

## **GNFAC Avalanche Forecast for Sun Dec 29, 2013**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, December 29 at 7:30 a.m. [\*\*Lone Peak Brewery\*\*](#) and [\*\*World Boards\*\*](#) sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Over the past 24 hours the northern Gallatin Range picked up 5-6 inches of low density snow totaling .4 inches SWE. The mountains around Big Sky picked up 2-3 inches while the rest of the advisory area picked up a trace to one inch.

At 4 a.m. mountain temperatures are ranging from the single digits to low teens F under mostly clear skies. Winds are blowing 5-10 mph out of the WNW. Today, a northwest flow aloft will remain over the area producing partly to mostly cloudy skies. Temperatures will warm into the upper teens to low twenties F and winds will remain light out of the WNW. Conditions will remain mostly dry today, but there is an increasing chance of snow tonight and tomorrow.

### Snowpack and Avalanche Discussion

[Bridger Range](#) [Gallatin Range](#) [Madison Range](#)

[Lionhead area near West Yellowstone](#)

Air is gradually being let out of the avalanche balloon. Without a recent loading event in most areas, the snowpack is finding a little time to relax. This does not mean avalanches won't happen - instead, it means conditions aren't quite as touchy. The bottom line is - the snowpack structure is weak ([\*\*video\*\*](#)). The combination of a thick slab resting over well-developed weak layers has produced widespread avalanche activity over the past week ([\*\*photos\*\*](#)).

On Friday, the Big Sky Ski Patrol triggered a massive slide on the North Summit Snowfield during control work. The slide broke hundreds of feet wide and the crown ranged from two to eight feet deep. This slide ran the complete path and took out mature trees in the run out zone. This event is not completely representative of what a skier or rider would trigger in the backcountry, but it's certainly an eye opener as to what is possible.

Also on Friday, two snowmobilers were caught in a slide in Tepee Basin in the southern Madison Range. The slide was not huge, but was big enough to completely burry a snowmobile ([\*\*photo\*\*](#)). This slide failed on a layer facets about a foot off the ground. Mark also observed recent avalanche activity in Tepee Basin yesterday. On this same outing, Mark observed active wind loading along the ridge tops, worrisome considering the poor stability in the area. It's important to note - slopes do not need to be wind loaded in order to produce avalanches ([\*\*photo\*\*](#)).

In the northern Gallatin Range and mountains around Big Sky fresh snow will keep the snowpack on edge. The recent snow was low density and did not apply a huge load to the pack, but did supply fresh ammunition for the development of new wind slabs. Triggering small wind slabs could act as a trigger for much larger avalanches ([\*\*photo\*\*](#)).

After adding up all these factors, a simple conclusion can be made - Don't trust the snowpack!

Today, dangerous avalanche conditions exist. Human triggered avalanches are likely and the avalanche danger is rated **CONSIDERABLE**.

### Cooke City

Cooke City has a stronger snowpack, but is not immune to avalanche activity ([video](#)). Yesterday, a snowmobiler triggered a slide on a south facing slope near Lulu Pass. The slide occurred on a heavily wind loaded slope and broke on a layer of facets about a foot off the ground. I observed a similar avalanche near Lulu Pass on Friday ([photo](#)). Weak layers are buried deep and are becoming harder to impact, however; if an avalanche is triggered it will likely be large and dangerous. Heavily wind loaded slopes, specifically those in steep-rocky terrain will be the most susceptible to producing avalanches.

As the area becomes more tracked out, riders will be pushing it on bigger and steeper slopes. I urge everyone to be cautious and always follow the three simple rules of backcountry travel.

1. Everyone has proper rescue gear (beacon, shovel, probe) and knows how to use it.
2. Always watch your partner from a safe location.
3. Only expose one person on a slope at a time.

Today, the avalanche danger is rated **CONSIDERABLE** on wind loaded slopes and slopes steeper than 35 degrees. Less steep, non-wind loaded slopes have a **MODERATE** avalanche danger.

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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

### **EVENTS/EDUCATION**

BOZEMAN: Wednesday, January 1, 10 a.m., Hyalite Tour at the Hyalite Reservoir. Classic skiing, free waxing and free lunch. More info: <http://www.mtavalanche.com/images/13/hyalite-tour-2014>

January 4, BOZEMAN: Saturday, 10:30 a.m. at Bridger Bowl, **Free Avalanche Transceiver Workshop**, next to rental shop at Jim Bridger Lodge.

January 7, BILLINGS: Tuesday, 6:30-8:30 p.m. at High Mountain Recreation, **90-Minute Rescue Presentation**.

January 8, BOZEMAN: Wednesday, 6:30-8 p.m. at REI, **Sidecountry IS Backcountry** lecture.

January 9, BOZEMAN: Thursday, 6-7 p.m. at Mystery Ranch, **1-hour Avalanche Awareness** lecture.

January 9, HELENA: Thursday, 6:30-7:30 p.m. at Exploration Works, **1-hour Avalanche Awareness** lecture.

January 11, COOKE CITY: Saturday, 10 a.m. to 4 p.m., **Companion Rescue Clinic for Snowmobilers**, Pre-Registration is required. <https://www.ticketriver.com/event/9445>

More information our complete calendar of events can be found [HERE](#).