GNFAC Avalanche Advisory for Sat Jan 2, 2010

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 2, at 7:30 a.m. **ProLite Gear**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

AVALANCHE WARNING

The Gallatin National Forest Avalanche Center continues a **Backcountry Avalanche Warning for the southern Gallatin and southern Madison Ranges, the Lionhead area near West Yellowstone, the mountains around Cooke City and the Washburn Range in northern Yellowstone National Park.** In the past 48 hours, 12-14 inches of new snow was deposited on an extremely weak snowpack. **Today the avalanche danger is <u>HIGH</u> on all slopes.** Areas of unstable snow exist. Natural and human triggered avalanches are likely. **Avalanche terrain including avalanche runout zones should be avoided.**

Mountain Weather

In the past 24 hours the mountains near West Yellowstone and Cooke City received 4-6 inches of snow, mountains near Big Sky received 1-3 inches, and the mountains near Bozeman received a trace to 2 inches. Temperatures have been relatively warm, and the Bridger Bowl Ski Patrol reported freezing rain yesterday morning. This morning at 4 a.m. mountain temperatures were near 20 degrees F and will warm to almost 30 degrees F today. Last night winds increased into the 30's but were blowing 10-20 mph this morning from the W. Today winds will continue blowing from the W bringing some snow flurries with only 1 inch of snow accumulating by tomorrow morning.

Snowpack and Avalanche Discussion

The southern Madison and southern Gallatin Ranges, the Lionhead Area near West Yellowstone, the mountains around Cooke City and the Washburn Range:

In the past two days over a foot of snow has accumulated in the mountains near West Yellowstone and Cooke City adding significant stress to an extremely weak snowpack. The weak snowpack is more obvious near West Yellowstone where recent snow resting on weak faceted snow hardly supports skis or snowmobiles. Near Cooke City faceted snow is less obvious because it lies under a supportable slab of snow, but these facets will produce avalanches. Riders near Daisy Pass yesterday observed several natural avalanches, and more are likely today. For this reason, today the avalanche danger is rated **HIGH** on all slopes. Avalanches can be triggered from low angle slopes if they are connected to steeper terrain and these runout zones should be avoided.

The northern Madison Range:

The snowpack near Big Sky is just as bad as in areas further south. It simply hasn't received the same load. A regular observer described the snowpack well saying: "This is getting repetitive. It's like a club sandwich" with layers of facets and slabs. Another regular commented that these facets are widespread and obvious as he experienced a few large collapses and some cracking of the snowpack in Beehive Basin. If avalanches do not break on these faceted layers, they will easily break within the storm snow which is upside down meaning warm dense snow sits on top of cold, low density snow. Today human triggered avalanches are probable and the avalanche danger is rated **CONSIDERABLE**.

The Bridger and northern Gallatin Ranges:

The Bridger and northern Gallatin Ranges continue to be denied snowfall occurring further south; however, these areas have not been denied a weak snowpack. On Thursday Doug, Eric, and I skied into Truman Gulch on the west side of the Bridgers and on Saddle Peak on the east side. Our snowpits were full of facets including a noticeable layer of near surface facets that formed just after Christmas. High on Saddle Peak we also found a hard wind slab between layers of facets similar to one seen by Karl and Doug in their <u>YouTube video</u>. Also on Thursday, skiers on Mt Blackmore found similar conditions as well as rapidly forming wind slabs. On the east face of Blackmore they observed several small, soft slab avalanches releasing in steep, wind loaded areas near rock bands. Skiers at low elevation areas in the northern Gallatin Range continue to find a highly faceted snowpack also. Today wind loaded slopes have a <u>CONSIDERABLE</u> avalanche danger. Non wind loaded slopes have a <u>MODERATE</u> avalanche danger.

Doug will issue the next advisory tomorrow morning at 7:30 a.m. If you get out in the backcountry give us a call or email with your observations. You can reach us at 587-6984 or email us at <u>mtavalanche@gmail.com</u>.

LIONHEAD WEATHER

Our weather station on <u>Lionhead</u> is now running and reporting weather at 4 a.m. and 4 p.m. We haven't installed the snow sensor yet, but you can check out temperature and wind speed.

AVALANCHE EDUCATION

1. WEST YELLOWSTONE

Snowmobilers and Skiers: TODAY from 12-5 pm at the Holiday Inn is avalanche lectures. Sunday, January 3 will be an all day field session for both skiers and snowmobilers. \$30 suggested donation. No sign up required. http://www.mtavalanche.com/education/classes/snowmobilers

2. BOZEMAN

Level 1: 7-10 January, Montana Outdoor Science School is offering a Level 1 Avalanche Course. Instructors are Angela Patnode and Jay Pape. For more information, contact Montana Outdoor Science School at 406-582-0526.

3. BOZEMAN

Level 1: American Avalanche Institute is offering a Level 1 Avalanche Course January 22-24, 2010 at Bridger Bowl. Get more information and register at: www.americanavalancheinstitute.com

4. FOUR CORNERS

Rescue Lecture: On Tuesday, 26 January, the Gallatin Valley Snowmobile Association is having it annual Chili Feed at 6:30pm in the Groomer Shack. At 7:00 there's a free Avalanche Rescue Talk. http://www.mtavalanche.com/workshops/calendar

5. BOZEMAN

Basic Avalanche Workshop: The Friends of the Avalanche Center and MSU are offering a Basic Avalanche Awareness Class the evenings Wed, Thur, 27 & 28 January with a field day on Saturday, 30 January. \$25 donation. No sign up required. <u>http://www.mtavalanche.com/education/classes/basic</u>