seminar and field session for local first responders. This course aimed to prepare them for accidents involving residents, motorists, and snow removal crews. Attendance was up at our four regular Avalanche Awareness and Basics classes – 156 people at the classroom sessions and 59 in the field sessions, and there was a great turnout at the community driven Sawtooth Snow Safety Festival. All told, our education programs reached over 700 people in addition to the regional avalanche workshops.

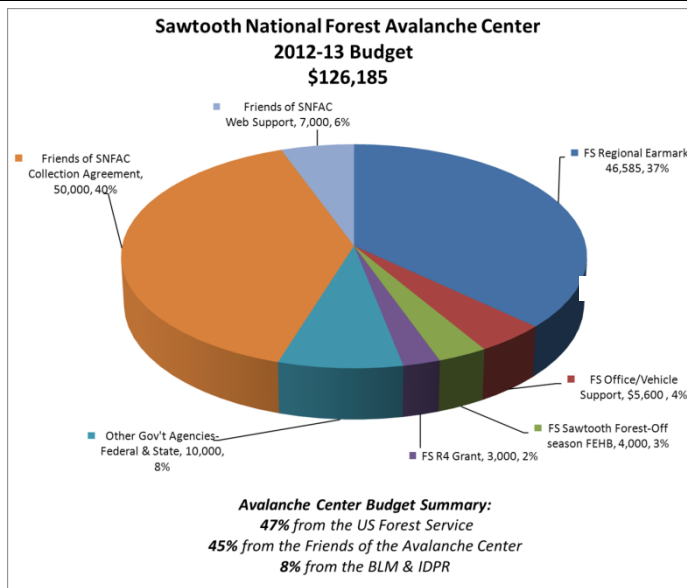


The SNFAC provides free or low cost avalanche classes for a variety of user groups, reaching hundreds of people each winter. Many of these classes feature a field component, which provides great hands-on training and an opportunity to spend the day with an avalanche forecaster or highly experienced instructor.

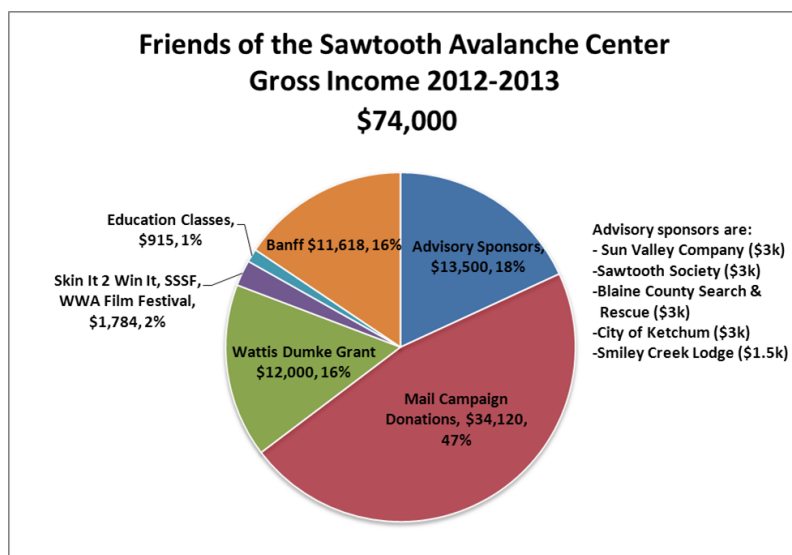
Funding & Partnerships

The Avalanche Center relies on a variety of partnerships to fund its operation. Approximately half of the Center's budget comes from the Forest Service. Despite shrinking federal budgets, Region 4 (of the Forest Service) continues to increase our Forest Service funding, a sign of their continuing commitment to Avalanche Centers, and to keeping the public safe. The Ketchum Ranger District provides vehicles, office support, and maintenance facilities.

