

GNFAC Avalanche Forecast for Mon Dec 26, 2011

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, December 26 at 7:30 a.m. This advisory is sponsored by **Hans Saari Memorial Fund** in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

Mountain Weather

A dry-upper level weather disturbance is moving across southwest Montana producing strong gusty winds. This morning winds are blowing 20-40 mph out of the WNW with gusts reaching into the 50s. Mountain temperatures are in the mid teens to low twenties with Cooke City being the coldest at 9° F. Today, temperatures will warm into the upper twenties and winds will stay elevated through the morning hours with gusts in the 50s possible. Winds will gradually decrease this afternoon. A cool and dry pattern will persist over southwest Montana through Tuesday.

Snowpack and Avalanche Discussion

The Gallatin and Madison Ranges, the Lionhead area near West Yellowstone and mountains around Cooke City:

Weather patterns this winter have been sporadic, making for variable snow conditions in our forecast area. Storms have been selective in their distribution of both snow and wind - developing unique snowpacks in individual ranges and even areas of the same range. Some areas have a deeper- stronger snowpack, mainly the northern Gallatin Range and mountains around Cooke City, while other locations consist of, as one friend puts it, "facet castles masquerading as a snowpack."

Yesterday, my partner and I took a pleasant walk up Mt Ellis. The snowpack from the meadow to the summit was comprised almost entirely of facets, making it possible to dig directly to the ground with my hand. On Friday, skiers in Beehive Basin found a different and more unstable snowpack. A two foot slab resting over facets near the ground provided an unstable structure capable of producing an avalanche ([photo 1](#), [photo 2](#)).

Despite warm-calm weather at lower elevations yesterday, taller peaks in the northern Gallatin and Madison Ranges had large plumes of snow billowing off their summits most of the afternoon - visual evidence that active wind loading was taking place.

Today's primary avalanche concern is wind loaded slopes. Strong winds out of the west make upper elevation slopes with an easterly component the most prone to unstable snow.

Today - Human triggered avalanches are likely on wind loaded slopes steeper than 35 degrees where the avalanche danger is rated **CONSIDERABLE**. All other slopes have a **MODERATE** avalanche danger.

The Bridger Range:

The Bridger Range just doesn't have enough snow to harbor widespread instability. Most slopes have a thin-shallow snowpack lacking a slab. Mark and I found this type of snowpack on the Apron this past Saturday ([photo](#)). However, upper elevation slopes, specifically those below ridgelines, do hold isolated pockets of wind drifted snow capable of producing an avalanche. The tricky part about this scenario is wind loaded slopes will provide the deepest snow cover and better riding conditions. If you are skiing or riding in the Bridger Range, be

cautious in wind loaded terrain and always be thinking about the consequences of an avalanche.

Today – Human triggered avalanches are possible on wind loaded slopes which have a **MODERATE** avalanche Danger. Non-wind loaded slopes have a **LOW** avalanche danger.

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.

EVENTS/EDUCATION

To check out all our education programs: <http://www.mtavalanche.com/workshops/calendar>

BOZEMAN

Women's 1-hour Avalanche Awareness Lecture. Wednesday, January 4, 6:30- 8 p.m. at REI.

Snowmobiler Introduction to Avalanches with Field Course. Lectures on Saturday, January 7, with an all day field session Sunday, January 8. Advanced registration IS REQUIRED.

1-hr Avalanche Awareness Lecture. Wednesday, January 11, 6:30-7:30 p.m at REI.

BIG TIMBER

1-hr Avalanche Awareness Lecture. Tuesday, January 10, 7-8 p.m at Big Timber High School.

HELENA

1-hr Avalanche Awareness Lecture. Thursday, January 12, 6:30-8:30 p.m at Exploration Works.

CODY, WYOMING

Snowmobiler Introduction to Avalanches with Field Course. Lectures on Saturday, January 14 at Mountain Valley Motorsports with an all day field session near Cooke City on Sunday, January 15. Advanced registration IS REQUIRED.