

GNFAC Avalanche Advisory for Tue Mar 22, 2016

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, March 22, at 6:45 AM. Today's advisory is sponsored by [World Boards](#) and [Cooke City Super 8/Bearclaw Bob's](#). This advisory does not apply to operating ski areas.

Mountain Weather

An upper level trough and an approaching cold front will create unsettled weather today. At 5 a.m. under cloudy skies the mountains around Lionhead and Cooke City received 2" of snow. Temperatures are in the mid-20s and winds are 10-15 mph out of the S-SW. Winds will shift to the north at 10-20 mph this morning as rain in the valleys gives way to snow in the mountains. By tomorrow morning Cooke City is expected to have an additional 10", with 3-6" everywhere else.

Snowpack and Avalanche Discussion

Today is a day of transition with new snow falling onto a variety of snow surfaces ranging from melt-freeze ice crusts to near-surface facets. On slopes that have a powdery surface, diurnal temperature fluctuations the past few days created a weak layer of facets in the top few inches of the snowpack. Big Sky Ski Patrol found this yesterday and I expect it on all slopes that are either high elevation or were shaded from the sun. On slopes that got baked by the sun, crusts formed. Some of these have facets on them too (melt-layer recrystallization). On slopes with surface facets the avalanche danger will increase with today's snow load.

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone Cooke City

In addition to a possible weak layer at the surface (or buried under the 2" of new snow), the southern mountains also have weak layers within the snowpack. Facets sitting on an ice crust are found 1-2 feet under the surface. Avalanches around Cooke City occurred on this layer over the weekend ([photos](#)) and Alex and I found it in our [snowpits](#) in Lionhead and Carrot Basin ([Lionhead video](#), [Taylor Fork video](#)). A secondary concern is a layer of surface hoar buried 2-4 feet deep on some slopes. Given the recent avalanche activity, buried weak layers and new snow forecasted for today, the avalanche danger is **MODERATE**, but may rise to **Considerable** later this afternoon.

Bridger Range Northern Madison Range Northern Gallatin Range

The northern mountains are in a holding pattern. They too have weak surface snow, but until it gets buried it is not posing a problem. Without new snow the slopes are generally stable and safe. For today the avalanche danger is **LOW** but could rise to **Moderate** with new snow and wind-loading.

Alex will issue the next advisory tomorrow morning by 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found [HERE](#).