

Avalanche Advisory & Mountain Weather

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Sawtooth National Forest Avalanche Center 2002-2003 Annual Report

Ketchum Ranger District PO Box 2356 Ketchum, ID 83340 (208) 622-0095 snfavalanche@sunvalley.net

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INTRODUCTION

The Sawtooth National Forest Avalanche Center (SNFAC) is a Forest Service program that operates from the Ketchum Ranger District office. It has created a unique affiliation of federal agencies, local organizations and businesses, members of the outdoor industry, and individuals. Through the cooperative efforts of all these groups and individuals the Avalanche Center is a successful community project. Our goal is two fold: One, to provide avalanche and mountain weather advisories to the public and two, to provide and promote avalanche awareness and education. The SNFAC is proud to be a part of a community partnership that benefits winter recreationists, Idaho travelers, local youth, winter visitors and winter workers.

ACKNOWLEDGEMENTS

The Sawtooth National Forest Avalanche Center (SNFAC) is deeply indebted to the many who have helped support us this season. We'd like to thank all of the agencies, businesses and individuals that provided logistical support, financial support and observations to the avalanche center this past winter. Without your help, we wouldn't be able to provide this service.

The Forest Service National Avalanche Center (NAC) provides leadership, and organizational direction. The NAC annually sponsors a pre-season meeting of the network of Avalanche Centers. This provides a helpful exchange of ideas, which allows for greater collaboration and communication between the individual centers. This meeting also provides a day of continuing education for avalanche professionals

The **National Weather Service** issues a daily "Sawtooth Avalanche Guidance Forecast" for Ketchum and Hailey, for Bald Mtn. at 9000 ft. elevation and for Titus Ridge near Galena Summit at 10,000 ft. elevation. This provides accurate target information for our forecast area. Rick Winther coordinates the program out of the Pocatello Weather Service office.

The **National Resource Conservation Service** contributes by allowing us access to their data from remote Snotel sites, and compiling monthly totals. This data has been an important component for formulating our backcountry forecasts. Special thanks go to Ron Abramovich, Phil Morrisey & Bill Patterson.

Sun Valley Heli-Ski helps by providing observations and snow study data during their operational season.

Sun Valley Company provides daily support by maintaining a weather station at the top of Bald Mountain Ski Area and allowing data access. The Baldy ski patrol provides avalanche and snow observations from their snow safety program. Special thanks go to Rich Bingham and Mike Lloyd

The Friends of the Sawtooth NF Avalanche Center and their Avalanche Awareness Committee provides invaluable enthusiasm and fundraising to assist the SNFAC. Louise Stumph and Michael Malko put in many hours assisting with the mail campaign and the annual Snow Ball. Martha Deffe again donated her time and talent to design the Snowball flyer. Lindy Cogan provides her book keeping services and hours of organizational support. Kay Tenney donated brochure designs and Tina Cole organized the season end Gear Swap. The Friends supported the Avalanche Hotline with donations from Backwoods Mtn. Sports, The Elephants Perch, Sun Summit, Bigwood Bread, and Pro-Line Sports.

Generous Grants from these organizations helped to sponsor the daily advisories
The Sawtooth Society
Tom & Lynn Campion and the Deer Creek Fund,
through the Idaho Community Foundation
The Sun Valley Mountaineers Club

The American Avalanche Association provides the non-profit umbrella for the Friends of the Sawtooth NF Avalanche Center. The Friends would not be possible without their assistance.

Westwide Avalanche Network (www.avalanche.org) provides a constant connection with the rest of the avalanche forecast community, provides internet posting of our daily advisory and hosts our website.

Dan Judd assisted us through out the season with computer programming and data organization. Jay Gress continues to work on our website and keep it state-of-the art.

Volunteer Observers, from a variety of backgrounds and interests, contributed data that assisted us in our daily advisories. Training and expertise varied considerably, and all of the information reinforced our premise that every observation helps to formulate the daily advisory.

Blaine County Rec District hosted the December Avalanche Class and raffled off a North Valley Trails season pass as a Friends contribution. The ERC and the Community School hosted the January Avalanche Class.

Patagonia helped to provide top of the line outdoor clothing that kept the forecasters warm and dry throughout the winter.

Back Country Access and their Avalanche Education Grant Program allowed us to purchase digital cameras and a slide scanner to enhance our classes and advisories.

Special Thanks go Ed & Sue Dumke and the Little Sprout Foundation

Sawtooth National Forest Avalanche Center: 2002-2003

With early season snow in the mountains, general information advisories began in the end of October. Daily advisories did not begin until snowfall warranted them on December 14th, and ran through March 22nd. General snowpack and weather information was issued periodically until March 28th. The daily advisories ended a week earlier than usual, and the general information ended 2 weeks early. This was due to funding limitations. We issued a total of 103 advisories.

Backcountry conditions seemed to be consistently great powder throughout most of the winter. Once the snowpack became supportive in Mid January, conditions were excellent for snowmachiners. Some spurts of corn skiing at lower elevations interspersed the dry spells. Stability-wise, several persistent weak layers and crusts kept most backcountry recreationists off of the steeper slopes and high alpine terrain during times of concern. We issued 4 Avalanche Warnings with the National Weather Service. The first two were near the end of December when a multi-day storm loaded a weak, depth hoar snowpack. The second two warnings were related to heavy rainfall on newer snow and isothermal conditions.

Overall, the Sawtooth National Forest Avalanche Center, (SNFAC), had a very successful season. This was represented by no fatalities, no known injuries and only a few close calls, in spite of several extended spells of relatively unstable conditions. This winter, there appeared to be an exponential increase in the number of backcountry recreationists of all types. Once again we observed a dramatic increase in avalanche awareness throughout the local community.

Eighteen classes were held with over 400 participants. We had to turn down a number of early season classes due to financial limitations & a subsequent staffing shortage until late January. Of note, we had a well-attended avalanche class in Stanley that was co-sponsored by the local snowmachine and ski clubs and promoted as a fun mixer for the two user groups. Hotline calls were up, and the local media brought significant coverage to avalanche awareness and conditions throughout the season. Enthusiastic response to the new e-mail service showed 180 subscribers by the end of the season. We received numerous comments from folks about the quality, consistency and value of the information provided in the advisories. End of the season advisory totals were double last season with 49,490 hits and calls. The breakdown was: 6,250 calls for our hotline, 24,250 hits on our internet advisory, over 18,540 e-mails sent, 450 faxes sent. In addition, we received over 29,000 hits on our home page and over 15,000 hits on our weather station sites.

Two new forecasters came onto the scene this year. Greg Johnson, formerly of the Logan, Utah-Bear River Avalanche Center and Jay Gress, our local field assistant and web designer. They brought great skills, dedication and expertise to the Center. Forecasters Pat Deal and Anne Marie Devereaux moved on to other careers and the opportunity to spend more time with their families. We miss them and wish them the best of luck. We were able to receive much more information about the northwest portion of the Sawtooths this season. Steve Conger, contracting with Idaho Transportation Depatment added a level of professional snowpack observations and analysis that had not been available for Banner Summit and Highway 21.

An exciting, and long awaited, improvement this season was the new Lower Titus weather station. It provides via our internet pages real time temperatures and snow depths for 9,100 feet in the Galena area. Other improvements were the use of power point for class

presentations. For next season we completed the development of a digital picture interface for inserting recent photos in advisories. We also printed snowmachine avalanche awareness brochures in conjunction with the Gallatin Forest Avalanche Center.

Funding is an ongoing struggle. We disappointedly did not receive several grants that we applied for, but in the future we hope to partner with the BLM and Idaho State Parks and Recreation. Very generous grants from The Sawtooth Society, The Little Sprout Foundation, The Idaho Community Foundation-The Deer Creek Fund, and Backcountry Access, assisted our programs throughout the season.

Janet Kellam, Director

THE SAWTOOTH NATIONAL FOREST AVALANCHE CENTER

HISTORY

The Ketchum Ranger District of the Sawtooth National Forest has provided a recorded phone message since 1983 that gives callers daily avalanche and weather conditions. Butch Harper, district snow ranger from 1963 to 1994, implemented and directed this small program with help from Rick Barker, Sun Valley Heli-ski, the National Weather Service and the Soil conservation Service. Butch also taught avalanche awareness classes in the Sun Valley Area. His programs were among the first in the country to reach out to the winter recreational user on national forest land.

Butch retired in 1994 and Doug Abromeit, Director of the National Avalanche Center and former Snow Ranger from Alta, Utah, took the job as the winter recreation specialist for the Ketchum Ranger District. In 1995-96 the Forest Service program expanded to provide a more thorough avalanche advisory and mountain weather forecast based on improved weather instrumentation in remote sites and increased field observations. The program evolved into what was known as the Forest Service Sun Valley Avalanche Center. The name changed in 2001-2002. The Avalanche Center is now known as the Sawtooth National Forest Avalanche Center, which Janet Kellam directs. Greg Johnson and Jay Gress work with the center as avalanche specialists, and Snow Ranger David Gordon provides forecasting assistance and expertise.

SNFAC now offers several basic avalanche awareness classroom and field sessions throughout the winter in the Wood River Valley and outlying areas. We provide a daily avalanche advisory and mountain weather forecast based on data collected by forecasters, Sun Valley Heli-ski and volunteers. Remote weather stations are shared with Sun Valley Company on Bald Mtn, and on Titus Ridge with Sun Valley Heli-ski.

Our educational programs reach all ages, include a variety of professional organizations and agencies, as well as skiers, snowboarders, snowshoers, and snowmobilers. We are grateful for the community support and all of our partnership affiliates that allow us to operate on a level that matches or exceeds the quality of leading avalanche centers in the country.

FORECAST AREA

The SNFAC daily forecast area includes the Wood River Valley drainages from the town of Bellevue at the south end of the valley to the headwaters of the Salmon River at the north end of the valley. The geography changes dramatically along this corridor from high sagebrush desert at 5,000ft at the southern end, to mountainous terrain with peaks over 12,000 ft. This creates a varied snowpack. Often, the forecast area is broken down into three major zones in order to identify these geographic/snowpack differences and communicate them to the public.

- 1) **North Valley-** ranging from Galena Summit and the headwaters of the Salmon River south to the North Fork of the Big Wood River.
- 2) **Central Valley** from North Fork south to East Fork of the Big Wood River and Greenhorn Gulch
- 3) South Valley- from Greenhorn and East Fork south to Bellevue.

At times, the hazard evaluation may be similar for all zones, other times it can be distinctly different. We also offer general information for the Stanley/Sawtooth area and for the Soldier Mtn/Fairfield area whenever possible.

OPERATIONS 2002-2003

The Avalanche Center adopted a new structure for the 2002-2003 season. The two part time forecaster positions were combined into a full time seasonal position. This provided a person on staff who could assist with some of the operational needs beyond forecasting and teaching, and did not have conflicting schedules with other jobs. This had not been possible with the previous structure and the director was doing the work of two positions. Greg Johnson, formerly of the Bear River- Logan, Utah Avalanche Center was hired and this made a huge difference.

However the difficulty with this new format is that one less person was available for a 7 day a week operation during the forecast season. The Avalanche Center cut back to 6 days a week for forecasts with Tuesday general information being provided with Monday's forecast. We were also faced with cutting back the number of classes and presentations due to this staff shortage. A local supporter stepped forward and offered to donate money to the Friends to pay for Tuesday advisories from late January until the end of the season. Jay Gress was hired as a part time forecaster and instructor and proved invaluable to the program. With a part timer, the staffing is flexible enough that instructors can be available to travel & teach some classes during the season if Friends money or neighboring other Forests money is provided.

