GNFAC Avalanche Advisory for Sat Mar 24, 2012

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, March 24 at 7:30 a.m. **Alpine Orthopedics** and **Javaman**, in partnership with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

This morning mountain temperatures are ranging between the upper 20s to low 30s F and winds are blowing 10-20 mph out of the SW. Today, temperatures will warm into the mid-forties under partly cloudy skies and winds will continue to blow 10-20 mph out of the SW.

Snowpack and Avalanche Discussion

WET SNOW AVALANCHE DANGER

Last night temperatures dropped below freezing. This will help reduce the wet snow avalanche danger through the morning hours. However, temperatures will warm into the forties by this afternoon making wet snow avalanches a serious concern. Sun exposed slopes, specifically those with south and west aspects will be the most prone to wet snow instability. Today, the wet snow danger will start out **LOW** but will rise to **CONSIDERABLE** by this afternoon.

The Bridger Range:

Yesterday, it was difficult thinking about avalanches walking around in flip flops and a t-shirt. That was until 1:30 pm when we received a call from an observer in the northern Bridgers saying there had been a large human triggered avalanche north of Ross Peak (**photo**). This slide falls on the heels of a major avalanche cycle that occurred earlier in the week (**photo**, **photo**, **video**).

The widespread activity in the Bridger Range is a clear indicator the snowpack is struggling. Most slides are failing on a layer of facets buried at or near the ground, which can be found throughout the range.

Prior to last night's freeze, temperatures in the Bridgers had not dropped below freezing for over 48 hours. This prolonged warming resulted in the loss of nearly .5 inches of <u>SWE</u> at the Bracket Creek Snotel site. This translates to free water moving through the pack, making conditions ripe for wet snow instabilities. Whether avalanches fail as wet or dry slabs the consequences will likely be severe.

Today, the avalanche danger is rated **CONSIDERABLE**.

The southern Gallatin Range, entire Madison Range and the Lionhead area near West Yellowstone:

It has been 4-5 days since the largest avalanche cycle of the season (video, video). Most slides resulted from massive loading of weak faceted snow buried mid-pack or near the ground. Unfortunately, these faceted layers still exist on most slopes and are fully capable of producing more avalanches.

Because these layers are buried deep in the snowpack, warm temperatures will have little effect on them in the short term. Although the odds of triggering an avalanche on deeper layers will decrease a little each day, the consequences of triggering a slide remains severe.

Today, faceted layers buried mid-pack and near the ground remain untrustworthy. For this reason human triggered avalanches are likely on slopes steeper than 35 degrees which have a **CONSIDERABLE** avalanche danger. Less steep slopes have a **MODERATE** avalanche danger.

The northern Gallatin Range and mountains around Cooke City:

In the northern Gallatin Range and the Cooke City area buried facets exist but are not as widespread. Additionally these areas did not receive as much snow from recent storms, thus the snowpack has less stress.

Yesterday, I toured up Mt Ellis and found challenging conditions both on the hike up and on the ski down. Soft snow and a poor snowpack structure kept my decision making conservative.

Today, the avalanche danger is rated **MODERATE**. However, this season has not been one to be remembered for stable conditions, and I would remain conservative in these areas despite a lower avalanche danger.

I 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 mtavalanche@gmail.com or call us at 587-6984.