

GNFAC Avalanche Forecast for Tue Feb 14, 2012

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Valentine's Day, Tuesday, February 14 at 7:30 a.m. Today's advisory is sponsored by our wives Genevieve, Amy and Marcie, the sweethearts of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

This morning 3-4 inches fell in the northern mountains and 2-3 inches down south with light westerly winds averaging 10-15 mph. Temperatures are in the teens under cloudy skies. Scattered snow showers will drop another inch or two this morning. Under mostly cloudy skies mountain temperatures will rise into the 20s with winds remaining light out of the west.

Snowpack and Avalanche Discussion

The mountains around Cooke City:

Cooke City remains our problem child of the mountains. The couple inches of snow last night and a few more today will keep the slopes unstable. Some slopes have large grains of depth hoar underlying the entire snowpack. A fracture on this layer would produce large, deep, and destructive avalanches. Buried one to two feet deep on most slopes is another weak layer: small-grained facets that are not obvious. As you ski or snowmobile around today, remember these two things:

1. Remote Trigger. Two days ago skiers triggered an avalanche from far away ([photo](#)). This is a sign of dangerous conditions since it tells us the weak layer is one continuous blanket connecting slopes together.
2. Repeat Offenders. Slopes are sliding for a second time on the foot thick layer of depth hoar. Previous avalanches shave a few inches off the weak layer leaving the bulk of facets to avalanche again. The steep and wide south face of Mt. Abundance had a large natural avalanche a few days ago; eleven days after Eric triggered it. Similar aspects and elevations have similar snowpacks, so be extra careful around the south face and chutes of Scotch Bonnet too.

For today, the avalanche danger is rated CONSIDERABLE.

The Madison Range, southern Gallatin Range and the Lionhead area near West Yellowstone:

Faceted snow can be found on almost all slopes in the Madison and southern Gallatin Ranges and Lionhead area. To find it, you don't need a hand lens, just a shovel. The facets will crumble out of the pit wall as you dig. Although this snow structure is weak ([snowpit](#)), without a rapid load of new snow the stability is good (Eric's [video](#)). Last night's three to four inches of fluff (.2" [SWE](#)) should not create natural avalanche activity. However, large facets on the ground along with layers of surface hoar and other small-grained facets in the upper two feet of the snowpack cannot be fully trusted. For today, it's still possible to trigger an avalanche and the danger is rated MODERATE.

The northern Gallatin Range and the Bridger Range:

The Bridger and northern Gallatin Ranges share a similar avalanche danger rating, but little else. The Bridgers are thin and weak. These mountains are not ready for the large dumps that must come someday. The northern

Gallatins on the other hand, especially in the Hyalite area, are well nourished and fit. But its Achilles' heel is steep slopes, especially ones thin and rocky. On Saturday, a skier up Flanders drainage in Hyalite triggered a small slide when he jumped off a 3-4 foot rock band. He was caught, but not buried or injured. For today the avalanche danger remains [MODERATE](#) on slopes steeper than 35 degrees and [LOW](#) on all other terrain.

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.

NRCS Snowpack Summary Graphs

For the current state of our snowpack depth (about 70% of average on the Gallatin), check out these two graphs generated by NRCS ([graph 1](#), [graph 2](#)).

EDUCATION

Bozeman

FREE 1-hour Avalanche Awareness at REI on Thursday, February 16 at 6:30 p.m. For more information call REI at 406-587-1938.