Observer Program

Observations came in from a variety of sources this winter. The Sun Valley Heli-Ski provided invaluable backcountry information. Our Intern- Andrew Ryan, Idaho

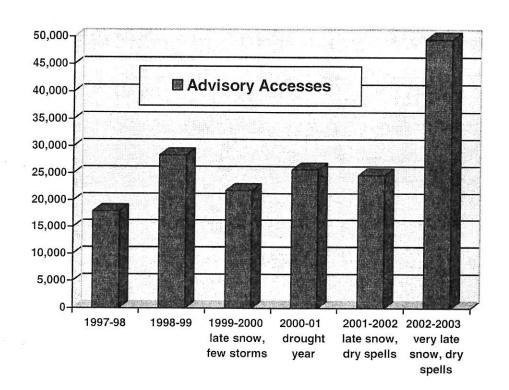
Transportation Department, Steve Conger-Highway 21, backcountry skiers & snowmachiners and road-side observations all helped us immensely.

Media

Local Media provided extensive coverage of the Sawtooth Avalanche Center and avalanche conditions throughout the winter. KECH radio, The Idaho Mtn Express, and the Wood River Journal helped us to reach a large percentage of the population that may never call the hotline or look up an advisory. The Twin Falls and Boise papers gave nice avalanche awareness coverage at least once during the season and both promoted the avalanche advisory during the season. Twin Falls based KMVT did an excellent piece with Doug Abromeit on avalanche warnings and avalanche conditions-this aired twice during the season. Again, we had 6- SNFAC banners (3 foot by 6 foot) displayed in different locations, visible from the road- Ketchum Ranger Station, the SNRA, Stanley Ranger station, Backwoods Mtn Sports and Smiley Creek Lodge.

SAWTOOTH NATIONAL FOREST AVALANCHE CENTER

ADVISORY USE 2002-2003 Annual Comparison



Notes:

Only 103 advisories produced during the season due to late start, early closing and no Tuesdays until late January (125 produced in 2001-2002).

Many more e-mail subscribers than last season, this became a popular service. Phone calls down by $\sim 1,700$ calls

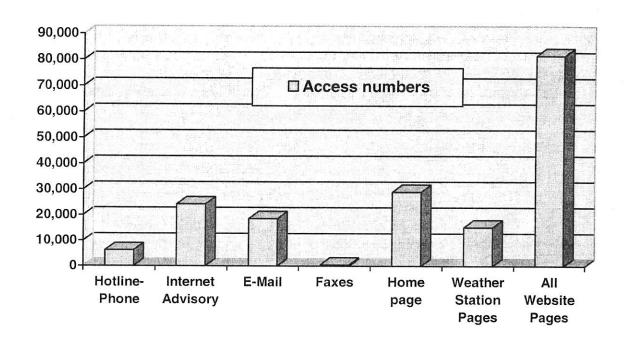
Advisory use only, not additional SNFAC internet pages

SAWTOOTH NATIONAL FOREST **AVALANCHE CENTER**

ANNUAL ADVISORY USE

2002-2003

Access Breakdown



Advisory accesses: October 1,2002 -April 1,2003

TOTAL 49,490

Hotline: 6,250

Internet Advisory Page: 24,250

(Westwide 18,250 & CSAC ~6,000)

E-Mail: 180 x 103=18,540

Faxes: 450

**OF NOTE: 2001-2002 Advisory Accesses: 24,654

October I-April I, 2003

Home Page:

29,000

Weather Station Pages:

15,250

All Website Pages:

81,500

CLASSES & OUTREACH

including Media Contacts 2002-2003

Throughout the season:

Banners at KRD, SNRA, Stanley FS, Smiley Creek, Backwoods

Gary Stivers & KECH whenever Considerable rating, or significant storms

Periodic Newspaper articles locally incl. SNFAC opening, closing, safe travel article Outreach newspapers:

Boise Idaho Statesman-feature article front page, Twin Falls-Times News, Challis messenger: Safe travel and avalanche warning signs

SNRA Recreation Report-weekly report posted at SNRA, KRD, Stanley Ranger Station, KECH Radio. This report refers people to the advisory web site or hotline number and will mention when conditions are Considerable or High avalanche danger.

Sun Valley Bald Mtn Ski Report-posted daily, lists avalanche hotline number SNOWBALL PR: Main Street Banner, Newspaper, Radio

Volunteers and interested FS/BLM staff accompany forecasters in field as ongoing education and outreach.

Classes, Presentations

| 12/05/02 | Basic Awareness Hemingway School/BCRD: |
|-------------|--|
| 12/09/02 | 80 participants Basic Field Session: 30 participants, 8 instructors |
| 12/12/02 | Beacon Clinic-The Elephant's Perch Staff, 10 participants |
| 12/14/02 | National Ski Patrol Avalanche Instructors Workshop 12 participants |
| 12/18/02 | SVSEF Nordic Ski Team-Middle School Avalanche basics and Beacon |
| | practice 35 students |
| 12/19/02 | Info Exchange-Area Outfitters & Guides 14 guides, patrol & forecasters |
| 1/09/03 | Basic Awareness /The Community School 60 participants |
| 1/11/03 | Basic Field Session: 40 participants, 10 instructors |
| 1/14/03 | Elder Hostel 20 participants |
| 1/23/03 | Prescott College- SNFAC tour of operations |
| 1/24/03 | SNRA/Sawtooth Forest Basic Avalanche Awareness training |
| | 22 participants |
| 1/27/03 | SNFAC tour of operations local guided program- BC skiers 15attend |
| 1/28/03 | Sun Valley Ski Patrol Avalanche Refresher 20 attend |
| 1/31-2/2/03 | USFS Snow Rangers workshop Jackson Hole 30+ participants |
| 2/13/03 | Twin Falls Snowmachine Club-Basic Avalanche 3hr. 6 participants |
| 2/21/03 | Basic Awareness 3hr. Stanley Ski & Snowmachine clubs 20 participants |
| 2/22/03 | Basic Field Session: ski/snowshoe 6, snowmachine 4 |
| 3/05/03 | Elder Hostel 20 participants |

Classes taught: 18 Participants: 414

Media outreach= broad and successful, untold numbers!

ACCIDENTS & INCIDENTS

In spite of prolonged spells of avalanche danger and serious buried weak layer problems, the SNFAC forecast area experienced relatively few incidents and no known injuries. There was one fatality December 28th in the Trinity Mountain area in South Central Idaho not too far from the forecast area. This was during an avalanche warning of High avalanche danger for the Sawtooth Forest and the mountains of central Idaho. Unfortunately, we were unable to travel to the site due to being understaffed and experiencing a storm cycle.

Early in the season, there was a full burial of a snowboarder in a steeper chute off of Copper Mountain, northwest of Stanley. His partners were alert & trained and were able to quickly locate him with beacons and dig him out unharmed. This occurred December 14th during significant new snow loading on a serious depth hoar snowpack.

December 31st, several skiers triggered a slide out of bounds on the Warm Springs side of Bald Mtn ski area. SS-AS-3-O on depth hoar. They did not see one of their members and skied out to alert the patrol, even though they had beacons. A rescue was initiated from the top and was called off after an initial search when the missing member saw his name on the lift message boards and contacted the patrol.

Another burial occurred March 9th, when a group of 10 snowmachiners were high marking in the steep alpine basin of the West Fork of Norton Creek. Snow conditions consisted of buried crust/facet layers, heavy new snow loading and wind. The advisory called for Considerable avalanche danger. SS-AM-3-O. Two riders were on the slope when the slide released, although one was able to turn and ride out of the slide with some expert riding. The rider buried had a hand sticking out and was able to struggle and clear his head. It was fortunate that no one else was caught. The group mentioned they were carrying rescue gear and they were being careful that day.

A number of other human triggered slides occurred periodically throughout the season. A few were surprises for the parties that triggered them. However no one was caught, emphasizing the value and practice of safe travel techniques. Overall, we were very pleased with the backcountry travel, judgement and lines people were using. Especially during times of Considerable avalanche danger.

FRIENDS OF THE SAWTOOTH AVALANCHE CENTER

The Friends continue to be a key component in the operations of the SNFAC. Annually, the Friends contribute enough money to nearly fund one forecaster and to pay for advisory hotline and internet expenses. Money is raised through the fall mail campaign, the annual snowball and hotline sponsorship. The Friends operate under the non-profit status of the American Avalanche Association, and are able to contribute money to the Sawtooth Avalanche Center through an annual Collection Agreement between the Sawtooth National Forest and the American Avalanche Association.

Future projects of the Friends are to produce a new brochure about their group, and to actively pursue available grants in Idaho that will help fund avalanche education and dispersing information. Members of the Friends Committee are: Sara Berquist, Steve Butler, Lindy Cogan, Tina Cole, Tom Campion, Mark & Martha Deffe, Rob King, Matt Leidecker, Michael Kraynick, Michael Malko, Beau Mills, Nils Ribi, Mary Schneider, Louise Stumph, Kay Tenney, Steve Wolper. All deserve special thanks for their efforts.

BUDGET: 2002-2003

The Sawtooth National Forest Avalanche Center operates on a very modest budget. Operations would not be possible at such a professional level, if not for Friends of SNFAC fundraising, for numerous hours of volunteer time donated by forecasters and observers, for the sharing of services provided by the Boise National Weather Service and the Natural Resource Conservation Service. Sun Valley Heli-Ski shares valuable field observations. Sun Valley Company shares their snow safety observations, Baldy's weather information site and access. The local Community School generously opens their classrooms for us to teach Avalanche Awareness Classes throughout the winter. Blaine County Rec. District sponsors our first local class of the season, which attracts a large audience. Again, the citizen's Avalanche Awareness Committee (Friends of SNFAC) did a phenomenal job in reaching out to the community with a fundraising campaign that brought in nearly 20,000 dollars. This money funds most of one forecaster position and advisory hotline and internet expenses. The Friends use any additional monies for special projects that they choose to support, such as the new Lower Titus weather station. (A note: The SNFAC does not receive any funding from the user fee/trailhead parking pass-demo program.)

As the SNFAC has grown to meet demands for avalanche information and education, so have the operational and financial needs of the center. We have been able to determine a bare bones level of operations and a budget that will allow us to produce avalanche advisories, teach educational programs and provide small amounts of time to pursue partnerships and necessary funding. The budgets for 2002-2003 and 2003-2004 outline the operational requirements. As of Spring 2003, we only have funding for the director and the fulltime forecaster and may be faced with providing 5 day a week advisories and limited classes in 2003-2004. However, we are optimistic and are pursuing partnerships with the BLM and Idaho Dept. of Parks and Rec that would allow us to have a part time forecaster and teach additional classes.

CONTRIBUTIONS AND FUNDING: 2002-2003

| Friends of the Sawtooth Avalanche Center | |
|---|-----------|
| Donations for Forecast Position (4 months) | 15,000.00 |
| Friends Mid-Season donation for additional Forecast Day | |
| (Part time forecaster 2 months) | 2,000.00 |
| Friends Donations for Advisory Hotline & Internet Expense | 3,000.00 |
| Friends Donations: | |
| Classroom materials, snowmachine maintenance | 500.00 |
| Friends Donations for Lower Titus Weather Station | 9,000.00 |
| Back Country Access Grant for Educational Materials | |
| (Digital Cameras & Slide Scanner) | 800.00 |

Donations Subtotal (\$30,300.00)

| Region 4 USFS | | | 19,000.00 |
|---|------|----------|------------|
| Ketchum Ranger District Funding | | | 6,000.00 |
| Sawtooth NRA | | | 6,000.00 |
| | USFS | Subtotal | (\$31,000) |
| Ketchum Ranger District Snow Range (Assists with forecasting and teaching | | | 5,000.00 |

TOTAL \$66,300.00

Overhead costs not shown in this and that are absorbed by Ketchum Ranger District are Travel Vehicles and Office Materials.

