## **GNFAC Avalanche Forecast for Sun Dec 8, 2013**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued Sunday, December 8 at 7:30 a.m. **Bridger Bowl** sponsors today's advisory. This advisory does not apply to operating ski areas.

## Mountain Weather

Overnight the mountains around Cooke City and West Yellowstone received 1-2 inches of new snow. The rest of our advisory area remained dry. This morning, cold temperatures continue with most locations ranging between - 5 and -10 F. Currently, winds are blowing 5-10 mph out of the WNW with the exception of Big Sky where winds are blowing 10-20 mph. Today, temperatures will struggle to climb above zero degrees F under partly to mostly cloudy skies. Winds will increase slightly throughout the day blowing 10-15 from the WNW. Even light to moderate winds can create dangerous wind chills with these frigid temperatures. There is a slight chance for mountain snow showers this afternoon and evening. No major accumulations are expected.

Snowpack and Avalanche Discussion

Cooke City

Cooke City is a big place. The mountains are big, the snow is big, and more often than not the avalanches are big. Without the stress of recent snow, it is becoming harder to trigger avalanches. However, faceted (weak) layers buried 3-4 feet deep remain a concern, especially on north and east facing slopes (**photo1**, **photo2**, **photo3**). The main problem with this scenario is - if you do trigger an avalanche it will likely be large and destructive. Now is a tricky time to ride in avalanche terrain. Some slopes may be stable while others are not. It's important to remember that tracks on a slope do not equal stability.

Today, careful snowpack evaluation and conservative decision making are essential when riding in mountains around Cooke City. For this reason the avalanche danger is rated **CONSIDERABLE**.

Bridger Range Madison Range Gallatin Range Lionhead area near West Yellowstone

The primary concern in the mountains around Big Sky and West Yellowstone is a layer of facets buried at or near the ground (**snowpit**). This layer is most problematic on upper elevation slopes facing north through east, but should be assessed on all aspects. Over the past week, the Big Sky Ski patrol has triggered numerous avalanches on this layer during control work (**photo**). The good news is the snowpack is gradually adjusting and avalanches are becoming harder to trigger. Without new snow, triggering an avalanche on this layer is not imminent but remains possible.

A secondary concern in the mountains around Big Sky is wind slabs. Last night the winds blew 10-20 mph out of the WNW, just hard enough to transport snow onto leeward slopes. I don't expect wind slabs to be widespread, but it's something to consider when traveling in upper elevation terrain.

The primary concern in the Bridger Range and northern Gallatin Range is the new snow/old snow interface. The Bridger Bowl ski patrol has triggered multiple slides on this layer over the past few days. I also observed a few small natural avalanches that failed on this layer near Hyalite Peak (**photo**). Although this layer is gaining strength, I expect a skier or rider could still trigger an avalanche in steep, upper elevation terrain.

Faceted layers buried deeper in the pack are not widespread, but do exist in isolated areas (video). Triggering an avalanche on deeper layers is less likely, but not entirely out of the question.

Today, less than perfect stability makes human triggered avalanches possible and the avalanche danger is rated **MODERATE**.

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.

## **EVENTS/EDUCATION**

BOZEMAN: December 11, 7 p.m., International Mountain Day, Emerson Cultural Center, Avalanche Forecasting and Awareness. <u>http://www.mtavalanche.com/images/13/international-mountain-day</u>

FOUR CORNERS: December 11, 7 p.m., 1-hour Avalanche Awareness for Snowmobilers at the GVSA Groomer Shed, <u>http://gvsa.net/</u>

WEST YELLOWSTONE: Snowmobiler Intro to Avalanches w/ Field Course, West Yellowstone: 19 and 20 December. Info and registration: <u>https://www.ticketriver.com/event/7116</u>