Sawtooth National Forest Avalanche Center

Annual Report 2004-2005



VOLUME 8

SPRING 2005

Operations

The Sawtooth National Forest Avalanche Center, (SNFAC) began issuing general snow and avalanche information on October 18th due to early season snowstorms. Periodic updates were posted and daily Avalanche Advisories did not begin until December 7th. An erratic winter followed with very warm temperatures, very cold temperatures and dry conditions, alternating with several periods of heavy snow or multiple storms. User numbers increased slightly, in spite of little or no snow from early January until mid February. A total of 128 advisories were posted.

Website improvements include better displays for weather station downloads, a new snow and weather links page off of our home page and a user friendly observation form linked from our home page. We also compiled a user survey.



A dry winter followed by late-March snowfall led to several large human-triggered avalanches. Baker Peak 4/1/2005

The Pocatello Weather Service cre- • Advisory use increases again! ated a new "Avalanche Weather" web page and at 5:30 AM produced daily local forecasts for Baldy, Titus Ridge and the Wood . River Valley. Their avalanche page was utilized and praised by Baldy Ski Patrol, Highway crews and many avid locals.

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Special points of interest:

- Use up by 8% in spite of a record dry year
 - Friends contributions & Advisory Sponsorship quarantee a full season of avalanche advisories and educational programs.

Educational Programs

The SNFAC staff provided a full range of educational programs this season, reaching over 600 people. Locally, Avalanche Basics were offered for all types of winter enthusiasts combined with field sessions for skiers, snowshoers, boarders and snowmachiners. Snowmobile specific classes were provided in Twin Falls, the Sawtooth Valley and Fairfield, SNFAC instructors offered a regional Idaho Department of Parks and Recreation program in Idaho Falls.

After 2 years of training and assisting at avalanche classes, IDPR has a safety program coordinator and their



Avalanche rescue practice scenario with snowmobilers



staff is becoming proficient in offering their own avalanche programs and reaching an even larger audience.

New programs included a 1 hour avalanche awareness session hosted by the College of Southern Idaho at the Hailey Campus, a bilingual "Living and Working in Avalanche Country" program oriented towards homeowners and service workers in the Wood River Valley, and a more specific "Avalanche Basics" program with Idaho Power linemen.

4" recent snow very weak faceted snow

In late-March, snow began piling up on a weak, faceted snowpack.

SAWTOOTH NATIONAL FOREST AVALANCHE CENTER ADVISORY USE-Yearly Comparison 80,000 70,000 60,000 50,000 □Faxes 40,000 □ E-mail 30,000 Motline Calls 20,000 Advisory Web Hits 10,000 2000-2002-2003-2004-2001 2002 2003 2004 2005 (25,671) (24,654) (49,490) (67,785) (73,146)

Snow Stability & Avalanche Cycles 2005

The winter of 2004-05 was feast or famine. Central Idaho experienced several periods of decent size snowstorms or multiple storms, interspersed with very long dry spells.

Early season storms were followed by intense warm ups. Finally, a storm system on a southerly track dropped 3 feet of snow throughout the forecast region during the first week of December. Areas where previous snow cover existed consisted of facets and unstable avalanche conditions resulted. Very warm temperatures and some rain in the days following the storm created melt freeze crusts on most aspects and led to the worst sliding and riding conditions of the winter.

During the last half of December, spotty dustings of snow provided material to feed facet growth and create a weak layer above the old surface crust. This facet/crust combination remained preserved on shadier aspects.

A storm over New Years and another a week later provided 60 to 70 inches of low density snow containing over 4 inches of water. In the northern Sawtooths, natural and human-triggered slides occurred but the remainder of the region saw little activity.

Dreams of a good snow year fizzled as one of the longest dry spells in memory ensued. Low avalanche danger allowed safe backcountry travel into areas that would normally be too dangerous. Excellent corn skiing even developed. A small storm on Valentine's Day provided brief relief to the dry conditions, and gave a clue of things to come. With an extremely

weak snow surface, even 6-8 inches of new snow was enough to cause widespread collapsing and some avalanche activity. Early March brought a warm up with wet slide activity.

By mid March, the Big Wood River and Salmon River Basins were 50-60% of average for snowfall and things were looking grim. Finally on St. Patrick's Day, the Rex Block weather system in the Pacific Northwest broke down and snowfall began. For two weeks, small but continuous snowstorms provided a total of over 2 to 3 feet of snow. The storms favored the Smoky and Sawtooth Mountains and snow accumulated over weak facets on mid to upper elevation northerly aspects.

Natural and human-triggered avalanches began increasing in size and concerns grew. On March 25 a backcountry skier was seriously injured in an avalanche on Titus Ridge. A rapid rescue by his partners and the Sun Valley Heli Ski helicopter likely saved his life. In the week following, triggered avalanches up to 1,000 feet in width were observed, and on April 1, exactly a week after the first accident, a snowmobiler was buried and killed by a large avalanche in Brodie Gulch.