OPERATIONAL EXPENSES FOR 2003-2004

(Exclusive of travel, equipment or special projects funded by the Friends)

Salaries for Director 6 months and Full Time forecaster/avalanche specialist 5 months: (\$15,000 Friends donations)

\$45,370

Advisory Hotline & Internet Expenses (Friends donations) \$2,600

Subtotal for Level | Operation (\$47,970)

Salary for Part time forecaster 2 days/week for 4 months:

Additional funding needed for Level 2 Operation \$11,840

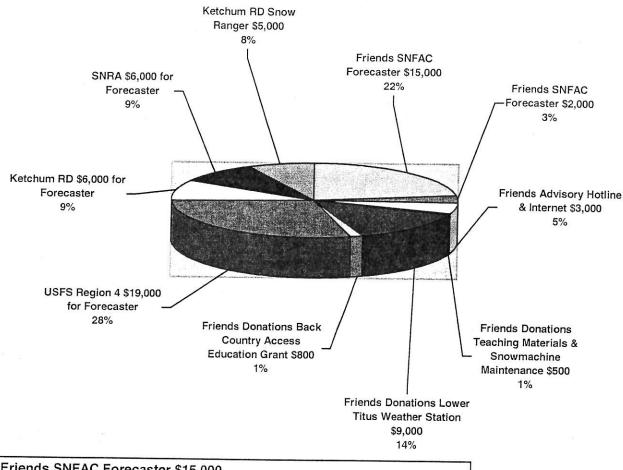
(only I day per week PT forecaster would be \$5,920)

TOTAL NEEDED: (\$53,890 if only 1 day /week PT forecaster) \$59,810

This includes NO travel, equipment or training costs-which would add \$2,000-5,000, depending on what funding is available. The SNFAC is able to shortcut these expenses some years, but not continually. This also does not include any forecasting done by the KRD Snow Ranger.

Sawtooth National Forest Avalanche Center Operations Budget 2002-2003

Income & How Spent: Total \$66,300



- ☐ Friends SNFAC Forecaster \$15,000
- Friends SNFAC Forecaster \$2,000
- ☐ Friends Advisory Hotline & Internet \$3,000
- ☐ Friends Donations Teaching Materials & Snowmachine Maintenance \$500
- Friends Donations Lower Titus Weather Station \$9,000
- ☐ Friends Donations Back Country Access Education Grant \$800
- USFS Region 4 \$19,000 for Forecaster
- ☐ Ketchum RD \$6,000 for Forecaster
- SNRA \$6,000 for Forecaster
- Ketchum RD Snow Ranger \$5,000

Friends Donations Total: \$30,300

USFS Total: \$36,000

Sawtooth National Forest Avalanche Center Operations Budget 2003-2004

Income & Projected Expenses:

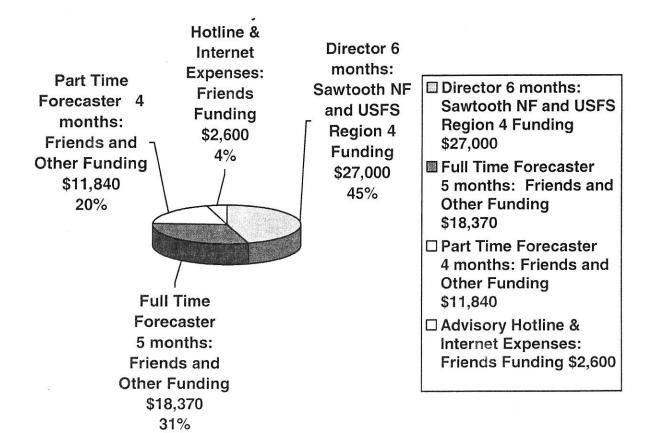
Level 1- \$47,970

This is a Director 6 months, 1 Full Time Forecaster/Instructor 5 months and means a 5-day a week forecast with only a few classes offered due to limited staffing. \$2,600 is Friends dollars donated for advisory hotline and internet expenses.

Level 2- \$59,810

This is a Director 6 months, 1 Full Time Forecaster/Instructor 5 months, 1 Part Time Forecaster/Instructor 4 months and means a 7-day a week forecast and the ability to offer a number of classes when Friends donations and other agencies or Forests can pay for the time. \$2,600 IS friends dollars for advisory hotline & internet expenses

(Of note: this budget, like prior years, does not provide any money for travel, equipment or training costs which should be \$2,000 to \$5,000 per year, depending upon what funding is available. This also does not include any forecasting or teaching done by the Ketchum RD Snow Ranger or any special Friends projects)



IN-KIND CONTRIBUTIONS OF EQUIPMENT AND LABOR

The Sawtooth National Forest Avalanche Center relies not only on cash contributions, but the more than \$7,000 in donated equipment, services and labor from community members, businesses and agencies. It is unmistakable that the SNFAC would not be able to operate at its current level if not for these donations.

Pocatello National Weather Service: Services and equipment incl. Specialized daily forecast for Baldy (9,000ft), Titus (10,000ft) and Sun Valley area (6,000ft)

Forest Service National Avalanche Center

Natural Resources Conservation Service: Services and equipment incl. access to Snow Course-SNOTEL sites and data for our area

Sun Valley Heli-Ski: Services and equipment including shared data, weather station maintenance and information from forecasters

\$1,500.00

Sun Valley Company: Services and equipment incl. access to Bald Mtn. weather station, shared data and lift services. \$5,000.00

Observer Network: Volunteers participating in data collection

\$500.00

THE FUTURE

The Sawtooth NF Avalanche Center needs to develop secure, multi-annual funding in order to operate at a base level. Then the Sawtooth NF Avalanche Center can be a consistent and dependable resource for avalanche information and education throughout central Idaho. What is apparent is that at least 2 &1/2 forecasters need to be on staff in order to meet the operational requirements of a 7day a week advisory and to present educational programs. If this staffing is not met, the services need to be reduced in order to meet costs.

Goals for the 2003-2004 season are:

- Develop partnerships with the BLM and Idaho State Parks & Rec.
- Obtain a laptop for Power Point presentations and an LCD projector, (both of which we are borrowing and using personal equipment)
- Continue to develop our outreach education programs that benefit the outlying communities and numerous agencies, a priority being outlying National Forests.
- Promote ongoing dialogue with all of the National Forest Avalanche Centers in order to recognize and meet the needs of the public, to stay abreast of changes and developments in the field of avalanche forecasting and to implement programs that keep pace with the times.

MONTHLY SUMMARIES 2002-2003

Autumn 2002

A late September storm system left remnants of snow in upper elevation shady locations. Then, a generally warm and dry autumn turned into winter near the end of October. October 22^{nd} - 23^{rd} 4 to 7 " of snow were deposited above 9,000 ft, with 4-5" lingering on the northerly aspects. October 28-30th brought a strong pulse of moisture as a frontal system slipped southward from Canada. The Upper Titus study plot at 9,100ft showed an accumulation of 15 inches. Snowfall intensity was surprising, receiving 10 inches in 5 hours. The Sawtooth NF Avalanche Center issued general snow and weather information during this storm.

November 2002

By mid November, we had received a foot of snow around Ketchum and a bit more around Galena. Collapsing and cracking of the new snow on the old facets was observed, but no natural slides except for some hunters unhurt but trapped when a back road slid up north near the Deadwood area. Signs of conditions to come. A bit more snow fell in November, then a long, cold dry spell (storm interval #3), which lasted until the 10^{th} of December. This created extensive faceting and some crust layers. South facing slopes melted down to dirt except for isolated pockets at upper elevations.

Month of November Precipitation Records:

November

Water Year

Galena Summit: 2.10" H20,

56% of average November 55% of average November

67% of avg as of Oct 1st 60% of avg as of Oct 1st

Big Wood Drainage Salmon River Drainage

52% of average November

45% of avg as of Oct 1st

Note: KRD recorded 1.06" H20, 11" snow

4" total depth EOM

Baldy= 14" snow, Titus 19"

December 2002

December proved to be an exciting month. Snowfall the 10th & 11th began to load the snowpack and storm #5 from Dec 13th to 16th tipped the scale. Baldy received 20", Titus reported 27 inches of new snow and it rained to 7,000feet. A full burial, live recovery of an avalanche aware snowboarder occurred at Copper Mtn 12/14/03 amongst visual signs of naturals and whumphing. Some naturals and skier triggered slides at this time. Stability tests all show Q1 shears with failures occurring between thin crusts or beneath them in the depth hoar. Durrance seemed the most stable of any location. South slopes were stable but thin snowpack. A bit more snow and very cold temperatures produced near surface faceting and surface hoar.

A loading storm cycle began Dec 26th that began cold, turned to rain at 6,000feet. The natural slide cycle that followed produced numerous small shedding slabs at lower elevations. Mid storm multiple aspects at mid to upper elevations ran including Lake Creek and the west facing bowl of Galena peak. (sizes class 2-3) An avalanche warning was issued for the Sawtooth Forest and all of Central Idaho for December 27 and 28th. December 28, an 18 year old snowmobiler was buried and killed in steep terrain near Trinity Mountain. Northwest of Fairfield, in the Smoky Mountains and the Boise National Forest. December 31st there was a close call with a skier triggered slide out of bounds on the North West side of Baldy in an area called "Heaven". One skier was reported missing and believed buried, and a search was performed. He later reported to ski patrol.

The depth hoar layer was becoming less reactive, but mid pack buried surface hoar led to ongoing concerns about surface slides stepping down into deeper, large releases.

Month of December Precipitation Records:

Galena Summit: 5.9"H20, 133% of average Dec Big Wood Drainage 141% of average Dec Salmon River Drainage 117% % of average Dec Water Year
96% of avg as of Oct 1st
94% of avg as of Oct 1st
75% of avg as of Oct 1st

Note: KRD recorded 4.19"H20, II "snow 27" total depth EOM Baldy had received 53" of snow in Dec., Galena Summit 69.5".

January 2003

Storm #9 at the beginning of January brought warm, wet conditions. Temperatures remained above 32 degrees for 60 hours above 9000 feet. A few large slides released off of upper elevation South facing ridgelines, although fewer than expected and all were wind loaded from the North. These slides were believed to have run on surface crusts, only a few appearing to step down. No slides released on other aspects, although we anticipated some activity. The avalanche danger finally, consistently dropped below considerable for the first time since mid December.

Mid January, after a bit more warm weather and a bit more snowfall, stability took a magnum leap towards low avalanche danger. Depth hoar and buried surface hoar shears showed vast improvement. After all of this significant heating and cooling, stability tests in many locations appeared quite solid and we entered a dry spell. The depth hoar appeared solidly bridged unless we had a significant weather event or spring-like warm up.

At the end of January, snowfall and heating began again in earnest with a low elevations becoming isothermal and wet snow below 9,200 feet. An avalanche warning was released for low elevations.

Month of January- Precipitation Records:

Galena Summit: 3.1"H20, 73% of average Jan Big Wood Drainage 69% of average Jan Salmon River Drainage 120% of average Jan Water Year
89% of avg as of Oct 1st
87% of avg as of Oct 1st
89% of avg as of Oct 1st

Note: KRD recorded .95"H20, 8.5"snow 24" total depth EOM Baldy had received 18" of snow in Jan., Galena Summit 28", Titus 32"

February 2003

After January's warm spell, early February produced very little snow and cold temperatures. The result was ½ to 3" of facets on top of surface crusts, or sandwiched between surface crusts on all but high elevation, north facing locations. High due north had facets without crusts.

Cumulative snow and wind created an ongoing concern for triggered slides, and an 8 to 10 inch storm February 21st led to a number of remotely triggered slides, primarily East and South East aspects with the facet-crust matrix the weak layer once strong NW winds added enough load.

February ended woith early corn conditions at low elevations, good powder on upper elevations north and east, and again faceted snow on the snow surface.

Month of February- Precipitation Records:

Galena Summit: 2.7"H20, 70% of average Feb Big Wood Drainage 59% of average Feb Salmon River Drainage 82% of average Feb Water Year
85% of avg as of Oct 1st
81% of avg as of Oct 1st
87% of avg as of Oct 1st

Note: KRD recorded 1.05 "H20, 11"snow 26" total depth EOM Baldy had received 18" of snow in Feb., Galena Summit 24", Titus 31"

March 2003

March became a lion and made up for lost time. Most drainages leapt from below average snow-water totals to near average. A moister pattern brought a series of storms across the region for the entire month. The biggest slide cycle occurred after a 20inch storm and 60mph winds loaded the February crust/facet interfaces. A snowmachiner was caught in a large class 3 slide out Norton Creek, but was able to force one hand and his head out and was rescued by his partners. An intense warm up was beginning as this accident occurred, and for the next several days a few large slides were triggered remotely and sympathetically in steep, alpine terrain with wind slabs or crusts associated with facets. Additional slides were triggered on the Salmon River side of the Titus ridgeline, in a traditionally faceted, westerly exposed rocky area.

