

GNFAC Avalanche Forecast for Mon Feb 25, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, February 25 at 7:30 a.m. **Loan Peak Brewing Company** and the **Cliff Gullet Memorial Fund** sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

No new snow has fallen over the past 24 hours. Currently, temperatures are in the single digits to low teens F and winds are light out of the WSW blowing 5-20 mph. Today, clouds and wind will increase as a cold front approaches from the west. Before the front arrives temperatures will warm into the twenties under partly to mostly cloudy skies. The cold front will arrive sometime after noon delivering a brief shot of snow and gusty winds. Light snow showers will develop behind the front with 3-5 inches possible by later tonight. After the frontal passage, winds will shift to the NW blowing 10-20 mph.

Snowpack and Avalanche Discussion

Bridger Range **Madison Range** **Gallatin Range**

Lionhead area near West Yellowstone **Cooke City**

Yesterday, the snowpack received a well deserved break. After a fast and furious storm on Saturday, clear skies and calm weather over the past 24 hours has allowed the snowpack some time to adjust.

Today, the primary avalanche concern will be wind loaded slopes. Strong winds from the north-northwest on Saturday formed wind slabs near ridgelines and exposed terrain features. Wind slabs will be most reactive on south facing slopes where a thin layer of facets around an ice crust exists below the slabs. On Saturday, we found this facet/crust combo to be a concern on south facing slopes in Hyalite. It also produced unstable results during stability tests in the Taylor Fork yesterday. On shadier aspects, wind slabs may be resting over a layer of lower density storm snow which may act as a temporary weak layer. Although wind loaded slopes are slowly stabilizing, they need to be recognized and approached with caution.

A secondary concern is faceted layers buried 1.5-3 feet deep ([video](#)). Over the past seven days, these layers have been responsible for human triggered avalanches in the Bridger Range, Lionhead area and mountains around Cooke City ([photo](#), [photo](#)). The problem with these deeper layers is they do not exist on all slopes and will not display signs of instability such as cracking and collapsing. Triggering a slide on a deeper faceted layer will be easiest on non-uniform slopes where the snowpack is thin and variable ([photo](#)). It's safe to assume that all slopes have buried weak layers until proven otherwise.

Today, wind slabs and weak layers make human triggered avalanches possible and the avalanche danger is rated **MODERATE**.

Doug 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.

Collecting Data in Avalanche Terrain - A Survey of Backcountry Travelers

An MSU undergrad created a quick, three minute survey for one of his classes. Click on the link and take it. He'll be grateful.

<http://www.surveymonkey.com/s/VD8SZTG>