Due to funding issues and waning public interest, the Avalanche Center began winding down its daily operations, but continued to warn of the lingering deep slab instability. The consensus at the Center was that the northerly snowpack could not be trusted until after an extended melt freeze cycle. This would produce large, wet avalanches before developing a more solid, summer time snowpack in the high country.

Funding & Partnerships

2005 was the first season that the avalanche center could operate with some financial certainty. The Sawtooth Forest fully committed to the director's position and commended the SNFAC for exemplary safety programs for the general public and within the Forest Service.

Friends of the The Sawtooth Avalanche Center have done an amazing job in community awareness about the avalanche center and what it offers, as well as annually raising close \$20,000. The Friends partnered with Sun Valley Ski Patrol to host the Best of Banff film festival and amazing raffle in early February.

Avalanche Advisory sponsorships made it possible to provide daily avalanche and mountain weather forecasts the entire season. Main Blaine sponsors were County, The City of Ketchum, Idaho Department of Parks and Recreation, the Sawtooth Society, The Sun Valley Mountaineers Club and the Deer Creek Fund in

tion. Backwoods Mountain Sports, Bigwood Bread, The Elephant's Perch. Galena Backcountry Patrol, Sun Valley Telemark series and Idaho Power provided additional funding. A very special grant from the Wattis-Dumke Foundation made it possible for the Avalanche Center to operate a full seven days a week, purchase a power point projector and offer many of the educational programs.

the Idaho Community Founda-

Great thanks go to Polaris and Woodside RV for developing a snowmobile loaner program with the Friends of the SNFAC and the Sawtooth Avalanche Center. Polaris and Woodside provided 2 brand new, 2005 700 RMK sleds. Forecasters could finally ride backcountry locations where the greatest need is for avalanche information helped us provide better snow stability information for sledders in our area. The new sleds also allowed us to teach a number of snowmobile field sessions and to get out with local riders. A far cry from our 10 year old trail sleds!

The NRCS SNOTEL crew

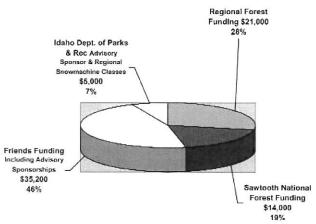
in Boise, Sun Valley Heli-Ski, were all working partners.

Sun Valley Ski Patrol, Sun Valley Company and Pocatello NOAA weather forecasters

> Countless local individuals contribute to the Friends and the Sawtooth Avalanche Center with financial donations, hours of promotional and educational work and endless enthusiasm. We are proud to be a community- based service that is so warmly received and supported.

Sawtooth National Forest Avalanche Center Budget 2004-2005

Categories of Expenditures: Total \$ 75,200



Staff 2005

The avalanche center was very fortunate to bring a new avalanche specialist on board. Chris Lundy took over the full time forecaster position from Greg Johnson. Chris comes from 11 years Bozeman. Montana where he was on the Bridger Bowl ski patrol & snow safety staff, an avalanche instructor and observer for the Gallatin National Forest Avalanche Center and a Master's graduate with an engineer-



Forecasters Jake Amadon and Chris Lundy investigating the early season snowpack on Titus Ridge.

ing and snow science degree from Montana State University. He has helped to upgrade all of the avalanche programs and he is in awe of all the accessible, winter terrain in our region.

Janet Kellam, director of the Sawtooth NFAC completed her 9th season with the center and Jake Amadon and Jeff Halligan returned for their second season as parttime forecasters and instructors. Doug Abromeit of the FS National Avalanche Center and Joe Miczulski, the Ketchum Ranger District Recreation Specialist and Snow Ranger provided valuable input and oversight.

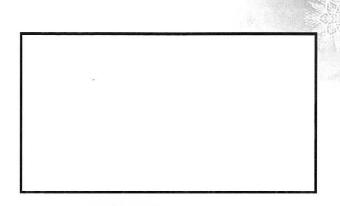


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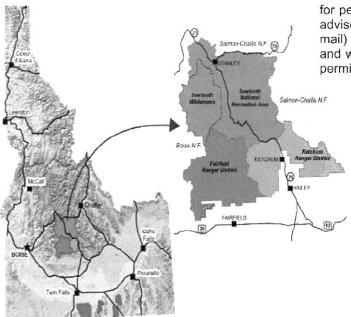
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> > SNFAC is a program of the USFS Sawtooth National Forest. The SNFAC is only partly funded by National Forest dollars. Additional funding comes from the Friends of the Sawtooth Avalanche Center, state and local grants and partnerships.



Avalanche Advisory Coverage



The Avalanche Center begins operations in November and ends in April. Early season general snow and weather updates are posted until there is enough snow for people to recreate in the backcountry. After that, daily advisories are produced (phone hotline, website and email) by 7AM each morning until April 1st. General snow and weather information is posted until mid April, funding permitting.



Brodie Gulch accident site, April 1, 2005.