GNFAC Avalanche Forecast for Fri Jan 8, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Friday, January 8, at 6:34 AM. Today's advisory is sponsored by the <u>Yellowstone Club Community Foundation</u> and <u>Edward Jones</u>. This advisory does not apply to operating ski areas.

Mountain Weather

The mountains near Bozeman and Big Sky received 3-4" of snow in the last 24 hours, and the southern areas received 1" of snow. Winds were 5-10 mph overnight out of the north-northwest. Temperatures this morning are in the teens F where they will remain through today. Winds will be 5-10 mph out of the west-northwest with light snow showers through tonight. The mountains may receive 1-2" of snow by morning.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

The mountains throughout our advisory area have a poor snowpack structure. Weak sugary depth hoar at the ground is capped by a thick slab (photo). Over the past week, this poor structure has had minimal stress from new or wind-blown snow, and we have not seen or had reports of avalanches. However, natural and human triggered avalanches failed on this depth hoar throughout the second half of December (photos page). This layer has also continued to propagate in stability tests since a slab formed above it in early December (video). It has become more difficult to initiate a fracture on this layer, but propagation means that it is possible to trigger an avalanche. There are fewer areas across a slope where you could trigger an avalanche, but the consequences of doing so are large. Typical trigger points are shallow areas of the snowpack and convex rollovers, but these are not always easy to identify and avoid. Cautious route finding and conservative decision making should be practiced.

Last Sunday, Doug and Eric observed weak near surface facets in Lionhead (video). This weak snow likely exists in other areas and is now buried by a shallow layer of new snow. This is not a big problem right now except where wind-blown snow has formed deeper wind slabs over this weak snow. These wind slabs appear as smooth chalky pillows near ridgelines and on leeward slopes, and should be avoided (photo). They could bury or injure a person, or trigger a larger avalanche deeper in the snowpack.

Today, buried depth hoar and wind slabs above facets make human triggered avalanches possible. The avalanche danger is rated MODERATE on all slopes throughout our advisory area.

Eric 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.

<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: 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.