Continual warming and cooling helped to stabilize the snowpack with concerns being focused on the upper layers or for shallow, weak alpine areas. At the very end of March, we were keeping an eye on late March snowstorms that created a 50centimeter slab on top of dry faceted snow and surface hoar. Strong winds, this new snowfall and unseasonably cold temperatures at upper elevations created additional concern for buried facets & crusts as we headed towards a rapid warm up.

This concern was given proof when Saturday, March 29 at the onset of a significant warming trend, a large avalanche (5ft crown, 400feet wide in an alpine basin), was triggered at 9,500 feet on a southeast facing slope in the White Clouds. Fortunately, the snowmachiner was able to ride out of the slide. This was the third rider to go on the slope. The last daily advisory was issued March 22nd, but we had issued general snow, weather and avalanche concerns for the weekend. We received a number of comments in which people expressed a desire to have the daily advisories continue into April.

Quality-wise, very good corn snow conditions developed at lower elevations and close to town. Excellent mid winter powder persisted on northerly, mid to upper elevation slopes. Overall, this season produced some of the most consistently good snow conditions in people's memory.

Month of March- Precipitation Records:

Galena Summit: 4.3"H20, 119% of average March Big Wood Drainage 100% of average March Salmon River Drainage 150% of average March Water Year
90% of avg as of Oct 1st
84% of avg as of Oct 1st
98% of avg as of Oct 1st

Note: KRD recorded 1.44"H20, 2.5"snow 6" total depth EOM Baldy had received 27" of snow in Mar., Galena Summit 42", Titus 51"

Total Annual Snowfall: KRD 75", Baldy 142", Galena Summit, 195", Lower Titus 223"

NOTE * We do not have records for April as the SNFAC closed after April Ist. However, the following information may be inserted at a later date from internet records.

Month of April- Precipitation Records:

Galena Summit: "H20, % of average Big Wood Drainage % of average Salmon River Drainage % of average Water Year
% of avg as of Oct 1st
% of avg as of Oct 1st
% of avg as of Oct 1st

Note: KRD recorded "H20, "snow" total depth EOM Baldy had received "of snow in Apr., Galena Summit", Titus "



APPENDIX

Annual Report 2002-2003

- I Sample Advisories & Archive page
- 2. Friends of the SNFAC Snowball Fundraiser
- 3. Selected Newspaper Articles and Letters
- 4. Forest Service Avalanche Forecast Center List

SAWTOOTH NATIONAL FOREST AVALANCHE CENTER



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1.6.2003

Good Morning, this is Greg Johnson with the Sawtooth National Forest Avalanche Center with the Backcountry Avalanche Advisory and Weather Forecast for Monday, January 6, 2003 at 7am.

This advisory is brought to you by the Friends of the Sawtooth Avalanche Center, supported in part by Backwoods Mountain Sports.

Special Announcement:

Special note for SNFAC Monday advisories during 2002-03 season: Due to funding limitations we will not be issuing an advisory on Tuesday mornings. Monday's danger rating will expire at midnight Monday night. We will discuss weather and snowpack trends for Tuesday in the body of the report today, Monday.

Today the avalanche danger is estimated to be:

The avalanche danger ratings for Monday are CONSIDERABLE on all upper elevation slopes and south facing slopes at mid and lower elevations. In all other areas the avalanche danger is MODERATE.

These danger ratings expire at midnight on Monday, January 6.

For Tuesday expect similar avalanche danger ratings.

A considerable avalanche danger means that human triggered avalanches are PROBABLE and natural avalanches are POSSIBLE. Use extreme caution in terrain steeper than about 35 degrees.

A moderate avalanche danger means that human triggered avalanches are POSSIBLE on slopes steeper than about 35 degrees.

Snowpack:

Yesterday there were a few natural avalanches that initiated in areas that were wind loaded. One of these avalanches was large and appeared to have stepped down to one of the buried weak layers.

Overnight temperatures have been rising and are nearing the freezing mark on Baldy and Titus early this morning. Today the temperature is expected to climb into the mid to upper 30's at 10,000 ft under a clear sky. Lower elevation temperatures should rise to around 35 to 40 degrees, but will be delayed a few hours because of the inversion.

Warm temperatures are going to help tighten in existing wind slabs that formed two nights ago, but will have destabilizing affect with our two prominent weak

snowpack layers. Within the snowpack is a thin layer of surface hoar layer buried between 1 and 2 feet. The layer is in most locations, but not everywhere. At the base of the snowpack is coarse grain sugar like snow called depth hoar. Warm temperatures will soften the overlying slab allowing more of your stresses to penetrate into these weak layers. The snowpack will be more sensitive today than is has in the past few days. Some natural avalanche activity may occur in very steep rocky terrain this afternoon. Plan your routes so that you do not travel underneath these slopes and avoid traveling on slopes that are about 35 degrees or steeper.

Southerly aspects are going to get the brunt of the warm temperatures and sun. The avalanche danger will quickly rise today as the snowpack becomes saturated. This is especially true in areas with little ground vegetation and upper elevation slopes that contain more snow and old crusts. Natural avalanches are likely to initiate on slopes approaching 40 degrees near steep bands of rock.

Outlook:

This week we will be under a ridge of high pressure. This feature is expected to bring no precipitation and warm upper elevation temperatures. In the long term the warm temperatures will significantly help stabilize the snowpack, but in the short term the avalanche danger will rise each day as the heat and sun soften the snowpack. By Wednesday south facing slopes will likely be entering a corn cycle and it is important to realize the stability can be very good in the morning and poor by mid-afternoon.

Mountain Weather:

This morning at 6 am temperatures are 31 on Baldy, 31 on Titus, and 12 at the Ketchum Ranger District. The wind is around 10 mph from the north on Baldy and Titus. No snow fell overnight. This is storm interval # 9.

A strong ridge of high pressure is building over the intermountain west today and will reside over us until at least Thursday. During this period expect upper elevation temperatures to be in the mid to upper 30's. Each morning the valleys will under strong inversions. The wind will generally be light. Our next shot of precipitation is Thursday evening, but it doesn't look like much.

| Reported Conditions | titus ridge | bald mtn. et 9,000ft | valley floor |
|--------------------------|-------------|-------------------------|--------------|
| Temperatures | | | |
| Note: Warming trend of | overnight | | |
| Overnight Low | 25 | 27 | 12 |
| 6am Temperature | 31 | 31 | 12 |
| 24 hr Maximum | 31 | 31 | 43 |
| Winds | | | |
| Note: Light and variable | le today | | |
| Current Winds | N@12 | N@10 | - |
| 24 hr Average | N@11 | NW@12 | |
| Maximum Gust | N@29 | NW@35 | No. |
| Snow - Storm Interval | # 9 | | |
| New Snow | - | 0" | 0" |

| Storm Total | - | 0" | 0" |
|-------------|-----|-----|-----|
| Total Depth | *** | 47" | 26" |

Announcements:

An Important Notice!

Cell phones that are turned on can impair the function of avalanche transceivers. It is important that all cell phones are turned off if you are wearing an avalanche beacon. This may apply to talkabout radios as well.

This forecast only applies to the backcountry and it is based on a limited number of observations in specific locations.

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1.26.2003

TO SHE WILLIAM TO SHE

Good Morning, this is Jay Gress with the Sawtooth National Forest Avalanche Center with the Backcountry Avalanche Advisory and Weather Forecast for Sunday, January 26, 2003 at 7am.

This advisory is brought to you by the Friends of the Sawtooth Avalanche Center, supported in part by The Elephant's Perch.

Today the avalanche danger is estimated to be:

Generally LOW with MODERATE danger in isolated locations

Low Danger: means natural avalanches are very unlikely, human triggered avalanches unlikely. Generally stable snow exists, although there may be isolated areas of instability.

Moderate Danger: means natural avalanches are unlikely, human triggered avalanches are possible, and unstable slabs are possible on steep terrain.

Snowpack:

Variable conditions continue to either bless or plague the valley, depending on where you are. If you've been out in the past several days, you're all too aware that finding good conditions can require a little detective work. Fear not though, as the shady aspects still hold grin-inspiring settled powder. The sunnier aspects have developed crusts whose temperamental nature may or may not support you.

Your primary threat of avalanching today comes from:

- ·Wind slabs that have not bonded well to the underlying snow surface
- ·Areas that have a cohesive slab burdening a drier and weaker layer in a relatively shallow snowpack. This set-up is commonly found in wind-affected areas, high alpine terrain and some lower elevation slopes
- ·Should the lower valley be bestowed with rain this afternoon, instability will no doubt rise, especially on the shady slopes with a dry snow surface

Buried weak layers are still noticeable within the snowpack, but most are not sensitive or volatile at this time. Do not write them off with a clean bill of health for the season though, as additional storm loads may reactivate their irritability.

Mountain Weather:

This morning's balmy temperatures near 30 degrees are consistent at all elevations. Winds are light out of the west and cloudy skies have deposited a trace of snow.

This afternoon brings a strong possibility of lower elevation rain and upper

elevation snow. As I mentioned, if it is indeed rain that we get down lower, avalanche danger will escalate, particularly so on north to northeast slopes and shady gullies that have light and dry surface snow. This afternoon, precipitation amounts are expected to be light, offering an inch of snow at lower elevations and 1 to 2 inches up higher. Lower elevation temperatures may climb into the 40s. Upper elevations are likely to experience temperatures in the mid-to-upper 20s.

Overnight we can expect 2 to 3 additional inches in the valley, 5 to 8 inches possible in the mountains. This storm will be relatively warmer than what you might expect in January and, especially down low, the few inches of snow that we do receive will likely be wet and heavy. Winds are expected to average around 20 mph, with gusts of 35-40 mph possible.

Tip for the day:

Try to start your day earlier than later, since conditions will likely deteriorate by mid-afternoon. Also, continue to pay attention to the surface snow and the distribution of any buried weak layers. This will come in handy when you consider what slopes will be affected by the additional load that is expected in the next storm cycle.

| Reported Conditions | titus ridge | bald mtn. at 9,000t | valley floor |
|-------------------------|-------------|------------------------|--------------|
| Temperatures | | | |
| Overnight Low | 25 | 27 | 29 |
| 6am Temperature | 28 | 30 | 29 |
| 24 hr Maximum | 28 | 36 | 41 |
| Winds | | | |
| Current Winds | 13 W | 10 SW | - |
| 24 hr Average | 9 W | 10 W | = |
| Maximum Gust | 16 W | 25 W | MA. |
| Snow - Storm Interval # | £ 11 | | |
| Total Depth | 47" | 43" | 25" |

Announcements:

An Important Notice!

Cell phones that are turned on can impair the function of avalanche transceivers. It is important that all cell phones are turned off if you are wearing an avalanche beacon. This may apply to talkabout radios as well.

This forecast only applies to the backcountry and it is based on a limited number of observations in specific locations.

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3.14.2003

Marie El Marie El Marie El Marie Mar

Good Morning, this is Janet Kellam with the Sawtooth National Forest Avalanche Center with the Backcountry Avalanche Advisory and Weather Forecast for Friday, March 14, 2003 at 7am.

This advisory is brought to you by the Friends of the Sawtooth Avalanche Center, supported in part by Bigwood Bread.

Today the avalanche danger is estimated to be:

We are issuing an avalanche warning with the National Weather Service for: HIGH danger of wet slides below approximately 8,000 feet in the Sawtooth National Forest and the mountains of Central Idaho.

High avalanche danger means that natural and human triggered avalanches are likely on a variety of aspects.

CONSIDERABLE Danger of newly formed wind slabs above approximately 8,000 feet. MODERATE avalanche danger in wind protected areas above approximately 8,000 feet. The avalanche danger will increase in sheltered areas during the day if the storm intensifies here and snow totals accumulate beyond more than 8 or 10 inches.

