

## GNFAC Avalanche Forecast for Sun Dec 21, 2014

UPDATE 2:25 p.m.: Two climbers almost swept off Silken Falls up Hyalite when the gulley naturally released above them.

UPDATE 2:00 p.m.: Climbers narrowly escaped getting caught in natural avalanches up Hyalite when slopes above Killer Pillar released. Heavy snow and wind-loading are creating dangerous avalanche conditions.

UPDATE 1:45 p.m.: Just posted a [video](#) on our field day up Buck Ridge. Instability is rising.

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, December 21 at 7:30 a.m. Today's advisory is sponsored by **Montana FW&P Recreation Trails Grant** in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

### Mountain Weather

Over the past 24 hours the mountains around Cooke City and West Yellowstone received 4-6 inches of new snow. The mountains around Big Sky picked up 3-4 inches while the Bridger Range received a trace. At 4 a.m. temperatures are in the 20s F and winds are blowing 15-30 mph out of the west and southwest with ridgetop gusts pushing 40 mph. Today, snow will continue in the southern ranges where an additional 3-5 inches is possible. The mountains around Big Sky will likely see another 2-4 inches while the mountains around Bozeman will see 1-2 inches. Temperatures will warm into the upper 20s to low 30s F and winds will shift to the west and northwest blowing 20-40 mph.

### Snowpack and Avalanche Discussion

Gallatin Range Madison Range Lionhead area near West Yellowstone Cooke City

This latest storm has put the three day total at Fisher Creek Snotel site near Cooke City at 1" of SWE or close to a foot of new snow. The three day total for the mountains near West Yellowstone is around .8 inches of SWE. This is a heavy load for the snowpack to bear.

Today, the avalanche dragon will be lurking. Weak layers near the ground and closer to the surface, 8-12 inches deep, will be feeling the stress of the recent storm snow. Yesterday, Mark rode in the Taylor Fork in the southern Madison Range and found a well-developed layer of surface hoar about ten inches below the surface ([photo](#), [video](#)). He also found plenty of weak snow near the ground. Doug found a similar set up on Mt. Blackmore earlier in the week ([video](#)).

In addition to the new snow, strong winds will be transporting snow onto leeward slopes, putting additional stress on these buried weak layers. Today, as snow and wind continue, I expect instability to rapidly increase.

For this reason, natural and human triggered avalanches are likely on wind loaded slopes which have a **HIGH** avalanche danger. Non-wind loaded slopes have a **CONSIDERABLE** avalanche danger.

### Bridger Range

The main avalanche concern for the Bridger Range today will be wind loaded slopes. As winds increase out of the west and northwest, fresh wind slabs will become a growing concern. This problem will be most likely in

upper elevation terrain, mainly below the ridgeline. However, strong winds will be transporting snow at all elevations and I wouldn't be surprised to find lurking wind slabs on mid and lower elevation slopes. If you're out skiing or riding in the Bridger Range today, pay close attention to changing weather conditions and don't be afraid to change plans if instability is on the rise.

Today, human triggered avalanches are likely on wind-loaded slopes steeper than 35 degrees which have a **CONSIDERABLE** avalanche danger. All other 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.

### **AVALANCHE EDUCATION and EVENTS**

Take a look at our **Education Calendar** for all our classes being offered.

**Snowmobiler Rescue Course**, Cooke City, December 27, 0800-1200. Register here:  
<https://www.ticketriver.com/event/13721>