

GNFAC Avalanche Forecast for Sat Jan 1, 2011

Happy New Year and welcome to 2011! This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 1, at 7:30 a.m. Bridger Bowl, in partnership with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

It's another cold morning with temperatures mostly in the negative single digits F though a few places near West Yellowstone and Cooke City reached the negative teens F. Winds increased since yesterday and were blowing 10-20 mph from the western half of the compass this morning. These winds were mostly confined to ridgetops except in the Bridger Range where they were blowing at all elevations. Today will have partly to mostly sunny skies. High temperatures will be about 10 degree F and winds will blow 10-20 mph from the W and NW. No significant snowfall is expected in the immediate future.

Snowpack and Avalanche Discussion

The northern Madison Range:

A group of snowmobilers observed several avalanches and triggered one near Buck Ridge yesterday in the First Yellowmule drainage on N and NE facing slopes. They broke about 18-24 inches deep near a layer of buried surface hoar which is our primary concern. This layer is more widespread near Big Sky than any other part of the advisory area, and it has been stressed by this week's new snow. Winds increased last night blowing from westerly directions and likely transported some snow adding further stress to the snowpack on leeward slopes. To ride in avalanche terrain today, look for slopes without wind deposited snow, then look slopes without buried surface hoar which exists in the upper 2 ft of the snowpack. It may be difficult to find visually but will readily show itself in stability tests.

Also, consider digging deeper to assess the strength of snow near the ground. In most places the lower half of the snowpack is strong, but a notable avalanche was triggered at the Yellowstone Club on Thursday. It occurred on an E facing slope without skier compaction near 8500 ft and broke on facets near the ground. This avalanche started in terrain with slope angles in the mid 30s and propagating into lower angle terrain. Facets near the ground are not a widespread problem but a good reminder of variability in the snowpack and a good reason to make thoughtful decisions following a big storm. For today careful snowpack evaluations are essential and the avalanche danger is rated CONSIDERABLE.

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

Yesterday Eric and I skied on Mt Ellis where we found stable conditions and discovered the importance of cold weather wax for our skis. It was a slow hike back to the car. We also found evidence of some faceting that likely occurred in mid-December. This faceted layer was not a concern for us on Mt Ellis, but it was an indication to me that isolated areas likely have a faceted layer in the upper 12-18 inches of the snowpack. Other areas like Hebgen Lake have no weak layers in the snowpack. A few areas like Flathead Pass and Bacon Rind have surface hoar from mid-December. Fortunately, there are many stable slopes lacking unstable weak layers, but don't roll the dice. A quick snowpit and a couple of stability tests on a representative slope will let you know. Also watch for fresh wind slabs resting on low density new snow, a great combination for avalanches. Late yesterday

afternoon the Bridger Bowl Ski Patrol noted lots of snow being transported by westerly winds. For today, the avalanche danger is rated [CONSIDERABLE](#) on wind loaded slopes steeper than 35 degrees and [MODERATE](#) on all others.

Doug will issue 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.

Avalanche Education

Avalanche Awareness for Snowmobilers and Skiers, West Yellowstone, Holiday Inn;

Lectures: TODAY, January 1 from 12-5 p.m.; Field: Sunday, January 2 all day. No Registration Required. ([more information](#))

There are many upcoming avalanche classes in the month of January. Check them on our education page at: <http://www.mtavalanche.com/workshops/calendar>