

GNFAC Avalanche Advisory for Tue Mar 8, 2011

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, March 8, at 7:30 a.m. Bountiful Table, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Most mountain locations picked up 1-2 inches of new snow in the last 24 hours. Winds have been calm with mountain temperatures last night dropping to 10F from yesterday's highs in the upper 20s. Today will turn sunny before clouding up later this afternoon. Temperatures will reach the low 30s and winds will pick up from the west. Tonight snowfall will measure 2-4 inches with ridgetop winds at 20-30 mph.

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 is a day of transition.

Two things have the potential to ramp up the avalanche danger and create lingering instability and tricky assessment.

1. Yesterday, we formed surface weak layers which are now preserved under 1-2 inches of snow.
2. The winds are increasing and will begin to load many slopes.

Immediately north of Bridger Bowl skiers found widespread surface hoar at all elevations. Outside Cooke City, small facets were found at the surface on east facing slopes from radiation recrystallization. On direct south facing slopes it may have been too warm for both these layers to develop, but I have a hunch they can be found on many slopes in our forecast area. These layers were capped last night with new snow; a scary gift to be unwrapped later.

The mountains are covered with low density powder from the weekend, ammunition for wind slabs. With increasing winds forecasted, this snow will quickly load slopes. The avalanche danger will rise in tandem with wind speeds. On windward slopes the winds may strip weak layers away while leeward terrain gets loaded. Even without a buried weak layer, freshly formed wind slabs will be avalanche prone.

On Sunday, Eric and I investigated a slide from the day before in the southern Madison Range. Skiers dropped a cornice which broke out a wind-loaded slope. The avalanche propagated 150 feet wide on a layer of facets. [Pictures](#), [video](#) and [snowpit](#) of the avalanche are all on the website.

Currently, human triggered avalanches are possible on wind-loaded slopes which have a [MODERATE](#) avalanche danger. Slopes that have not received a wind-load have a [LOW](#) avalanche danger. If the winds increase as forecasted, I expect the danger to rise to [CONSIDERABLE](#). Wind-loading will be obvious with plumes of snow blowing off the ridgelines. A few natural slides by the end of the day will not be out of the question and the likelihood of triggering these wind-loads will increase too.

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.

"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.