

GNFAC Avalanche Advisory for Wed Mar 9, 2011

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, March 9, at 7:30 a.m. Javaman, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Lingering showers yesterday morning and a bit more last night accumulated five inches near Big Sky, and two to three inches everywhere else. West winds increased at the ridge tops and have averaged 25-30 mph with gusts to 40 mph. Temperatures are currently in the low teens after reaching the mid 20s yesterday. Later today, mostly sunny skies will cloud over as mountain temperatures rise into the low 30s and winds blow west to southwest at 25-35 mph. A trace to one inch of snow may fall in the southern mountains tonight, but a dry high pressure ridge is keeping significant snowfall at bay.

Snowpack and Avalanche Discussion

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

Today's avalanche forecasting challenge is an easy one and can be summed up in two words: wind-loading. Yesterday were the first strong winds that blew since the weekend's snow. Low density powder covered the mountains from a depth of six inches up north to twenty inches around Cooke City. Yesterday, by early afternoon, soft slab avalanches were releasing naturally near the ridgelines. This was witnessed by the ski patrols around Lone Mountain as well as Mark and another party in the northern Bridger Range.

Mark toured above Fairy Lake and to the Great One on Sacajewea. The winds were moving impressive amounts of snow near the ridge top ([photo1](#), [photo 2](#)). Winds also swirled mid mountain and formed thin slabs that easily cracked on the lower density snow underlying it. Mark's [snowpits](#) confirmed that instabilities were limited to the new windblown snow. A skier the day before found feathery, weak crystals of surface hoar immediately north of Bridger Bowl (now buried under the new snow), but Mark did not find it. Small grains of faceted snow were also seen near Big Sky and Cooke City. None of these layers seem widespread, but they're worth knowing about since wind slabs will pop even easier on them. Eric and I investigated a slide on Sunday in the southern Madison Range with this recipe. Thick, hard, wind slabs avalanched on a thin layer of facets when a skier knocked a cornice off triggering the slope ([photo3](#)).

Within a few hours of the winds starting to blow yesterday, small natural avalanches were seen. Since then, the winds have continued blowing at a steady clip which has only increased the likelihood of avalanches. Cornices will be sensitive to breaking and wind slabs will be easily triggered. For today, all wind-loaded slopes have a [CONSIDERABLE](#) danger. Slopes not affected by the wind will have great powder and a [LOW](#) avalanche danger.

Mark 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.

"How To..." Video Tutorials

We created three videos on the [Stability Tests](#) page describing how to perform a Compression Test, an Extended Column Test, and how to choose a snowpit location.