Thanks to Rich Gummersall and his colleagues at the Idaho Department of Parks and Recreation. This state agency is making a significant contribution and commitment to avalanche safety throughout the state. In addition to the \$5000 they contribute to fund avalanche advisories and education, they gifted two 2010 Polaris 600 RMK snow machines to the avalanche center ... an act of uncommon generosity, and one that has helped our operation immensely.



The Avalanche Center budget comes from a variety of sources, providing an example of a successful public-private partnership.



The Friends of the SNFAC had a successful fundraising season, illustrating a strong community buy-in and support of the avalanche center.

The Friends of the SNFAC continue to grow and remain a critical partner in the mission of the Avalanche Center. This year the Friends committed to an annual collection agreement of \$50,000 for a span of 5 years. This money covers salaries for 2 of our 3 forecasting positions. In addition, they provided 2/3 of the funds used to overhaul our website. In total, 45% of our budget this season came from the Friends.

We want to congratulate them on another successful fundraising season, and for steadfastly working to become a well-oiled and professional entity. They achieve a remarkable amount of community buy-in and support, and are at the heart of what makes the Sawtooth Avalanche Center a successful private – public partnership.

Snowpack Summary

The winter of 2012-13 didn't follow usual patterns, providing us with some great opportunities to see and learn from atypical conditions. First, there was the December to Remember. Automated stations in our advisory area recorded snowfall on roughly two of every three days, and by Christmas our upper-elevation snowpack was 135-175% of the thirty-year average. This deep, early season snowpack didn't metamorphose into widespread faceted layers, and although great riding and skiing conditions pulled far more people than usual into the backcountry, we received few reports of human-triggered slides or avalanche incidents (thanks to the unusual snowpack development). We issued a High danger rating only once that month, and our advisories focused on storm snow and wind slab avalanche problems, not the persistent and deep slab problems we're so accustomed to in the early season.

The storms shut off at Christmas, and for the following three months we saw one- to three-week long dry spells punctuated by brief periods of light snow, inversions and/ or bouts of strong, northerly winds. Several times, weak layers that formed at the surface were tempered by warming in the few days prior to snowfall, and the subsequent instability wasn't widespread or prolonged.

The season closed with yet more anomalous conditions - an extended period of unseasonably warm temperatures followed by a very winter-like storm. We saw a prolonged wet loose avalanche cycle that circled the compass from sunny to shady aspects, then on the 10th day started all over again on sunny aspects. In early April a very cold low settled overhead, bringing one to two feet of snow, single-digit temperatures and a powerful blast of northerly wind. On April 14th (the last day of our advisories), snowmobilers triggered a D3 slab high in the Boulder Mountains on a recently wind-loaded slope. This was the closest call of the season. The two riders involved – a father and son – survived uninjured after the father rode through the moving debris, picked up his son, and drove through the swash to safety.



We ended the season with a snowpack representing roughly 87% of the 30-year average and 78% of last season. On average, only 25% of the season's snowfall fell after December 26th.

This avalanche was triggered by a snowmachine in the Boulder Mountains April 14, 2013.

Photo Courtesy of Nate Scales.

Next Season's Goals

- Continue to improve our avalanche advisories.
- Obtain permission from the USFS to construct a weather station in the Sawtooth Mountains, and secure the funding for that station.
- Update our advisory format. There is momentum to move to a design that would be shared amongst several US avalanche centers.
- Create a new mountain weather page that contains daily point forecasts and links to graphical weather station output.
- Increased outreach to the motorized community.
- Double the amount of observations we receive from the public.
- Ramp up avalanche awareness week to include a community sponsored snow and avalanche workshop and a 'know-before-you-go' program for Blaine County youth.
- At least one outreach and education class in the greater Boise area.
- Develop and implement a 'forecaster exchange' that will increase collaboration and information transfer between avalanche centers.
- Work with Boise State University to document and research persistent weak layers.



Continue working with Sun Valley Company, stakeholders and local sidecountry skiers to promote education and understanding of issues related to skiing out-of-bounds on Baldy.