

Sawtooth National Forest Avalanche Center Annual Report 2003-2004



VOLUME 7

SPRING 2004

OPERATIONS

The Sawtooth National Forest Avalanche Center, (SNFAC), began issuing Snow and Avalanche Information on November 5th, 2003. A total of 127 advisories were issued until April 5th, 2004. The last three weeks in March brought record setting warm temperatures and very good spring snow conditions at mid to upper elevations, but produced bare slopes and avid bicyclers at lower elevations.

User numbers increased again this season in spite of a late start for daily advisories, several extended dry spells and an early season ending because of an unusually warm spring. Advisory accesses were nearly 68,000, *an increase of 36% over last year!* More than 130,000 hits were received on all of the SNFAC web pages by April 15th. The webpages include hourly downloads from the three remote weather stations that we maintain: Bald Mtn, Titus Ridge and Lower Titus. Direct links were provided to the avalanche advisories from Boise and Pocatello National Weather Service pages, Idaho NRCS SNOTEL and Idaho Department of Parks & Recreation.



Surface Hoar becoming a buried weak layer late January 2004

We were very fortunate to have Dr. Thomas Wiesinger of the Swiss Federal Institute for Snow and Avalanche Research visit SNFAC and tour the Sawtooth area with us for several days in March.



A Field Class with IDPR staff

Educational Programs

With guaranteed funding & staffing through the 2003-04 season, SNFAC engaged more than 600 people with avalanche classes. This included outreach programs in Fairfield, West Yellowstone and Twin Falls, a women's class and several snowmachine oriented classes.

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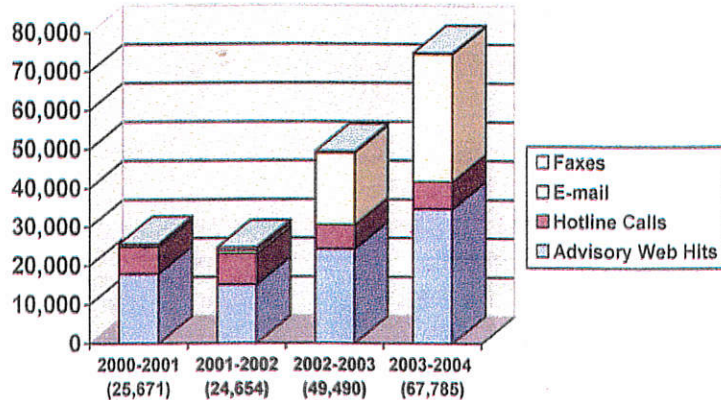
Special points of interest:

- Advisory use increases again! *Use up by 36%*
- Friends contributions & Advisory Sponsorship guarantee a full season of avalanche advisories and educational programs.



Idaho Department of Parks and Recreation began a partnership program with the three Idaho Avalanche Centers to teach regional avalanche classes with field sessions for snow-machiners in Idaho Falls, Boise and Coeur d'Alene.

SAWTOOTH NATIONAL FOREST
 AVALANCHE CENTER
 ADVISORY USE-Yearly Comparison



Snow Stability & Avalanche Cycles 2004

2003-2004 proved to be a winter with prolonged instability. Early season depth hoar persisted until late December. A series of Christmas storms followed by a deadly New Year's storm did evolve into a homogeneous snowpack with low avalanche danger, which lasted until late January. February brought new storms and deep slab instabilities.

During the New Year's storm two people were killed when a wind loaded slope released above a cabin near Fairfield, Idaho. Several homes in the city of Ketchum were hit by slides with minor damages occurring. A ski instructor was reported missing within the ski area only to be found 2 and ½ days later in a tree well type situation, (non-avalanche related), by an avalanche dog. He appeared to have died of asphyxiation.

The January dry & cold weather produced copious amounts of near surface facets and widespread surface hoar. Small storms followed by two larger, wet February storms created a dangerous snowpack with persistent buried weak layers 1 foot (February surface hoar) and 3 feet deep, (January buried surface hoar and near surface facets). Numerous, unexpected human triggered avalanches occurred beginning the 20th of February and became increasingly larger until February 28th when a snowmachiner was killed while high-marking in the Apollo Creek drainage of Baker Creek.

Fortunately, no one else was injured during this time. Avalanche cycles occurred during the two larger February storms, and a few sporadic, delayed release naturals were observed until March 2nd.

By late February, most backcountry travelers became ultra conservative and very few were venturing onto steep slopes. Persistent shears within the snowpack and a strong wind event (65mph Baldy, 116mph Soldier Mtn) added to the conservative thought pattern. March 7th, a skier triggered a large slide on a steep slide path above the Williams yurt in the Sawtooth Mtns, lost their gear, but was only partially buried.

Mid March, the heat turned on. Isothermal snowpacks and melt freeze crusts formed on all but due north aspects. Eventually, a more consolidated snowpack emerged as skiers traded boards for bicycles and storm parkas for shorts. The snowpack totals had been close to average at the beginning of March, but these dropped to 73% snow water equivalent for the Bigwood River drainage and 78% of average for the Salmon River by April 1st. This is unusual, March is typically a month of significant snowfall and increased snowpack totals.

Funding & Partnerships

2004 saw some great strides made towards annual funding that will help to guarantee daily Avalanche Center operations. The Sawtooth Forest has fully committed to funding the Avalanche Center director position. The Friends of the Sawtooth Avalanche Center shifted from a springtime "Snowball" dance to a well attended, season opener Film Festival and Raffle. Additional partnerships and advisory sponsorships are evolving with Idaho Department of Parks and Recreation, Blaine County Commissioners, the City of Ketchum and several local foundations.

