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

## Mountain Weather

Cold continues with mountain temperatures around -10 F most places this morning. Valley temperatures were coldest near Bozeman and the Bridger Range around -20 F. For comparison, it was -18 F at the <u>South Pole</u> this morning. Winds increased last night but eased a little this morning blowing 3-8 mph from the south gusting 10-15 mph. Today will have some sun and a few clouds near Bozeman and a chance of snow and more clouds near West Yellowstone. High temperatures should remain below zero F. Winds will decrease and become more easterly today.

Snowpack and Avalanche Discussion

Cooke City

Following a large storm last Sunday and Monday, many avalanches occurred near Cooke City mostly on northerly aspects. These slides broke 3-4 feet deep (**photo1**, **photo2**, **photo3**). It was much easier to trigger an avalanche in the middle of last week than it will be today. Now is a tricky time as the odds of triggering an avalanche slowly decrease. The snowpack might let us ride in avalanche terrain but it's a game of Russian Roulette especially on northerly aspects. The snowpack has all the ingredients in place for human triggered avalanches. Weak facets 1-2 feet above the ground have shown their ability to fracture. For these reasons today, the avalanche danger is rated **CONSIDERABLE**.

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone

Weak snow has been found near Big Sky near the ground mostly on north facing terrain. The Big Sky Ski Patrol did trigger one slide (**photo**) on a south aspect yesterday but did not think it is one that could necessarily be triggered by a skier. Nearby in Beehive and Bear Basins, a similar layer of facets exists about a foot above the ground (**snowpit**) and should not be trusted. Without a recent heavy load of new snow, triggering an avalanche on this layer is not imminent but remains possible.

Stronger snow exists in the Bridger Range and the only avalanches triggered by the Bridger Bowl Ski Patrol have been ones about 8-10 inches deep involving just the new snow. Yesterday, Eric and his partner braved the cold weather and skied to Hyalite Peak (video). They saw a few small natural avalanches (photo) that likely occurred on Tuesday and involved just the new snow which since then had bonded well to the old snow surface. They also found a faceted layer about a foot above the ground but did not think it would be much of a problem except in isolated areas.

For today with faceted layers lurking in the snowpack in some areas, human triggered avalanches are possible and the avalanche danger is rated **MODERATE**.

Eric 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. http://www.mtavalanche.com/images/13/international-mountain-day

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>