# **GNFAC** Avalanche Advisory for Mon Jan 11, 2016

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, January 11, at 6:24 AM. Today's advisory is sponsored by the **Gallatin County Search and Rescue** and **Mystery Ranch.** This advisory does not apply to operating ski areas.

### Mountain Weather

A weak ridge of high pressure is in place producing mild temperature inversions. This morning mountain temps are in the teens with the exception of Cooke City where temps are in the single digits. In the mountains around Bozeman and Big Sky, winds are blowing 15-25 mph out of the W-NW with gust upwards of 30 mph. In the mountains around West Yellowstone and Cooke City, winds are lighter blowing 10-20 mph out of the W-NW. Today, temps will warm into the low to mid 20's under partly cloudy skies. Winds will continue to blow 15-30 mph out of the W-NW. No new snow is expected over the next 24 hours.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Without a significant change in the weather, there has been no major change in snowpack stability. Facets near the ground continue to produce unstable results in stability tests along with the occasional avalanche (**photo**). The tricky part about this problem is its growing level of variability.

Over the weekend, a group of skiers outside of Cooke City reported finding slopes with stronger, more stable snow, while other skiers in the same area found a poor snowpack structure that produced unstable results in stability tests. Alex found similar conditions in the Bridger Range last week (video). Increasing variability means some steep slopes are unlikely to produce avalanches while others most certainly will. Evaluating stability in these conditions is challenging.

The best approach to take is to assume every steep slope has an unstable structure and is capable of sliding. If you do venture into steeper terrain, make sure to dig a snowpit or two in order to assess the strength and distribution of the facets near the ground (<u>video</u>). Keep in mind that if an avalanche is triggered on this layer, it will likely be large and carry high consequences.

On top of facets near the ground, there will be a few isolated wind slabs to contend with. With winds blowing 15-30 mph in the mountains around Bozeman and Big Sky, these areas will be the most likely to encounter this problem. Be extra cautious when traveling in upper elevation terrain leeward to westerly winds and avoid steeper slopes where wind loading has taken place.

Today, weak layers and wind slabs make human triggered avalanches possible and the avalanche danger is rated **MODERATE**.

Doug 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 <a href="mailto:mtavalanche@gmail.com">mtavalanche@gmail.com</a> or leave a message at 587-6984.

#### **EVENTS and AVALANCHE EDUCATION**

A complete calendar of classes can be found HERE.

<u>EVENT in Bozeman</u>: 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

Bozeman: TONIGHT, Companion Rescue Clinic, REI, Fri 6-8p.m., Sat 10a.m.-2p.m.

January 13, *1hr Avalanche Awareness*, REI, 6-7:30 p.m.

Four Corners: January 13, 1hr Avalanche Awareness for Snowmobilers, GVSA Groomer Building, 7-8 p.m.

West Yellowstone: January 9, 23, and 30, *1hr Avalanche* Awareness, West Yellowstone Holliday Inn, 7-8:30 p.m.

Livingston: January 14, *1hr Avalanche Awareness*, Neptune's Brewery, 6-7:30 p.m.

Cooke City: January 16, *1hr 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, *1hr 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

#### 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: <a href="https://www.ticketriver.com/event/16862">https://www.ticketriver.com/event/16862</a>

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.