

[GNFAC Avalanche Forecast for Thu Jan 14, 2016](#)

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 14, at 6:50 AM. Today's advisory is sponsored by [Montana Ale Works](#) and [Buck Products](#). This advisory does not apply to operating ski areas.

Mountain Weather

The mountains received 3-5" of new snow overnight. Winds were out of the west around 20 mph with gusts exceeding 30 mph. Temperatures this morning are in the teens F. Today, temperatures will reach the mid-20s F then cool to the teens this afternoon and continue to drop to single digits tonight. Light snow will continue this morning and the mountains will receive 1-2" by mid-day. Wind will continue out of the west at 20-30 mph and decrease to 15-20 mph through the day.

Snowpack and Avalanche Discussion

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

[Lionhead area near West Yellowstone](#) [Cooke City](#)

Throughout the mountains, weak depth hoar at the base of the snowpack is capped by a 2-4 foot thick slab of snow ([video](#)). Over the past two weeks, it has been more difficult to trigger an avalanche on the depth hoar and the odds are low, but occasional avalanches and continuous unstable test scores indicate it is still a real possibility ([video](#)). Two snowmobile triggered avalanches that failed on depth hoar were reported in the past week and were both triggered from low on the slope ([photo](#), [photo](#)). One of these slides was in the Crazy Mountains, which is not in our advisory area, but reports have indicated a similar poor snowpack structure exists throughout southwest Montana.

There are fewer spots across a slope where you can trigger an avalanche on the depth hoar, and it is possible to find stronger snow. This variability can lure us into thinking that a slope is safe when the possibility of a large avalanche still exists ([video](#)). Many experienced skiers and riders are choosing to avoid avalanche terrain based on poor snowpack structure and the possibility to trigger a large avalanche.

Last night's snow added .2-.3" of snow water equivalence ([SWE](#)) to the snowpack. The weight of this snow will not stress the depth hoar at the ground, but will highlight two other characters in our story of instability. Near surface facets and wind slabs. Weak faceted snow near the surface has been observed in most areas and is slowly being capped by a soft slab of snow. This shallow, soft slab is not yet unstable. However, soft slabs may form with continued snowfall today and through the weekend. In addition, moderate wind this morning will transport the new snow and create wind slabs near ridgelines and on leeward slopes. These slabs will be easier to trigger where they form over faceted weak snow near the surface. Small slab avalanches can bury or injure a person and possibly trigger an avalanche deeper in the snowpack.

New snow and wind overnight will make human triggered avalanches likely near ridgelines, and a poor snowpack structure make it possible to trigger a larger avalanche. Today, the avalanche danger is [CONSIDERABLE](#) on wind loaded slopes and [MODERATE](#) on all other slopes.

I will issue the next advisory tomorrow morning by 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

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

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

SATURDAY, Cooke City: January 16, *Ihr Avalanche Awareness*, Visitor's Center, 6-7:30 p.m.

January 30, *Companion Rescue for Snowmobilers*, <https://www.ticketriver.com/event/18078>

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

January 23 and 24, *Intro to Avalanches w/ Field Course*, <https://www.ticketriver.com/event/18441>

West Yellowstone: January 23, and 30, *Ihr Avalanche Awareness*, West Yellowstone Holiday Inn, 7-8:30 p.m.

EVENT in Bozeman: January 19, 5:30-7 p.m. and 7:30-9 p.m., *Avi Center Beer Social at Montana Ale Works*. This event is a fundraiser for the Friends of the Avalanche Center, \$35. Tickets here: <https://www.ticketriver.com/event/18542>

EVENT at BRIDGER BOWL: February 6, *King and Queen of the Ridge*. A day of hiking and skiing the Ridge as a fundraiser for the Friends of the Avalanche Center. Teams and individuals are welcome! More info here: <http://bridgerbowl.com/event/king-and-queen-of-the-ridge>

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.

Advanced Avalanche Workshop w/ Field Course

January 27, 28, and 30: <https://www.ticketriver.com/event/16862>

Course content includes: snowpack metamorphism, the mechanics of avalanche failure and fracture, and decision-making. Different topics are covered each evening session. The field session includes snowpack analysis and avalanche rescue scenarios.