Considerable Danger: means that natural avalanches are possible, human triggered avalanches and wet slides are probable on steep terrain. Moderate danger means that human triggered slides are possible.

Snowpack:

Unseasonably warm temperatures since last weekend have created a non-cohesive and isothermal snowpack at lower elevations. Rain began in Ketchum at 7pm last night and is expected to continue at lower elevations throughout the day.

Above approximately 8,000 feet in elevation, temperatures began to cool during the night and at 6am it is snowing above 7 to 8,000 feet. Temperatures are expected to warm only a few degrees from their present values and cool tonight. The biggest concern at mid to upper elevation today will be the wind slabs formed by strong Southeast to Southwest ridgeline winds that persisted for over 24 hours and were visibly transporting snow yesterday. These winds will continue to transport new snowfall throughout the day and load any leeward aspect.

Additional concerns at mid to upper elevations will be:

· The new snow load and relatively warm temperatures creating more stress on the weak facet crust interface that, although improving, persists approximately 1-

- 3 feet deep. Primarily East & West aspects.
- · Alpine terrain continues to present a variable snowpack. Some locations offer good stability, some have weak & shallow snowpacks along exposed ridgelines or persistent wind slabs that are not well bonded to the underlying snow.
- \cdot Sluffing and sensitivity of the new, wet snow that is currently accumulating at a rapid rate in the Titus area.

Mountain Weather:

6AM temperatures are 29 degrees at 9,000 feet on Baldy, 25 at 10,000 feet on Titus Ridge, and 38 at Ketchum Ranger Station. Ridgeline winds averaged 21 from the Southwest yesterday and gusted up to 68 mph from the Southeast to the Southwest. Baldy is showing two inches of new snow on top at 6am and snowing hard, Titus is showing close to 6 inches new snow. This is storm #19.

Upper elevation temperatures are expected to be 24-28 degrees on Titus, 31 to 35 on Baldy. Temperatures are still expected to get into the 50's today on the valley floor. An additional 2-3 inches of snow possible at upper elevations- We may get more than that before the storm tapers off tonight, another storm expected Saturday afternoon with cooling temperatures. Winds 15-30 and increasing by tonight with gusts in the 40mph range. Expect rain in the valley with the snow line dropping down to 7,000 feet by the end of the day.

Tip for the day:

With such extreme lower elevation temperatures, strong winds and rapid precipitation, today is a day to avoid going out any of our side canyons, to be concious of & avoid avalanche runout zones and to avoid steep slopes at any elevation.

| Reported Conditions | titus ridge at 10,000m | bald mtn. ac 9,000fc | valley floor |
|-----------------------|---------------------------|-------------------------|------------------|
| Temperatures | | | |
| Overnight Low | 25 | 29 | 38 |
| 6am Temperature | 25 | 29 | 38 |
| 24 hr Maximum | 39 | 43 | 57 |
| Hours Below Freezing | 9 | 3 | 0 |
| Winds | | | |
| Current Winds | 11SW | 7WNW | 40 |
| 24 hr Average | 21SW | 215 | # |
| Maximum Gust | 57SE | 68SE | 2. ** |
| Snow - Storm Interval | ± 19 | | |
| New Snow | 5.5" | 2" | rain" |
| Storm Total | 5.5" | 2" | - |
| Total Depth | 72" | 54" | 21" |

Announcements:

Highway 21 west of Stanley remains closed, time of re-opening is still unknown.

Please stay clear of any wintering wildlife. The are carrying their young and are particularly vulnerable in the springtime. You'll want to stay at least 1/2 a mile from any mountain goats.

Field observations of any type are extremely helpful to us. Please call the observation voice mail at 622-0099 and leave information about what you may be seeing out there. Especially if you see or trigger any avalanches. You can e-mail us through our home page at www.avalanche.org

A reminder to try out the free e-mail advisory service, go to our home page at avalanche.org.

Sun Valley Heli-Ski is operating. To check where they are flying each day you can call the "Guides Line" at 726-1000 after 8AM.

This forecast only applies to the backcountry, not developed ski areas. It is based on a limited number of observations in specific locations. This advisory will be updated tomorrow at 7 AM.

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Come join us for the 5th annual



Friday March 7 at the NextStage Theater

With music by

Nada Brama

"Electric & Accoustic Jribal Rock Junk"

Doors open at 7p.m.

Awesome Raffle Prizes!

Wolf Ski, Ortovox, Lifelink, Black Diamond, Marmot, Smith Sport Optics & More GRAND PRIZE: A day of heli-skiing with Sun Valley Heli-Ski

Jickets: \$15 at the door, \$12 in advance.

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| Nama | Address | Phone | |

Idaho Statesman Boise, ID / 3 DATE / 3 4 3

The Idaho Statesman

Idaho officials warn of high avalanche danger

Backcountry treks could be hazardous this weekend

By Pete Zimowsky The idoho Statesman

A huge dumping of snow last week kicked off the backcountry skiing and snowmobiling season, but it also triggered high avalanche danger, and Idaho officials are worried.

"The snowpack is unstable," Janet Kellam, director of the Sawtooth National Forest Avalanche Center in Ketchum, said Thursday, "It is a dangerous year."

The center is forecasting considerable avalanche canger, es-

Lecially for this weekend.

Avalanches already have

buried backcountry treakers in Fouth-central Idaho

* A slide killed an 18-year-old snowniobiles near Trinity

snowmobiles near Trinity
Mountain, north of Mountain
Home, on Saturday.

Last month, a member of a chaing and snowboarding party was buried on Copper Mountain, but was saved by fellow trackers. Copper Mountain is detween Lowing and Staney.



➤ Avalanche warning signs

➤ How to travel in avalanche terrain

➤ What to do if you're caught in an avalanche

> Tips for snowboarders, skiers and snowmobilers



Idaho Statesman Boise, ID DATE

> A telemark skier was buried in an avalanche near Fisher Creek Summit near McCall. He was saved by his buddles.

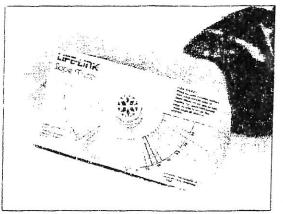
> Avaianches have buried Idaho 21 northeast of Idaho City and also east of Lowman.

Last season, avalanches in Idaho killed two people, bota on snowmobiles. Thirty-five people were killed in avalanches in the United States. And so far this season, five people have been

See Avalanche on page 5

On the Idaho Outdoors page 8

Avalanche danger in Oregon's Cascades is 'scary,' Local 8



Above: Lew Peterson digs a snow pit to assess avalanche danger while skiing along the Boise Front in January 2002.

Left: The Slope Meter measures the steepness of the slope. The gray areas (in the 35-degree range) show the area where avalanche danger is night. Incidentally, that range of steepness also is good for powder skiing.

Pete Zimowsky Statesman file photos

Avalanche

From page 1

killed in the United States.

The reason avalanche danger is so high, according to Kellam, is because the first snow that fell in November froze. Without any new snow for more than a month, the old snow crystallized in the cold, dry weather.

Then last weekend, new snow fell on top of the frozen snow. It was like putting the new snow on ball-bearings.

"You can squeeze it and can't make a snowball. It falls out of your hand like sugar," Kellam said.

The sugar or faceted snow causes instability under the new snow.

Avalanches are not a phenomenon only for wilderness areas and mountain ridges far from the ciry.

"We have avalanche terrain in every play area within normal day's traveling from Boise," said Steve Conger, an avalanche consultant with the Idaho Department of Transportation.

Conger monitors avalanche activity in the Canyon Creek area on Idaho 21 between Lowinan and

"le's going to be dicey at least for a week, 'said Lew Peterson of Boise. He is an avid backcountry skier and conducts clinics on Telemark skiing and winter safety

People need to be careful this next weeken.i," he said.

Here are some safety tips from the U.S. Forest Service and others on avaganches:



Roger Phillips / Idano Statesman : le choto

Steep slopes offer sledders a chance to nill climb and highmark. Showmobilers always should be aware of avalanche dangers before attempting to climb the steeps

Warning signs

Mother Nature puts out a billboard of information when avaianche danger is high:

> Before heading into the backcountry, call an avalanche hotline for information on weather conditions and snowpack

> Check local weather reports.

> Watch for warring signs while driving to your destination. Are snowballs rolling down the slope 5 into the highway? it thebt meat? that the anowpack is unstable.

> Avaianche signs may devel op during the day as you travel, and they could require you to ceevaluate plans and descinations to the day. So be dexible.



Learn more

Forest Service
Avalanche Forecast centers
operate throughout the
Western United States. Visit
www.avalanche.org. You also
can call (208) 622-8027 for
the Harley-Stanley area.

➤ For the McCall area, call (208) 634-0409 or visit www.fs.fed.us/r4/payette/

main.html.

➤ REI in Boise is offering two avalanche awareness clinics: a free clinic at 7 p.m. Jan. 22 at the stere on Emerald, and a clinic that costs \$65 for members and \$85 for non-members Jan. 25 at Bogus Basin Mountain Resort. Registration for the second class requires attendance at the first one.

➤ The most significant signs are recent, natural avalanches or avalanches triggered by other people. Slides on little slopes indicate that bigger slopes facing the same direction also can slide.

➤ New snowfall, especially rapid accumulations, can increase avalanche danger. Often stability improves after several days, but the blue-sky days right after a storm are when people should be extra cautious.

➤ Wind-transported or drifted snow can act like a load of new snow[all]

➤ Watch for cracking and collapsing of the snowpack. Sometimes you can hear a whumping sound as the weaker layers beneath a load of snow collapse.

➤ Rapid warming also is a clue that conditions may be getting unstable.

Traveling in avalanche terrain

When traveling in avalanche terrain, selecting the right route and following safety principles are key to stuying alive.

I he idea behind good route selection and safe travel techniques is to minimize the time that you are exposed to any potential avalanche

danger.

Good route selection means that you follow low-angle ridge lines for most of your ascent and avoid crossing avalanche paths and avalanche run-out zones.

(The Forest Service constantly taiks about slope angle in its advisories.)

Typically, slopes that have a lower angle than about 30 degrees are seidom prone to avalanches. Slopes that are 30 degrees or steeper, (especially between 35 and 45 degrees) are most capable of producing a slab avalanche.

If you choose to get onto steeper clopes to rice or make curns, it is important to have a good understanding of the avalanche stability

of that slope at that time.

It is also important to remember that you may trigger an avalanche from below a steeper slope, even if you are on a normal trail or winterclosed back road.

Avalanche debris can pile up in terrain traps such as gullies, creek bottoms and depressions. Avoid these terrain traps by recognizing them. It is important to evaluate the consequences of any area that you are in, should an avalanche occur.

If you're caught

Be prepared if someone is buried or caught in an avalanche:

➤ Carry shovels, probes (ski poles breakdown into probes), and avalanche heacons and be well practiced at performing a rescue.

Don't go for help. You have only minutes to dig your partner out.

As you travel, communicate with your group about your route and the conditions. Don't be stuck with a plan that you cannot change as conditions warrant.

> Make constant observations as to the snowpack, weather and terrain.

➤ Keep your "avalanche antennae" our for potential problem spots such as sharp breakovers, hollow sounding wind slabs or areas of weaver underlying snow

> inclinicuals in a group should travel spread out but in sight of each other. Expose only one person at a time to potential hazard.

Idaho Statesman Boise, ID 🐧 🥦

DATE

Other group members should watch from a safe location. If someone triggers an availanche, this will minimize the number of people caught in it. It also will reduce the stress on the slope.

➤ If conditions are ripe for a potential avalanche, be alert and have an idea of your safest and quickest way off of the slope or to a safe spot if the slope were to slide.

Skiers and boarders

> Descend one at a time from safe spot to safe spot, aucked into the trees and off the slope.

Wear releaseable bindings without safety straps and do not have your pole straps over your wrists.

➤ Do not cross above your partner or stop in the middle of a slope. If you regroup at the bottom, do so only well out of the way and in a safe location.