Invaluable, in-kind support is provided each season by the Pocatello National Weather Service with their daily avalanche guidance and point weather forecasts, the National Resources Conservation Services with their special SNOTEL

data downloads. Sun Valley Heli-Ski shares their snowpack field observations, and Sun Valley Company provides direct access to the Bald Mountain weather station, shared data and lift services.

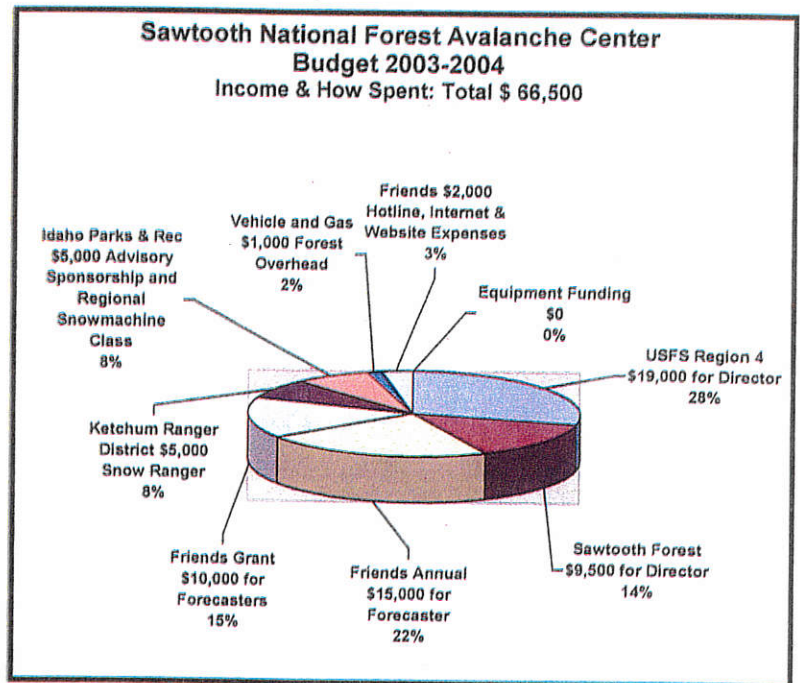
2003-04 sponsors of the daily avalanche advisories included the Sawtooth Society, Idaho Dep't of Parks and Rec., the Sun Valley Mountaineers Club, Backwoods Mountain Sports, Bigwood Bread, The Elephant's Perch and Sun Summit Ski & Cycle.

A Sawtooth Information Exchange e-mail group formed to facilitate sharing of field observations. Participants included local outfitters & guides and Sun Valley Ski Patrol.

Countless local individuals contributed to the Friends. The Sawtooth NF Avalanche Center would not be able to operate

without the Friends and their financial donations, their hours of promotional and educational work and their endless enthusiasm about what we do.

We are proud to be a community-based service that is so warmly received and supported.



Staff 2004

Janet Kellam returned for her 8th season with the avalanche center, Greg Johnson completed his 2nd season and two new forecasters joined the team.

Jake Amadon worked part time as a new forecaster and instructor for the SNFAC and part time as a guide with Sun Valley Heli-Ski. Jeff Halligan, re-



Forecaster Greg Johnson checking early season instability on Titus Ridge

cently relocated as a Recreation Specialist from the Payette National Forest and Avalanche Center, was able to forecast 1 day a week and help teach classes. Although working in the Ketchum office with many other duties, Doug Abromeit and Joe Miczulski provided valuable information throughout the winter.



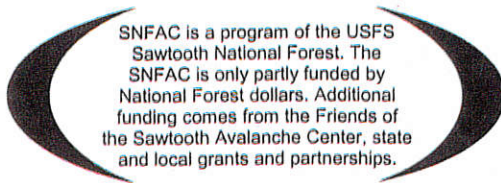
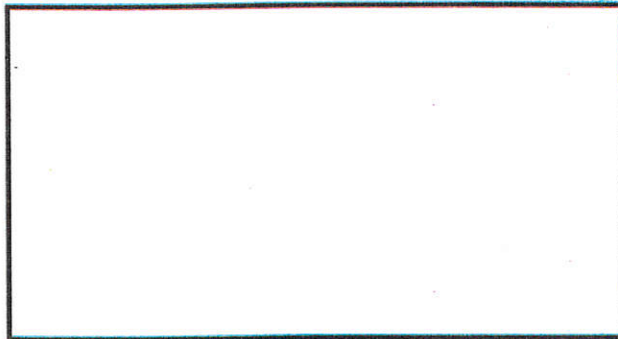
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the Sawtooth Avalanche Center, state
and local grants and partnerships.

2004 Media Promotes Avalanche Awareness

Media attention on the local, regional and national level brought avalanche awareness to hundreds of thousands of people. Newspaper articles in the Wood River Valley, Twin Falls, Boise, Idaho Falls, Mountain Home and even the New York Times were based on press releases and interviews with SNFAC staff. Radio stations throughout southern Idaho produced specials on avalanche awareness.

Boise, Twin Falls and Sun Valley television stations all produced avalanche awareness specials and did a number of news programs about the Fairfield cabin fatalities. Forecaster Greg Johnson appeared on a news clip on Tom Brokaw, MSNBC, ABC affiliates and the Today show after the New Year's fatalities.

National Geographic Explorer is releasing a film and a website about avalanches and interviewed our staff. Gary Stivers and KECH

radio provided countless community service & news broadcasts about the current avalanche danger and always provided listeners with the contact numbers for the daily advisories.



Fairfield Avalanche Site: January 1st, 2004