GNFAC Avalanche Forecast for Thu Jan 20, 2011

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 20, at 7:30 a.m. The Montana Fish, Wildlife & Parks Snowmobile Program, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory which is in memory or Tyler Stetson. Tyler was killed in an avalanche while skiing in Beehive Basin this day in 2008. This advisory does not apply to operating ski areas.

Mountain Weather

Winds increased yesterday and were blowing westerly 20-25 mph in most areas this morning except at the Bridger Ridge where they were blowing 40 mph. Clear skies overnight allowed temperatures to drop to near 0 degrees F. Cloudy skies will return around noon today, and snowfall should start sometime this afternoon. High temperatures will be in the high teens to 20 degrees F. Winds may subside a bit this morning but increase again this afternoon blowing 20-30 mph from the W and SW with gusts late this afternoon around 40 mph. Snowfall this afternoon and evening will favor the mountains near Bozeman and Big Sky where 3-6 inches should fall by tomorrow morning with other areas receiving 2-4 inches.

Snowpack and Avalanche Discussion

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

This week most areas received over an inch of <u>snow water equivalent</u> (over 1ft of snow) except the mountains near Cooke City which received about 2.5 inches of <u>snow water equivalent</u>. In simple terms, more snow = more avalanches, and there are two distinctly different avalanche concerns.

Generally the snowpack is strong and can support the weight of new snow, BUT the stress of this new snow has pushed areas with a weak snowpack to their breaking point. These areas are mostly places that have a snowpack less than 1 meter deep (video) which has become weaker during the last month (Republic, Mineral, Big Sky). The Big Sky Ski Patrol triggered an avalanche with explosives on Tuesday that broke near the ground about 2-5 ft deep. Yesterday they triggered another in the Lenin slide path about 4 ft deep and 150 ft wide. Similar avalanches have been observed nearby on Cedar and Fan Mountains and near Cooke City. These areas are not widespread but deserve special attention. They do not have a specific pattern with respect to aspect or elevation and require a careful examination of specific terrain features. Likely areas are steep and rocky that may have been scoured during previous wind events.

Fresh wind slabs are a more widespread avalanche concern especially with strong winds and plentiful new snow to be transported to the lee sides of ridges and gullies. This morning the Bridger Bowl Ski Patrol noted obvious plumes of snow blowing in the moonlight both at ridgetops and mid-mountain. Yesterday an ice climber half way up a climb called the Dribbles in Hyalite Canyon triggered a slab of new snow resting on a sun crust. Fortunately he was not swept off the climb. He and his partner decided not to climb higher and descended. While this type of instability can heal quickly, it will remain a concern with more strong winds. For today, wind loaded slopes will have a <u>CONSIDERABLE</u> avalanche danger. All other slopes will have a <u>MODERATE</u> avalanche danger.

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>

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 – Next 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 (more information) (Prepay)

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