Snowmobilers

➤ If you're highmarking, only one sled on the hill at a time. Others should watch well off to the side.

If the nighmark rider becomes stuck, absolutely do not ride up to help them. While riding up seems like the right thing to do, the majority of highmark avalanche fatalities have happened when a second machine goes up to assist the stuck one and triggers an avalanche. The second machine puts more stress on the stope and triggers the slide.

Cross steep areas one at a time, and regularly watch for the rider behind you as you move along.

Toofferstery ideasor comments, contact reporter Pete Zimowsky at patmowsky (didahostatesman.com oc 277-6-45)







LAST WINTER, avalanches killed more people in the U.S. than ever before. In 10 years, the annual number of people killed in the U.S. rose from eight to 35. However, local availanche classes and advisories can help backcountry travelers arm themselves with knowledge. "The good news is that availanche conditions are predictable, and there are ways to travel that enhance your safety," said Sawtooth National Forest Avalanche Center Director Janet Kellam

Avalanche season arrives early

Record 35 U.S. deaths occurred last year

By GREG STAHL

Express Stall Writer
As the first significant mows of the winter blanketed Central Idaho last week, the dawning of another avalanche season also began. Last year in the United States,

a record 35 people lost their lives in avalanches, and avalanche ex-perts are working hard to get the escalating number to level off. Only 10 years ago, fewer than 10 people died in avalanches each winter in the United States. According to the experts, av-

alanche accidents kill more peo

alanche accidents kill more peo-ple on public lands than any other natural disaster. Fortunately, avalanches are predictable, within certain pa-rameters. They only happen in certain terrain with certain snow conditions, said Sawtooth National Enerst Avalanche Cen. National Forest Avalanche Cen-

ter Director Janet Kellam. The avalanche center issues frequent winter advisories that contain critical snowpack and weather information. They are a link with what has been happening while backcountry travelers

have been going about their lives.

The Nov. 8 advisory, for example, predicts high avalanche danger this week on north-fac-ing slopes, where 1 to 2 feet of new snow fell on an old, sugary base laver.

On the sunnier aspects, this wet, heavy snow has fallen on bare ground and patchy snow and should become a good base layer." Kellam wrote. "The north

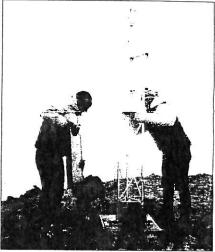
facing slopes and shady loca-tions are a different story."

The center also offers courses that show how to assess avalanche danger, how to travel safe-ly in avalanche terrain and how to carry out a fast and effective rescue should problems occur:

Several changes are at hand at the avalanche center, where a new, full-time forecaster has arrived to replace part-time fore-casters Anne Marie Devereaux and Pat Deal.

Greg Johnson, who spent two years as the director of the Bear River Avalanche Information Center at Logan, Utah, is also bringing several years of experience in the Canadian Rockies to the local area.

He is an avid backcountry boarder, skier and snowmobiler



SAWTOOTH NATIONAL FOREST AVALANCHE CENTER Director Janet Kellam, right, and former forecaster Anne Marie Devergaux assemble a weather station on upper Titus Ridge near Galena Summit. Data from the station is used to help forecasters predict avalanche danger in local mountain ranges.

David Gordon, winter recreation specialist, and Kellam will continue as instructors and forecasters.

The center also has a new Lower Titus weather station, which provides hourly snow and weather data from Titus Ridge, above Galena Summit. A link to the weather station is available through the avalanche center's Web site at www.avalanche.org. where links are also available to weather stations on Bald Moun

tain and Upper Titus ridge. Kellam noted, however, that the Titus plot is geared to collect information about snow while it is falling. Because of its sun exposure, once a storm clears, the snow will settle and the station will not accurately portray how deep the snowpack is at 9,100 feet.

Because of funding limits tions, the Avalanche Center will issue daily advisories for six days of the week, instead of seven. Monday and Tuesday advisories will be combined, with general

snow and weather information given on Monday for Tuesday

Local avalanche connections

Avalanche hotline: 622 3027 or www.avalanche.org

- Scheduled avalanche classes:
 Dec. 5 at Ernest Hemingway Elementary School in Ketchum
- Jan. 9 at the Environmental Resource Center in Ketchum · Call the avalanche center at 622-0095 for information.

To help with the avalanche center's ever-shrinking budg-et, contact the Friends of the Sawtooth Avalanche Center, Michael Malko at 726-8818 or Louise Stumph at 726-3909. Donations can be mailed to Friends of the Sawtooth National Avalanche Center at P.O. Box 2669, Ketchum ID 83340.

New weather station at Galena Summit provides better info for backcountry enthusiasts

Avalanche class information 2002-03:

Thursday, December 5, 2002 6-9 p.m. at Hemingway Elementary School:

Basic Avalanche Awareness, classroom Session. Class is free, no advance sign-up necessary. Class is Co-sponsored by Blaine County Recreation District who will raffle off a North Valley Trails Pass and these donations go to further avalanche education. We will sign up folks for field session at this class. Participants must attend classroom to go in field.

Thursday, January 9, 2003 At Environmental Resource Center building, ERC meeting room:

Basic Avalanche Awareness, classroom session. \$5 donation, no advance sign-up necessary. Class is co-sponsored by ERC and Friends of the Avalanche Center. We will signup folks for field session at this class. Participants must attend classroom to go in field.

Saturday, December 7, 2002 and Saturday, January 11, 2003: 9a.m. - 4 p.m. meeting place at Ketchum Park and Ride lot, North end.

Basic Avalanche Awareness, field sessions. Sign-up with name and phone number at classroom session of KRD.

* Participants must have attended a basic classroom session over the past few years or comparable class in order to participate in field session. Participants must also be prepared to be outside all day. Please wear plenty of warm clothing, and bring water and lunch. Participants must bring snowshoes or skis and skins. Be ready to hike short distances. Also please try to bring an avalanche beacon and shovel.

Backwoods Mountain Sports and the Elephant's Perch offer a \$5 all day rental for participants. The session is sponsored by Friends of the Sawtooth National Forest Avalanche Center and \$25 donations are suggested.

This is a great refresher course for those who have attended an avalanche course in the past. The sessions provide valuable info for first-timers and are an excellent precourse for anyone planning on taking a level 1 avalanche course.

• Basic Avalanche Awareness, classroom session details: This is an introductory course designed to provide students with the basics of avalanche safety and snow study. The course is designed for all abilities of skier, snowmobiler, boarder, snowshoer and for anyone who is interested in snow and avalanches. Topics covered include the elements of safe winter travel in the backcountry, the dynamics of snow, what is avalanche terrain and what factors influence the development of avalanche conditions.

We urge everyone to attend the optional Saturday field sessions. Instructors will be from the Sawtooth National Forest Avalanche Center. Additional guest instructors and avalanche professionals will attend the field session to ensure a small student/instructor ratio.

- Field Session details: The field session emphasizes hands on experience in interpreting snow and weather conditions and their relation to avalanche conditions, utilizing safe travel techniques, and avalanche rescue within your traveling group. Instructors will be from the Sawtooth National Forest Avalanche Center. Additional guest instructors avalanche professionals will attend the field session to ensure a small student/instructor ratio.
- Avalanche Beacon Clinics: Clinics are ongoing, beginning December 5, every Thursday at 3 p.m., meeting at the Ketchum Park and Ride lot (except for holiday weekends) Clinics are sponsored by Backwoods Mountain Sports. For more information, piease call 726-8818.

The Sawtooth National Forest Avalanche Center has a new Lower Titus weather station, which provides hourly snow and weather data from Titus Ridge above Galena Summit.

Now you can click on the Sawtooth Center's home page, through www.avalanche.org, and find out just how much snow has fallen in the Galena Summit area or in the headwaters of the Salmon River. You can click between the three weather sites; lower Titus, Upper Titus and Baldy.

The Titus plot is geared to collect information about the snow while it is falling. Once a storm clears and the site gets a bit of sun, the snow will settle out and will not accurately portray how deep the snowpack is at 9,100 feet.

For Galena Summit total depth information, go to the NRCS SNO-TEL/Winter recreation page at http://www.id.nrcs.usda.gov/snow/recreation.html.

The Friends of the Avalanche Center provided the bulk of the funding for the Titus project, and need to continue to raise funds to pay for this. If you'd like to help, contact Michael Malko at 726-8818, Louise Stumph at 726-3909 or call the Sawtooth NF Avalanche Center at 622-0095.

Several new changes have taken place at the Sawtooth NF Avalanche Center. Anne Marie Devereaux and Pat Deal are spending more time with other pursuits. Everyone at the

Center would like to thank Anne Marie and Pat for their enthusiasm and expertise, and wish them the best of luck.

The good news is they will continue to assist with some classes when possible. Greg Johnson, has been hired to fill a full-time position at the Avalanche Center.

Greg spent two years as the director of the Utah-Logan Avalanche Center and brings several years of experience from the Canadian Rockies, where he completed his masters program with reknowned avalanche researcher Bruce Jamieson. He is an avid backcountry boarder, skier and snowmobiler.

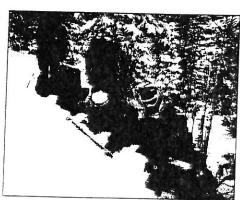
Janet Kellam, director, and David Gordon, winter rec. specialist, will continue as forecasters and instructors. Doug Abromeit, director of the FS National Avalanche Center also works out of the Ketchum Ranger District.

In an effort to cope with funding limitations, the Avalanche Center will issue daily advisories for six days of the week instead of seven. Monday and Tuesday's advisory will be combined, with general snow and weather information given on Monday for Tuesday.

The Center will not be able to provide specific snow and weather data or a danger rating for Tuesdays. For daily mountain weather and avalanche advisories, call the AVALANCHE HOTLINE at 622-8027, or log on to www.avalanche.org.

Courtesy Photo

STUDENTS TAKE part in a Basic Avalanche Awareness course offered by the Sawtooth National Forest Avalanche Center and the Blaine County Recreation District, Friend of the Avalanche Center and Friends of the Sawtooth National Forest Avalanche Center.



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earn avalanche warning signs before venturing into wilds

explest esperiences a winter ummistal, able ck underfoot is one of the diminiph" of a collapsing snowdess he or she doesn't know ickcounts travelerean have

Led if means.

the United States continues to ation, the number of people ush and killed in avalanches e 1 a 4 winter another record i or collectuals people lost their Each year, despite increasing attendable classes and infor-

llapse and weakening of the Jumph." which signifies a ally causes avalanches and But warrung signs, like the e relatively clear. Even a rudicutary knowledge of what genin can help backcounty travels make decisions that could owpack when it is weighted, av to travel in avadanche terve their lives.

alanche Center Director ite the danger; according to nche skills, or they underestiunity experience and ava-Unfortunately, avalanche viens often lack proper back National net Kellam, Mooth

"The good news is that avanche conditions are prectable, and there are ways to wel that enhance your safety,"

innended to anyone planning Beyond attending an avanebe class, which is highly rectravel in the winter back-

country, Kellam offered the following tips to skiers, snowboarders, snowshoers and snow-

Avalanche warning signs

These may develop during the you re-evaluate plans and desticountry and will require that nations for the day. When you see day as you travel in the back-

travel that enhance "The good news there are ways to is that avalanche predictable, and conditions are your saftey."

JANET KELLAM

Sawlooth National Forest Avalanche Center

Mother Nature's billboard clues idea to stay on low-angle slopes of avalanche danger, it's a good or go back another day

 The most significant signs are recent, natural avalanches or av-

alanches triggered by other people. Slides on little slopes indicate that bigger slopes that face lhe same direction can ava-

- New snowfall, especially rapid accumulations, increases the after a storm are the times to be likelihood of avalanches. Often, stability improves after several days, but the blue-sky days right
 - transported snow can act like a load of new snowfall and trigger Even if it is not snowing, winda slope to avalanche.
- Watch for cracking and colapsing of the snowpack. Sometimes a "whumphing" sound results when weak layers beneath the snow surface collapse.
 - Rapid warming can also trigger unstable conditions.

