

GNFAC Avalanche Advisory for Tue Feb 5, 2013

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 5 at 7:30 a.m. The **Cliff Gullet Memorial Fund** and **Moonlight Basin Ski Patrol** sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

This morning mountain temperatures were near 20 degrees F. Westerly winds were blowing 20 gusting to 40 mph in the Bridger Range and northern Gallatin Range. In all other areas westerly winds were blowing 10 gusting to 20 mph. Since yesterday, Hyalite Canyon and the mountains near Cooke City received about an inch of snow. A few other places received a trace. Cloudy skies this morning may produce another dusting and maybe an inch in places. Without much sunshine today, temperatures shouldn't warm too much. Winds may increase a little and back to the SW.

Snowpack and Avalanche Discussion

Bridger Range Northern Madison Range Cooke City

Now is a tricky time. The avalanche danger is slowly decreasing following last week's heavy snow. Some slopes will harbor unstable conditions while others are quickly stabilizing. Yesterday near Cooke City, a rider on a snow bike remotely triggered an avalanche while entering the Sheep Creek basin (SW aspect, 8800 feet, 3-4 feet deep, 100 feet wide). Also yesterday the Big Sky Ski Patrol discovered a cornice triggered avalanche in a permanently closed area under the West Wall. It broke 1-2 feet deep on facets near the ground. What these two slides have in common is a snowpack that was thin during the month of January ([video](#)).

Avalanches have occurred where layers of faceted snow exist under last week's new snow. These faceted layers can be found on many slopes. Low elevation slopes and south and west facing slopes ([photo](#)) at higher elevations had a previously thin snowpack and have facets near the ground. Other slopes with a deeper snowpack have a thin layer of facets. This layer seems to be more problematic on the southern half of the compass. These distributions are confusing especially since these layers are not widespread and many stable slopes can be found. For today wind loaded slopes steeper than 35 degrees have a [CONSIDERABLE](#) avalanche danger. All other slopes have a [MODERATE](#) avalanche danger.

Northern Gallatin Range

Prior to last week's snow, the northern Gallatin Range had received much less snow than other areas consequently have a thinner snowpack. During cold weather in January, the snowpack became weak and faceted. Last week's snowfall placed a heavy load of snow on this weak snowpack which could not support the load and produced collapsing, cracking, and avalanches. See this human triggered avalanche from last Thursday – [video](#). With widespread weak facets buried under recent snow, today the avalanche danger is [CONSIDERABLE](#) on all slopes steeper than 35 degrees and [MODERATE](#) on less steep slopes.

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

The southern Madison and Gallatin Ranges and the Lionhead area near West Yellowstone, received a less snow last week but these areas have a widespread layer of weak facets buried 1-1.5 feet deep. Enough snow fell to stress this layer and produce avalanches. On Sunday, skiers near Lightning Creek in the southern Madison Range triggered a slide about 300 feet away that broke 150 feet wide and long, and about 1 foot deep ([photo](#)). Additionally, last Friday up to 10 slides were seen on south facing slopes on Kirkwood Ridge. With a widespread weak layer and recent avalanches, today the avalanche danger is **CONSIDERABLE** on all slopes steeper than 35 degrees. Less steep slopes have a **MODERATE** avalanche danger.

Doug 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.

OTHER MOUNTAIN RANGES – Heads Up

In nearby mountain ranges (like the Crazy and Absaroka Ranges) just outside the advisory area we've been receiving reports of both natural and human triggered avalanches. We do not have data on these areas, but it sounds like conditions are generally more unstable than what we've seen in our advisory area. Many of these ranges had a very thin snowpack in January that became very weak and faceted.

February 16: 11th Annual King and Queen of the Ridge

The 11th Annual King and Queen of the ridge Hike/Ski-a-thon fundraiser is Saturday, February 16. The event supports avalanche education. Enter as an individual or a team. Collect pledges for the number of hikes you can do in five hours. Kids and families are encouraged to hike too! Prizes will be awarded to the most hikes (1st, 2nd, and 3rd); most money raised, most laps for a team, most money raised for a team. [More Information](#) / [Registration Form](#)

EDUCATION

In **Bozeman**, TOMORROW, February 6, REI is hosting a *1-hour Avalanche Awareness lecture for Women*. **There is one spot left.** Register at: <http://www.rei.com/event/47916/session/64605>

The Friends are teaching a free *Companion Rescue Course* in **Big Sky**, at Grizzly Outfitters, on Friday, February 8 from 6-8 p.m., followed by a field session the next day from 10 a.m. to 2 p.m. Space is limited and pre-registration is required: <https://ticketriver.com/event/5830-companion-rescue-clinic-for-skiers-&-boarders>