GNFAC Avalanche Advisory for Sat Feb 14, 2015

Good morning and happy Valentine's Day. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, February 14, at 7:30 a.m. Montana FW&P Recreation Trails Grant in partnership with the Friends of the Avalanche Center sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Spring like weather continues around southwest Montana. At 4 am temperatures range from the upper 20s to upper 30s F and winds are blowing 10-20 out of the W with gusts around Big Sky reaching 30 mph. Today, near record highs are possible around much of the region. By this afternoon mountain temperatures will warm into the mid to upper 40s F under partly to mostly cloudy skies. Winds will continue to blow 10-15 mph out of the W-NW with stronger gusts possible in upper elevation terrain. A weak storm system is approaching from the west which will produce increasing clouds throughout the day. Light rain and snow showers are possible in the mountains by late afternoon. The mountains could pick up 1-2 inches of snow by tomorrow morning.

Snowpack and Avalanche Discussion

Wet Snow Danger

Most mountain locations did not drop below freezing overnight. This will increase the potential for wet snow avalanches today, primarily on sun exposed slopes. Yesterday, Doug observed large wet loose avalanches on Baronette Peak outside of Cooke City. The Big Sky Ski Patrol also observed wet loose avalanches in south facing terrain around the ski area. Fortunately, the forecast calls for increasing clouds throughout the day, which should help limit wet snow activity. However, with temperatures climbing into the 40s and sun during the early part of the day, wet snow avalanches remain possible and the wet snow avalanche danger is rated **MODERATE**.

Southern Madison Range Southern Gallatin Range

Lionhead Area near West Yellowstone

The primary avalanche concern in the southern ranges is a layer of buried surface hoar 1-2 feet deep. Yesterday, my partner and I found this layer on protected, mid-elevation slopes in the Lionhead area near West Yellowstone. We got this layer to propagate consistently in stability tests and even triggered a small slide. Mark also found this layer in the same area on Thursday (video) and Doug found it in the Taylor Fork last Sunday (video, photo). The tricky part about buried surface hoar is it typically has spotty distribution. This means you'll find it on one slope, but not on another. I would be especially diligent in looking for this layer on protected slopes that have not seen a lot of traffic. The presence of this layer means human triggered avalanches are possible on slopes steeper than 35 degrees which have a MODERATE avalanche danger. Less steep slopes have a LOW avalanche danger.

Bridger Range Northern Madison Range

Northern Gallatin Range Cooke City

In the mountains near Bozeman, Big Sky, and Cooke City, triggering an avalanche is unlikely but not impossible. Old stubborn wind slabs remain a concern, primarily in alpine terrain where winds have been the strongest, but warm temperatures and lack of snow have helped wind slabs stabilize. In the northern Madison and northern Gallatin Ranges, a weak layer of facets and/or surface hoar exists in isolated places. A skier near Lone Mountain triggered a small avalanche on this layer on a NE facing slope around 9000 ft. on Thursday. There has been no other avalanche activity on this layer, but it is worth looking for since it's only buried about 1 foot deep and just takes a few swipes of the shovel to find. This layer is only a problem in a few locations; otherwise, the snowpack is generally stable and the avalanche danger is rated LOW.

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 or call us at 587-6984.

AVALANCHE EDUCATION and EVENTS

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

Tonight 1-hour Avalanche Awareness, Cooke City, Chamber of Commerce, 6:30 p.m., Saturday, February 14.

Snow Science and the Human Factor, Bozeman, MSU Procrastinator Theater, 6-8:00 p.m., Tuesday, February 17. The free event will feature a talk by Powder editor and MSU graduate John Stifter, multimedia presentations on the human factor in avalanche risk, a panel of experts from MSU's Snow & Avalanche Lab and Gallatin National Forest Avalanche Center, as well as a Q & A session (**poster**).

Companion Rescue Clinic, Bozeman, REI, 6-8 p.m., Friday, February 20 and 10 a.m.-2 p.m. on Saturday, February 21 (field location TBD). Pre-registration is required: www.rei.com/stores/bozeman.html

1-hour Avalanche Awareness, West Yellowstone, Holiday Inn, 7 p.m., Saturday, February 21.

Companion Rescue Course for Snowmobilers, Cottonwood Drainage, Crazy Mountains, Saturday, February 21, 9:30 a.m. – 2 p.m. Please RSVP to your club officers or to <u>kathrynjbarker@fs.fed.us</u> if you are interested in participating.