

GNFAC Avalanche Advisory for Sun Dec 16, 2012

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, December 16 at 7:30 a.m. Today's advisory is sponsored by Montana FW&P Recreation Trails Grant in partnership with the Friends of the Avalanche Center.

Mountain Weather

Since yesterday morning 1-3 inches of snow fell over much of our forecast area. Today, a fast moving disturbance will deposit an additional 1-3 inches by this afternoon. Currently, temperatures are in the single digits to low teens and winds have increased out of the WSW blowing 15-30 mph. Temperatures will stay on the cool side with highs reaching the upper teens to mid-20s F under cloudy skies. Winds will continue to blow 15-30 mph from the WSW with gusts reaching into the 40s. A more powerful storm is forecasted to impact our area tonight and tomorrow. Another 1-3 inches is possible by tomorrow morning. The southern mountains will be favored picking up 6-8 inches by tomorrow afternoon. The northern ranges will likely see 3-5 inches.

Snowpack and Avalanche Discussion

[Bridger Range](#) [Madison Range](#) [Gallatin Range](#)

[Lionhead area near West Yellowstone](#) [Cooke City](#)

Yesterday, my partner and I rode in the Taylor Fork in the southern Madison Range and saw the sun for approximately a half hour. This seems to be the average length of time for high pressure systems sitting over southwest Montana. As storms continue to roll through, the snowpack is being constantly tested. Fortunately, the pack is holding up well.

One contributing factor to a well behaved snowpack is the lack of wind. This is a bit unusual for southwest Montana. Don't worry though; this next round of storms will pack a much breezier punch. Today, wind slabs will be the primary avalanche concern. Strong winds out of the WSW will easily transport fresh, low density snow. Slopes directly below ridgelines or on the lee side of cross loaded terrain features will be likely areas to find fresh wind drifts.

I expect these areas to be sensitive to the weight of skier or rider. Cracking and collapsing of wind deposited snow is a sure sign of instability. On a positive note, fresh wind slabs are relatively easy to identify and avoid. Steering clear of wind loaded slopes today will be the best way to avoid avalanches.

A secondary concern is avalanches failing on weak layers now buried several feet in the snowpack. During our trip to the Taylor Fork yesterday, we found the same layer of buried surface hoar that Mark found ten days ago. Fortunately, this layer has gained strength and did not produce unstable results in stability tests ([video](#)). However, the potential for triggering a slide on a deeper weak layer remains. Areas where the snowpack is shallow and thin, mainly around rock bands or scoured ridgelines will be areas most prone to triggering deeper avalanches. Also, slides failing in the new snow make great triggers for larger avalanches ([video](#), [photo](#)).

Today, plenty of fresh snow and strong winds will make human triggered avalanches likely on wind loaded slopes steeper than 35 degrees which have a [CONSIDERABLE](#) avalanche danger. All other slopes have a [MODERATE](#) 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.

EDUCATION

Snowmobiler Introduction to Avalanches with Field Course in West Yellowstone on December 20 and 21. Sign up for this class [HERE](#).

Free 1-hour Avalanche Awareness lecture at Bridger Bowl at 1 p.m. on the 4th floor of the Saddle Peak Lodge on December 23. No registration necessary.