

## **GNFAC Avalanche Forecast for Tue Feb 19, 2013**

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 19 at 7:30 a.m. **Montana Import Group** in partnership with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Since early yesterday morning there's no new snow to report. Southerly winds are light at 10-20 mph except in Hyalite where they are blowing 25-40 mph. Under mostly cloudy skies temperatures are in the teens, but winds and temperatures are not expected to fluctuate much today. Moisture streaming in from the southwest will only drop a trace to one inch of new snow by morning, but hopefully a little more tomorrow.

### Snowpack and Avalanche Discussion

#### Northern Gallatin Range

Over the weekend eight inches of new snow was measured in Hyalite Canyon. [Ridgetop winds](#) have increased through the night and are blowing stronger than anywhere else: averaging 25 and gusting to over 40 mph. Wind-loading is our primary avalanche concern, and knowing Hyalite, I imagine winds are effectively cross-loading gullies. Additionally, a [poor snow structure](#) exists from a layer of weak facets buried 2-3 feet under the surface (or on the ground if the snowpack is thin). While the soft slabs of windblown snow will be easy to identify, the buried facets will require digging. For today, since it's likely someone can trigger an avalanche on wind-loaded slopes, the danger is rated [CONSIDERABLE](#). On slopes without a wind-load the danger is [MODERATE](#).

#### Bridger Range Madison Range Southern Gallatin Range Lionhead area near West Yellowstone Cooke City

Snowfall is weight, and weight correlates to stress on the snowpack. This weekend's snowfall added stress and spiked the avalanche danger, especially on steeper slopes. Eric and others had cracking and collapsing in the southern Madison Range and poor stability test scores around Big Sky. On the northeast aspect of Fan Mountain a three foot deep natural slab avalanche was triggered by a sluff in an area with a thinner snowpack. Around Cooke City a few skier triggered avalanches were reported ([photo](#)). The Bridger Range got the most snow, 16 inches, yet surprisingly had very little avalanche activity.

Throughout or forecast area, thin snowpacks (three feet or less) are weak with some being unstable. Furthermore, persistent weak layers are buried 2-3 feet deep on many slopes. Feathery crystals of buried surface hoar are breaking clean in tests in Bacon Rind and on a few slopes around Big Sky ([photo](#)). Other slopes have smaller grained facets which are harder to spot unless they fracture in a stability test or unmask themselves with a crack or collapse—a red flag. Around Cooke City some southerly facing slopes have a thin ice crust capped with facets buried 1-2 feet deep that we need to avoid ([photo](#)).

Even though the snowpack in each mountain range has its own personality and quirks, they are all kissing cousins. A common DNA thread of instability is linked to thin snowpacks and weak snow buried 1-3 feet under the surface. With time slopes are gaining strength, but avalanches are still possible and the danger is rated [MODERATE](#) today.

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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

**AVALANCHE READING** ([Articles Page](#))

[Accident report](#) by Mark Staples, from an avalanche on Alex Lowe Peak, February 9.

[Sidecountry is Backcountry](#), printed in the February issue of *Carve*, by Doug Chabot.

[Know Your Slope Angles](#), printed in the February *Montana Snowmobile Association Newsletter*, by Eric Knoff.