Safe travel and preparedness

travel techniques are the basis are exposed to avalanche danger. Good route selection means try during the winter. The idea is to minimize the time that you Good route selection and safe for traveling in avalanche coun-

- that you follow low-angle ridgelines for most of your ascent routes, and avoid crossing avalanche paths and avalanche runout zones. Typically slopes with lower slope angles, below approximately 30 degrees, are seldom prone to avalanches. Thirty degree-slopes and steeper, espe-
- ber that an avalanche can be

triggered from below a steep slope, even if you are on a trail or closed road

- Avalanche debris can become very deep in terrain traps like sions. These terrain features gullies, creek bottoms or depresshould be avoided.
 - through practice, how to per-You only have minutes to dig lanche beacons, and know. form a rescue. Don't go for help. Carry shovels, probes and avasomeone out.
- fectively with the group about Make constant observations As you travel, communicate eftions. Be flexible, and change plans as conditions warrant. rain. Keep your "avalanche anhollow-sounding wind slabs or mize the number of people the route and changing condiabout the sno... cather and terennae" out for potential problem spots, like sharp breakovers, areas of weak underlying snow. Travel in a spread-out pattern, but within sight of each other. Expose only one person at a time to potential hazards. In the event of an avalanche, this will mini-
- have an idea of the safest and Whenever traveling exposed, dangerous slopes, be alert and

Skiers and snowboarders should descend one at a time, from safe spot to safe spot. Wear releasable bindings without

LOGAL AVALANGHE

Avalanche hotline: 622 8027 or Scheduled avalanche classes:

- Dec. 5 at Ernest Hemingway Ch. mentary School or Kelchum
- Jan. 9 at the Environmental Re-Source Center in Ketchum
- will be held every Thursday, except to: Beacon clinics, beginning Dec. 5. holiday weeks, at 3 p.m. at the Ketchum Park and Ride lot
- Call the avalanche center at 622. 0095 for information.

safety straps, and do not wear pole straps. Do not ski or cross above a partner; or stop in the middle of a slope.

Snowmachines

while others watch from the ride up to help him or her. The majority of highmark avalanche If highmarking, only one sled side. If the highmark rider hecomes stuck, absolutely do not should be on the hill at a time. fatalities have occurred when a second machine goes up to assist the stuck one and triggers an avalanche of the entire slope.

time and watch for the rider to Cross steep areas one at

Sawtooth Avalanche Center seeks funding

Friends seek new partnerships

By GREG STAHL

Express Staff Write

As the number of people using local avalanche prediction and education services goes up, the funding that feeds those efforts are stagnant.

Without help, the Sawtooth National Forest Avalanche Center may not be able to offer avalanche forecasts through all of the remaining winter months. Next year is also a question mark.

Some budget juggling within the Forest Service might save the rest of this winter, but yearto-year uncertainty is something avalanche center advocates wish to do away with.

"Use of the service is going up exponentially, but our funding is not going up," said Michael Malko, co-chair of the Friends of the Sawtooth Avalanche Center, which is an advocacy and fundraising group for the center. "There's no guarantee it will be open year-to-year."

Louise Stumph, the other Friends co-chair, said the group is looking for solutions, which could include more partnerships or community sponsors.

"It's always on a shoestring, it

seems to me," Stumph said. "This is a community service that is free of cost to anyone who wants to use it. You'd rather have people use it and be safe than have to pay for it and not use it."

The avalanche center is based out of the Forest Service's Ketchum Ranger District offices. It is staffed by two full-time avalanche forecasters, and operates on a \$60,000 per year budget, said the center's director, Janet Kellam. About half of the center's budget comes from the Forest Service. The other half is raised privately by the Friends in events like the annual SnowBall and in an annual mail campaign.

Evidence indicates the center's forecasts and programs are increasingly popular.

From October through December, 30,000 people visited the center's on-line advisory or called its telephone advisory. The Internet advisory experienced 3,500 hits in December and more than 200 phone calls a day, Kellam said.

"That shows a huge growth in awareness." Kellam said.

The local avalanche center began in 1983 when retired Snow

FOR INFORMATION

For information about the Sawtooth National Forest Avalanche Center, call 622-5371. For information about the nonprofit Friends advocacy group, call 726-8818.

Ranger Butch Harper began recording telephone message advisories. In 1984, National Avalanche Center Director Doug Abromeit moved to Ketchum, bringing the national center with him.

Since that time, the Sawtooth National Forest Avalanche Center has grown in programming and education efforts, and has experienced moderate growth in funding.

In 1996, the Friends formed under the nonprofit wing of Ketchum's Environmental Resource Center, and in 2000 the Friends became associated with the American Avalanche Association.

"The friends group is still about getting awareness of the center and meeting the needs of backcountry skiers and snowmobilers." Malko said.

NEWS

United States
Department of
Agriculture

BOISE NATIONAL FOREST

1249 S. Vinnell Way Suite 200 Boise, Idaho 83709 208-373-4100

FOR IMMEDIATE RELEASE February 14, 2003

Information Contact: Janet Kellam 208-622-0095 David Olson 208-373-4105

Avalanche Class Offered At Stanley

Boise, ID – A basic 3-hour avalanche class will be offered February 21 from 6: 30 to 9:30 pm at the Stanley Community Building on Highway 21. The free class is being sponsored by the Salmon River Snowmobile Club and the Sawtooth Ski Club and the instructors will be from the Sawtooth National Forest Avalanche Center.

An optional Saturday field session will also be offered from 9-4 pm. Participants must attend the Friday class prior to attending the Saturday session.

The course will provide valuable information for first timers, and it is a great refresher for those who may have attended an earlier course. In addition, the class is an excellent precourse for a 3 day Level 1 avalanche class.

Topics covered in this class include avalanche warning signs and identifying avalanche conditions, safe travel techniques, avalanche terrain recognition, and performing an effective rescue.

New records have been set over the past two years involving avalanche fatalities from both skiers and snow mobile operators. Last year 39 people died from avalanches across the nation and this year one snowmobile operator was killed in an avalanche in the Trinity Mountain area.

"What we are beginning to see is a dramatic increase in snowmobile incidents primarily because riding skills are exceeding avalanche knowledge skills," said Janet Kellam of the Sawtooth National Forest Avalanche Center. "This class will really help improve knowledge and understanding of avalanche conditions and terrain, and most importantly help prevent an accident from occurring."



Friday, March 7, 2003
—— at the nextStage Theatre——

With music by
NADA BRAHMA

"Flectric Acoustic Tribal Rock lunk"

DOORS OPEN AT 7:00 PM • AWESOME RAFFLE PRIZES!

Wolf Ski, Ortovox, Lifelink, Black Diamond, Marmot, Smith Sport Optics & More.

GRAND PRIZE: A day of heli-skiing with Sun Valley Heli-Ski!

Tickets: \$15 at the door. \$12 in advance

Brought to you by



Come support the Friends of the Sawtooth National Forest Avalanche Center. Celebrate the Ski Season and help the Avalanche Center to remain one of the the Top Forecast Centers in the World! Join the Party and a have a Chance to Win some Awesome Prizes!

ELEPHANTS PERCH • BACKWOODS MOUNTAIN SPORTS

A Snow Dance Thank You

The staff at the Sawtooth National Forest Avalanche Center would like to extend a special "Thank You!" to The Friends of the Sawtooth Avalanche Center, The Elephant's Perch and Backwoods Mountain Sports for organizing and sponsoring the Snow Ball. The Snow Ball was a great gathering and helped to raise essential funds that allow the Avalanche Center to produce avalanche advisories and teach classes.

Many other folks helped to make it all possible: Mary Schneider, Louise Stumph, Steve Butler, Tom Nickel, Gordon, Michael and Sun Valley Brewing, Anthony and Nouveaux Beverage, Brian and Base Mountain Properties, Phil & Joy-wine sommeliers extraordinaire, and all of the helpers at the event.

Mark and Sun Valley Heli-Ski Guides generously donated a free day of heli-skiing. Huge thank you's to all of the raffle support: Mike & Wolf Ski, Kellie O' & Vests of the West, Sandy Giltinan Acupuncturist, Atomic, Smith, Jytte, Life Link, Patagonia, Blac' Diamond, Marmot, & Ortovox.

Kathy, Ron and the nexStage Theatre deserve thanks all year for making community events possible in our town. We can't say thank you enough to the Idaho Mountain Express, the Wood River Journal and KECH Radio for spreading avalanche awareness and pointing the public toward the Avalanche Center.

And, last but definitely not least, a very warm thank you to all of you who helped to support the Sawtooth Avalanche Center in so many ways!

Sincerely, Janet, Greg, Jay & David



wood River Journal Sports • Motoring Classifieds

Sports Editor: Philip A. Janquart philianquart@netscape.net
March 19, 2003

Sawtooth National Forest Avalanche Center Winds Down



CHECKING THE SNOW PACK: A member of The Sawtooth National Forest Avalanche Center checks snow pack conditions. The SNFAC will be ending condition reports beginning this Saturday March 22. Photo:

The Sawtooth National Forest Avalanche Center will be shifting into springtime operations.

The last daily advisory will be issued Saturday, March 22. It's a week earlier than usual and is due to funding limitations. Mid-week updates will be posted and general snow and weather information will be issued for the weekend of April 29. Throughout the spring, daily temperatures and weather information links will continue to be available from the Sawtooth National Forest Avalanche Center's home page. Click on www.avalanche.org and select Sun Valley.

The staff at the Sawtooth NF Avalanche Center would like to thank the Friends of the Avalanche Center, the Ketchum Ranger District and all of the individuals, groups and local businesses who help to spread avalanche awareness and information throughout the surrounding communities. Classes and advisory use numbers continue to grow!

For anyone venturing in the backcountry this spring, here are some good tips for safe travel and best snow conditions:

 Get out early and be home by early afternoon. There's great snow conditions to be had, but stay heads-up in alpine areas and at upper elevations where the snowpack may be more winter-like.

 Pay close attention to how deep the overnight freezes penetrate the snowpack, or if a dramatic warm-up occurs. If you are sinking into wet snow over your boot tops, it is time to call it quits. Snow -boarders and snowmachiners, if you step off of your board or sled periodically it will help you gauge how rapidly the melt freeze crusts

C-- CENTER Page 4

CENTER from page 1

are breaking down. This spring, if there is an extended period of above-freezing temperatures at upper elevations, we could see some large, deep avalanches in the alpine terrain.

• Any new snowfall will be more sensitive to the effects of the sun's heating than older snow, and with new snowfall watch for recently formed wind slabs on crusty layers.

 It is still important to dig down and see just how well the snow layers are bonded together, how wet or how weak the underlying snowpack may be.

We continue to recommend safe travel practices such as one person exposed on a slope at a time, closely watch each other, carry avalanche beacons, proces and shovets and be well practiced with



CEDS 211 17 E 2445 Janet Kellam, of the Sawtooth National Forest Avalanche Center, Johns a deckcountry survival pack while fecturing during one of this season's ava-



AVALANCHE HOTLINE 208.622.8027

OBSERVER HOTLINE 208.622.0099

www.avalanche.org

KETCHUM RANGER DISTRICT 208,622,0095

snfavalanche@sunvalley.net

RECEIVED Kunt. ____



Ketchum Fire Weight David G.

Phone: (208) 726-7805 • Fax: (208) 726-7812

Ruth Monahan, Forest Supervisor-Sawtooth National Forest 2647 Kimberly Road East Twin Falls, ID 83301 Wile to be to your st down record efforts. Job.

December 27, 2002

I am writing to you in support of the work performed by the Sawtooth National Forest Avalanche Center. Our agency provides emergency medical services to the north half of Blaine County. We have seen a tremendous rise in participation of winter sports activities in our area. A few years ago, many recreationists did not have the knowledge or equipment to be prepared for avalanche hazard. This was demonstrated by the tragic deaths of two men on Galena Summit. Since then, the Sawtooth National Forest Avalanche Center has done a tremendous job of educating the public, including programs with school-age children. It is now rare to see local recreationists oblivious to the danger of avalanche. Many people, including our agency, rely on the Center=s daily Backcountry Avalanche Advisory. The expertise of the forecasters and the timeliness of the data give credibility to the advisory, convincing people to stay away from dangerous slopes when the temptation is to go out there.

