GNFAC Avalanche Advisory for Tue Jan 25, 2011

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, January 25, at 7:30 a.m. Alpine Orthopedics, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

This is the thirteenth day in a row that we've gotten new snow in our advisory area. Last night all the ski areas picked up 3-4 inches with 2-3 inches falling everywhere else. Winds are blowing westerly at 10-20 mph with temperatures in the low 20s in the north to 10 degrees outside Cooke City. Scattered snowfall this morning will only drop another inch in the mountains. Under mostly cloudy skies winds will blow westerly at 15-25 mph as temperatures warm into the upper 20s.

Snowpack and Avalanche Discussion

<u>The Bridger, Madison and Gallatin Ranges, the Lionhead area near West Yellowstone, the mountains around</u> <u>Cooke City and the Washburn Range:</u>

Last night's snowfall will improve the skiing and riding conditions without spiking the danger. The snowpack is strengthening, even with consistent snowfall. A few small crowns were noted on Cedar Mountain in the northern Madison Range yesterday, but the bigger, deeper slides happened late last week following the biggest snowfalls and strongest winds. These avalanches fell into two categories: either wind-loaded slopes (photo) or thinner, faceted snowpacks (photo). One large avalanche on Republic Peak, another on Beaverhead in the southern Madison Range and a slide in the Bridger Range on Hardscrabble were all wind-loaded. Since then, even though a few inches have fallen every day, we're finding activity decreasing as the snowpack adjusts to this load. Even the wind slabs are getting progressively harder to trigger. There are no widespread, prominent weak layers in the snowpack, but that doesn't mean you can get away with reckless behavior. Although natural avalanche activity is unlikely today, it's still possible to trigger a slide on wind-loaded slopes or areas that have thinner, weaker snow. Wind loads will be found near the ridgetops. To find thinner areas, try and poke a ski pole to the ground or step off your machine to see if you sink through the snowpack; faceted, sugary, weak snow is unsupportable. Given these stability concerns, the avalanche danger is rated MODERATE on all slopes today.

If you have been backcountry skiing all winter you may have noticed that since the New Year, the snowpack has slowly developed more facets on its lower half. Our snowpits show the top half consisting of new, decomposing stellar crystals with the bottom half sitting on mixed forms—snow crystals that are mildly faceted. Unlike the sugary consistency of well developed facets, the faceting on these mixed forms are subtle and sometimes require a hand lens to see. Facet is an ugly word which typically is synonymous with avalanche activity. But so far this year, this lower layer is dense, not reacting in our stability tests and only produced isolated avalanche activity even after large snowfalls. This is the strongest snowpack I've seen in three years. It's refreshing not being gripped on every slope, every day.

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 <u>mtavalanche@gmail.com</u> or call us at 587-6984.

SURVEY

The *Friends of the Gallatin National Forest Avalanche Center* are sponsoring a survey. We're trying to find out how we're doing, what we can do better and who our users are. The survey is 4 pages long and takes 5-10 minutes to complete. <u>http://www.surveymonkey.com/s/YFCKDZH</u>

This Friday: Beacon Park Opening Celebration

The Bozeman Recreation Department is celebrating the opening of the Bozeman Beacon Park on Friday, January 28th from 4:00 to 6:00 p.m. at Beall Park, 415 N. Bozeman. The Recreation Department will offer food, refreshments, music, and training on how to use the park with your avalanche beacon. This event is free to the public. For information call 582-2290.

Avalanche Education

January 26, 27 and 29 in Bozeman

Basic Avalanche Awareness – This Wednesday & Thursday 7:00 p.m. – 9:30 p.m. at MSU EPS Building, Room 103 with a field day on Saturday at Bridger Bowl (more information) (Prepay)

February 2, 3, and 5 in Bozeman

Advanced Avalanche Awareness –Wednesday & Thursday 7:00p.m. – 9:30 p.m. at MSU SUB Room 235 with a field day on Saturday at Bridger Bowl. ADVANCED REGISTRATION REQUIRED (more information) (Register)

For additional information and a listing of other avalanche classes, go to: http://www.mtavalanche.com/workshops/calendar