GNFAC Avalanche Forecast for Thu Feb 7, 2013

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, February 7 at 7:30 a.m. The **Montana FWP Recreation Trails Grant** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Under clear skies this morning, mountain temperatures were in the mid-teens F and SW winds were blowing 10-15 mph gusting to 25 mph. Today an upper level ridge will move east and some clouds will move over the area. Temperatures should climb only a few degrees to near 20 F and winds will continue the same. Some snow will come Friday followed by cold temperatures on Sunday.

Snowpack and Avalanche Discussion

Bridger Range Northern Madison Range Cooke City

The odds of triggering an avalanche decrease a little each day without new snow but vary dramatically between slopes. Some slopes have weak, faceted crystals near the ground where the snowpack was less than 3 feet deep (video) prior to last week's snowfall. Other slopes have a thin layer of smaller but equally weak faceted crystals that formed on the snow surface. These faceted crystals formed during periods of cold, clear weather in January and are now buried about 1-2 feet deep. Both layers produced avalanches as recently as Monday (avalanche photos).

Where either of these layers exists, the odds of triggering an avalanche are much higher. Slopes without these layers have better stability and lower odds of triggering an avalanche. With such variability, the avalanche danger rating is just a starting point. Revise it up or down depending on your observations and stability tests. For today avalanche conditions remained heightened on specific terrain making human triggered avalanches possible and the avalanche danger is rated overall **MODERATE**.

Southern Madison Range Gallatin Range

Lionhead area near West Yellowstone

The Gallatin Range generally has facets closer to the ground while the southern Madison Range and Lionhead area generally have facets that formed near the old snow surface. Compared with other parts of the advisory area, these weak layers are much more widespread. On Tuesday I rode in the Taylor Fork area with the director of MSU's Snow and Avalanche Laboratory, but it didn't take a scientist to spot faceted layers of snow buried 1-2 feet deep. These facets were an obvious stripe in the walls of our <u>snowpits</u> that produced clean, fast, and easy fractures in our stability tests. We found one slope with stable conditions, but this seems to be more the exception than the rule.

Because these areas have widespread, persistent weak layers that produced avalanches over the weekend and continue to yield poor stability test scores, the avalanche danger is rated **CONSIDERABLE** on slopes steeper than 35 degrees and a **MODERATE** danger on all others.

Doug will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations drop us a line at <u>mtavalanche@gmail.com</u> or call us at 587-6984.

February 16: 11th Annual King and Queen of the Ridge

The Avalanche Center, Montana Ale Works and Beartooth Powder Guides have already entered as teams. Organize your own team or come out as an individual hiker. Better yet, let others do the hiking for you and <u>donate</u> instead! If you would like to donate to the Avalanche Center team (50 lap goal!) drop us a line at <u>mtavalanche@gmail.com</u>. Pledges can be made per lap or just a flat donation. Kids and families are encouraged to hike too! Prizes will be awarded to the most hikes (1st, 2nd, and 3rd); most money raised; most laps for a team; most money raised for a team and our newest category, most money raised by the least amount of hikes! <u>More</u> Information / Registration Form

EDUCATION

The Friends are teaching a free *Companion Rescue Course* in **Big Sky**, at Grizzly Outfitters, **this Friday**, February 8 from 6-8 p.m., followed by a field session the next day from 10 a.m. to 2 p.m. Space is limited and pre-registration is required: <u>https://ticketriver.com/event/5830-companion-rescue-clinic-for-skiers-&-boarders</u>

In West Yellowstone, this Friday February 8th, the Friends are giving a 1-hour Avalanche Awareness for Snowmobilers lecture at 7pm at the Holiday Inn.