GNFAC Avalanche Forecast for Sat Dec 19, 2015

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Saturday, December 19, at 7:30 a.m. Today's advisory is sponsored by Montana Ale Works and Alpine Orthopedics. This advisory does not apply to operating ski areas.

AVALANCHE WARNING

The Gallatin National Forest Avalanche Center is issuing a Backcountry Avalanche Warning for the mountains near **Cooke City**, the **Madison Range**, the **Gallatin Range**, the **Lionhead area near West Yellowstone**, and the **Bridger Range**. Continuous snowfall and strong winds have added weight to a weak and unstable snowpack. Strong wind this morning will continue to load slopes. The avalanche danger is rated **Gallatin Range** on all slopes. Natural and human triggered slides are likely. Avalanche terrain and avalanche runout zones should be avoided.

Mountain Weather

At 4 a.m. mountain temperatures are in the 20s F. Since yesterday morning, the mountains around Bozeman received 3-4" of snow, and the mountains near Big Sky and West Yellowstone received 6-8". SNOTEL data is still lagging, but reports of heavy snow in Cooke City suggest close to a foot of snow fell in the mountains. Overnight, southwest winds reached gusts of 50-60 mph, except in the Bridger Range where gusts reached 30 mph. Today, temperatures will be near 30 F and will cool to the 20s F this afternoon. Wind will continue to blow 30-40 mph out of the southwest. Snowfall will begin this afternoon, and I expect 5-7" by morning.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

In the last 24 hours, snowfall in the mountains totaled .3 to .9" of SWE. Strong winds last night transported this snow and added weight to an already unstable snowpack. Yesterday's snow was not a lot of weight in some areas. However, weak faceted snow throughout our advisory area has been producing avalanches under loads from the past week's snow and wind. Avalanches, shooting cracks, and collapsing of the snowpack are sure signs that the snowpack is unstable. We have observed and received reports of unstable snow in all areas (video, video). Snowmobilers triggered and were caught in an avalanche near Cooke City on Tuesday. Yesterday, I observed a large natural avalanche in the backcountry south of Bridger Bowl and two smaller avalanches on the west side, behind Bridger Bowl. All of these failed on weak faceted snow. The Big Sky and Yellowstone Club ski patrols continued to release avalanches on this weak faceted snow during avalanche mitigation work this week. On Thursday, snowmobilers triggered avalanches on this weak snow in Cabin Creek (photo, photo) and Buck Ridge in the Madison Range. More evidence of unstable snow is documented on our photo page, and information about where we have found weak and unstable snow is on our video page. Unstable snow is everywhere in the mountains throughout our advisory area.

Today, snowfall and strong winds have loaded an unstable snowpack to make the avalanche danger **HIGH** on all slopes. Avalanche terrain and avalanche runout zones should be avoided.

SNOTEL sites in SW Montana are not working which impedes our ability to report snowfall amounts. NRCS is working hard to fix this issue soon.

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 or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found HERE.

Cooke City: December 23, *1hr Avalanche Awareness*, Cooke City Visitor's Center, 6-7:30 p.m.

West Yellowstone: January 2, 1hr 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, *1hr Avalanche Awareness*, REI, 6-7:30 p.m.

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

Dillon: January 19, *1hr 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.