I encourage the Forest Service to increase funding to the Sawtooth National Forest Avalanche Center. We see a tremendous value in the preventative education offered and the advise of the daily Backcountry Avalanche Advisory. Cutting funding may undo all the good results we have seen and lead to tragedy.

Chief of Fire and Emergency Medical Services

File Code: 1500

Date: January 8, 2003

Greg Schwab Chief of Fire and Emergency Medical Services Ketchum Fire Department P.O. Box 966 Ketchum, ID 83340

Dear Chief Schwab:

Thank you for your December 27, 2002 letter in support of the work performed by the Sawtooth National Forest Avalanche Center. It is always nice to have our employees recognized for the outstanding and valuable work that they are performing. I am personally proud of the service and programs that are being provided to the community.

Funding to support the Avalanche Center includes a combination of funds from our Regional Office, the Forest, and community "Friends" group. In addition, we are continuing to pursue partnerships with Idaho State Parks and Recreation and other sources. The Forest is committed to continuing our support of the Avalanche Center and recognizes that the demand and need for the services is increasing. Continued financial support from users and the community will be critical to our long-term success.

Thank you again for all your support. I appreciate the positive and cooperative working relationships between your Department and the Sawtooth National Forest.

Sincerely,

/s/ Ruth M. Monahan RUTH M. MONAHAN Forest Supervisor

cc: Kurt J Nelson

To open this document in the Records database, click on this link -> []

To access all documents in the National Records Database, click on this link -> 😜



CKCOUNTRY SKIERS AND SNOWBOARDERS NEED TO KNOW BEFORE THEY GO. And one of the best ways to know is to access your local Avalanche BY Doug Abromeit, Director, Forest Service National Avalanche Center Center each morning right after you brew that triple shot cappuccino:

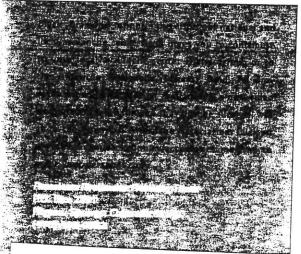
DIAMOND EQUIPMENT

And here's why. Avalanche accidents kill people. In fact, they kill more people on public lands than any other natural disaster. But avalanches don't happen by accident; they only happen in certain terrain with certain snow conditions. If you can identify those conditions you can solve the avalanche puzzle.

Avalanche Centers can help you solve the puzzle. Avalanche Centers issue public advisories that contain critical snowpack and weather information; they are our link with what's been happening while we are at work, at school or asleep. Avalanche Centers also offer courses that show how to field assess avalanche danger, how to travel safely in avalanche terrain and how to carry out a fast and effective rescue.

Obviously Avalanche Centers cannot assure our safety in the backcountry; but Avalanche Center classes and advisories can provide the tools we need to make good choices and to react decisively in an emergency.

Avalanche Centers could not provide those tools without public support. Typically thirty to fifty percent of the funding for an Avalanche Center comes from public contributions. In other words, without public support many Centers would have to either shut down or significantly scale back their services.



Over the years, backcountry skiers, snowboarders, climbers, and snowmobile riders forged partnerships with the Forest Service and other state and federal agencies to help operate the centers. Their cooperative efforts netted an efficient, cost effective system staffed by some of the most respected and dedicated avalanche professionals in the world.

But recently increased demands combined with flat or reduced budgets have left many Avalanche Centers stretched to the breaking point. Heightened public support is vital as the Centers struggle to meet the needs of all of us that journey into the mountains in winter.

The Avalanche Centers. much like a wind-loaded powder slope, exist in a delicate balance between the stress of demand and the strength of funding. Backcountry users rely on Avalanche Centers to help them solve the avalanche puzzle. Avalanche Centers rely on backcountry users to help fund the Centers. Good decisions and honed skills will determine whether the balance can be maintained.



The Sawrooth National Figure 2 (erchum 10 83340)



Black Diamond Equipment, Ltd 2084 East 3900 South Sait Lake City, UT 34124 Phone: 801.278.5552 Fax: 801.278.5544

Black Diamond Equipment, AG Christoph Merian Ring 7 4153 Reinach (BL), Switzerland Phone: +41/61 71 31 61 0 Fax: +41/61 71 31 61 1

www.BlackDiamondEquipment.com

August 26, 2002

Mr. Dale Bosworth, Chief USDA Forest Service Sidney R Yates Federal Building 201 14th Street at Independence Ave SW Washington DC 20250

Dear Chief Bosworth,

The attached letter is signed by the CEO's and Senior Managers of America's \$5 billion/year outdoor Industry and is written in support of the Forest Service's Avalanche Forecast Centers.

The signatories include: Patagonia, Eagle Creek Travel Gear, Outdoor Retailer (industry tradeshow producers), Cascade Designs (large holding company), Rivers and Mountains, Watermark Sports, Asolo Boots, Mountain Hardware and of course Black Diamond Equipment. In addition, I have received phone calls of support from Nike/ACG, Marmot, Gregory, Osprey, Vortex and several other companies.

I think you will agree with me when I say, "it is gratifying to see such a strong show of support" from the leading companies of America's outdoor Industry in support of a Forest Service Program. Please read the attached signed letter to understand why that support is there.

I am also sending copies of this and the attached letter to those elected representatives who have residing in their states at least one of the Forest Service Avalanche Forecast Centers.

Sincerely Yours

BLACK DIAMOND EQUIPMENT LTD

Peter Metcalf

CEO/President

Cc: (with attachments)

Bruce Greenstein, Chairman, The American Avalanche Advisory Fund

Frank Hugelmeyer. Executive Director of the Outdoor Industry Association

Doug Abromeit, Director, Forest Service National Avalanche Center, Ketchum, ID

The Honorable Ted Stevens, United States Senate

Dianne Feinsten, United States Senate

Hon Ben Nighthorse Campbell - United States Senate

Conrad Burns, United States Senate

Judd Gregg, United States Senate

Bob Bennett, United States Senate

Patty Murray, United States Senate

Robert C Byrd, United States Senate

Harry Reid, United States Senate

Dale Bosworth, Chief USDA Forest Service Sidney R. Yates Federal Building 201 14th Street at Independence Avenue SW Washington, DC 20250

Dear Chief Bosworth:

We want to congratulate and thank the Forest Service for the great job your backcountry avalanche centers do.

We recently saw statistics that showed that avalanches kill more people on National Forests than any other natural event and that nearly all avalanche fatalities occur on National Forests. The fatalities span the spectrum from snowmobile riders and backcountry skiers to hunters and snowshoe hikers. It is obvious to us that without the avalanche centers there would be many more avalanche fatalities on National Forests.

But saving lives is not all the avalanche centers do. Avalanche centers also provide a positive way for the public to participate in a Forest Service program. The public heartily endorses the avalanche centers and they have shown their support by establishing friends' organizations that provide significant funding for local avalanche centers. This sort of enthusiastic support seems refreshing in an age when many government programs are openly questioned and criticized.

Outdoor-industry retailers and manufacturers in turn support local friends' organizations by providing them staff services, products, and funding. The industry has also worked closely with the Forest Service National Avalanche Center to increase public avalanche awareness. Some of the projects we have worked jointly on include an avalanche awareness video for snowmobile riders, an avalanche awareness video for backcountry skiers and snowboarders, and avalanche danger scale hang tags.

We feel that public safety is a shared responsibility. We look forward to working even more closely in the future with both the Forest Service's local avalanche centers and with the National Avalanche Center. The overall Forest Service avalanche program provides a very popular and valuable service to the public. We thank you for providing this service and we urge you to continue your support.

Sincerely,

The Leading Companies Of America's Outdoor Industry,

Blitck Diviner DEGUIDMENT LTD FEMTELLAND CEO/PRESIDENT Page 2 USA Outdoor Industry's Support of Avalanche Forecast Centers con. August 2002

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MOUNTAIN HARDWARD IN

DAVID LOECHWER OUTDOOR RETAILER

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Cascade Designa.

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Waterrak Sports, INC.

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FOREST SERVICE AVALANCHE CENTER LIST

For current Avalanche Information and Mountain Weather Forecast: www.avalanche.org

FOREST SERVICE UTAH AVALANCHE CENTER-SALT LAKE CITY

Hotline: Sundance/Timpanogos (Provo) (801) 378-4333

Tri-Canyon (Salt Lake City) (801) 364-1581

Alta (801) 742-0830

Park City Area (435) 658-5512

Ogden Area (801) 626-8600

Snowmobile Hotline: I-800-648-7433

Web-site: http://www.avalanche.org/~uafc

FSUAC/ BEAR RIVER AVALANCHE CENTER-LOGAN

Avalanche Information: Logan (435) 797-4146

Southeast Idaho (208) 239-7650

Web-site: http://www.usu.edu/braic/

FSUAC/ MANTI-LA SAL AVALANCHE CENTER-MOAB

Avalanche Information: (801) 259-SNOW Manti-SkyLine Hotline: I-800-648-7433

Web-site: http://www.avalanche.org/~lsafc/

NORTHWEST WEATHER AND AVALANCHE CENTER

Hotline: Washington (206) 526-6677 Oregon (503) 808-2400

Web-site: http://www.nwac.noaa.gov

COLORADO AVALANCHE INFORMATION CENTER

Hotline: Denver/Boulder (303)275-5360

Fort Collins (970)482-0457

Summit County (970)668-0600

Colorado Springs (719)520-0020

Aspen (970)920-1664

Durango (970)247-8187

Web-site: http://www.geosurvey.state.co.us/avalanche

GALLATIN NATIONAL FOREST AVALANCHE CENTER

Hotline: Bozeman, Livingston, West Yellowstone & Cooke City (406) 587-6981

Website: http://www.mtavalanche.com

NORTH WESTERN MONTANA GLACIER COUNTRY AVALANCHE CENTER

Avalanche Information: (406) 257-8402

Website: http://www.montanaweb.com/avalanche

MISSOULA REGIONAL AVALANCHE FORECAST CENTER- WEST CENTRAL MONTANA

Avalanche Information: (406) 549-4488

Web-site: http://www.fs.fed.us/r1/lolo/rec-contrib/advisory.htm

SAWTOOTH NATIONAL FOREST AVALANCHE CENTER

Hotline: (208) 622-8027

Web-site: http://www.avalanche.org/~svavctr/adv_current.php

PAYETTE NATIONAL FOREST AVALANCHE INFORMATION CENTER

Avalanche Information: (208) 634-0409

Web-site: http://www.fs.fed.us/r4/payette/main.html

IDAHO PANHANDLE

Avalanche Information: (208) 765-7323

Website: http://www.fs.fed.us/ipnf/visit/conditions/backcountry/index.html

BRIDGER-TETON NATIONAL FOREST AVALANCHE CENTER

Hotline: Teton Area (307) 733-2664

Continental Divide Trails/Togwotee Pass (307) 733-2666

Southwest Trails/Greys River Area (307) 739-0674

Web site: http://www.jhavalanche.org

TAHOE NATIONAL FOREST AVALANCHE CENTER

Avalanche Information: (530) 587-2158

Web-site: http://www.r5.pswfs.gov/tahoe/avalanche.html

SHASTA-TRINITY NATIONAL FOREST AVALANCHE CENTER

Hotline: (530) 926-9613

Web-site: http://www.r5.fs.fed.us/shastatrinity/mtshasta

MOUNT WASHINGTON, NEW HAMPSHIRE

Hotline: (603) 466-2713 xt 4

Web-site: http://www.tuckerman.org

OTHER NORTH AMERICAN AVALANCHE WEBSITES:

FOREST SERVICE NATIONAL AVALANCHE CENTER

www.fsavalanche.org

CANADIAN AVALANCHE ASSOCIATION

www.avalanche.ca