

## **GNFAC Avalanche Advisory for Fri Dec 25, 2015**

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Christmas Day, Friday, December 25, at 7:30 a.m. Today's advisory is sponsored by [\*\*Mountain Valley Motorsports of Cody\*\*](#) and [\*\*Bountiful Table\*\*](#). This advisory does not apply to operating ski areas.

### Mountain Weather

The mountains received 2-3" of snow in the last 24 hours. Winds overnight were southerly around 10 mph and temperatures were in the single digits F. Today will be mostly cloudy with a chance of 1-2" of snow. Temperatures will climb to the low teens by late morning, and drop to negative values tonight. Calm easterly winds and cold temperatures today will make for a frosty Christmas.

### Snowpack and Avalanche Discussion

The snowpack throughout the mountains has received a much needed vacation from snow and wind loading. However, the snowpack structure is unstable and the avalanche danger remains elevated. Buried weak faceted snow in all areas will not go away anytime soon.

The weight of snow that fell over the last two weeks totaled 5-6" of snow water equivalency ([\*\*SWE\*\*](#)) in the southern ranges and 3-4" of SWE in the northern ranges. As this weight was added to a weak snowpack, natural and human triggered avalanches were reported in all areas ([\*\*photo page\*\*](#)). Yesterday, a skier near Mt. Blackmore observed a large natural avalanche that slid a few days ago ([\*\*photo, photo\*\*](#)). In the past week, avalanches on weak faceted snow surrounded Saddle Peak in the Bridger Range ([\*\*photo\*\*](#)), and were triggered in the Madison range ([\*\*photo, photo\*\*](#)), Gallatin Range ([\*\*photo\*\*](#)), and near Cooke City ([\*\*photo\*\*](#)). Avalanches are all the evidence we need to know that the snowpack is unstable.

Skiers have also reported collapsing and cracking of the snowpack in the Madison, Gallatin, and Bridger Ranges. My partner and I toured in Beehive Basin on Wednesday, and experienced widespread collapsing and "whumpling" on low angle terrain ([\*\*video\*\*](#)). These are signs that we could trigger an avalanche in steeper terrain. The avalanche fatality last Saturday in Cooke City is a sad reminder that it is possible to remotely trigger an avalanche from low angle terrain if it is connected to steep terrain above ([\*\*video, photo\*\*](#)).

In some areas we have found that it is getting more difficult to initiate a fracture in stability tests. This does not indicate better stability. We still have all the ingredients required to trigger an avalanche, as Eric found on Mt. Ellis yesterday ([\*\*video\*\*](#)). It may be more difficult to trigger an avalanche as the snowpack gets deeper, but the consequences are higher. Areas of stronger snow have been found, which means there is more variability and stability assessments can be tricky ([\*\*video\*\*](#)).

Careful route-finding and snowpack assessment are required if you plan to travel in the backcountry. Human triggered avalanches remain likely today, and the avalanche danger is [\*\*CONSIDERABLE\*\*](#) on all slopes throughout our forecast area. Have a safe and happy Christmas.

Eric will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at [\*\*mtavalanche@gmail.com\*\*](mailto:mtavalanche@gmail.com) or leave a message at 587-6984.

### **EVENTS and AVALANCHE EDUCATION**

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

**West Yellowstone:** January 2, *Ihr Avalanche Awareness*, West Yellowstone Holliday Inn, 7-8:30 p.m.

**Bozeman:** January 6, *Women's Avalanche Awareness and Beacon 101*, Beall Park, 6-8 p.m.

January 9 and 10, *Companion Rescue Clinic*, REI, Fri 6-8p.m., Sat 10a.m.-2p.m.

January 13, *Ihr Avalanche Awareness*, REI, 6-7:30 p.m.

**Livingston:** January 14, *Ihr Avalanche Awareness*, Neptune's Brewery, 6-7:30 p.m.

**Dillon:** January 19, *Ihr Avalanche Awareness*, UM Western Library, 6:30-8 p.m.

***ASMSU Intro to Avalanches w/ Field Course***

January 20, 21 and 23 or 24: <https://www.ticketriver.com/event/16861>

The workshops will be held on Wednesday and Thursday evenings, with a field course on either Saturday or Sunday. Different topics will be presented each evening. Topics include: avalanche terrain recognition, the effect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.