GNFAC Avalanche Forecast for Sat Feb 8, 2014

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, February 8 at 7:30 a.m. **Bridger Bowl** in partnership with Friends of the Avalanche Center, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

This morning NRCS Snotel sites are down and we are unable to receive accurate snowfall amounts for many areas. Fortunately, the ski area weather sites are still up and running. Overnight, the <u>Timber weather station</u> at the Yellowstone Club has recorded nearly a foot of new snow. Bridger Bowl has recorded 2-3 inches of new snow over the past 24 hours.

Currently, temperatures are around ten degree above zero F in most mountain locations. Winds are blowing 15-30 mph out of the west-southwest with the exception of the Bridger Range and mountains around Cooke City where winds are blowing 5-15 mph. Today, temperatures will warm into the upper teens to low twenties F and winds will continue to blow 15-30 out of the west-southwest. Snow will continue through much of the day with an additional 3-5 inches possible in the mountains around Big Sky, West Yellowstone and Cooke City. The Bridger Range will likely pick up 2-4 inches.

Snowpack and Avalanche Discussion

Madison Range Gallatin Range Cooke City

Lionhead area near West Yellowstone

Today, the primary avalanche concern for the mountains around Big Sky, West Yellowstone and Cooke City will be wind loaded slopes. New snow and strong winds out of the west-southwest have likely formed sensitive wind drifts on leeward terrain. In many areas these recently formed wind slabs will be sitting on top of a thin layer of facets formed during the January dry spell. Human triggered avalanches will be very likley and natrual avalanches will be likely today on all wind loaded slopes.

Human triggered avalanches will also be likely today on non-wind loaded slopes. Facets buried 1-2 feet deep will be pushed near their breaking point under this new load. This layer exists on many slopes and has produced both natural and human triggered avalanches throughout this week (**photos**).

Near Cooke City, this layer exists on all aspects but is most problematic on slopes facing south through southeast where it sits on top of a firm ice crust. Skiers over the past few days have triggered slides and experienced cracking and collapsing on this layer (**photo**, **photo**).

Near West Yellowstone this layer is present on most slopes and has repeatedly demonstrated its ability to propagate a fracture (video). It is not quite as widespread in the mountains near Big Sky, but a recent avalanche on an east facing slope in Middle Basin is a good reminder it's still lurking (photo, video).

Facets near the ground are not a widespread problem, but should not be ruled out. Yesterday, skiers in the northern Gallatin Range triggered a large slide on an east facing, heavily wind loaded slope that broke at the ground. The crown was 3-5 feet deep and 150 feet wide. The slide was triggered by a cornice drop.

Today, very dangerous avalanche conditions exist on wind loaded slopes which have a **HICH** avalanche danger. Slopes without a wind load have a **CONSIDERABLE** avalanche danger.

Bridger Range Northern Gallatin Range

The Bridger Range has not received nearly as much snow over the past 24 hours. In addition to the lack of snow, this area has a deep and relatively strong snowpack. Yesterday, my partner and I skied into Truman Gulch on the west side of the range and found bad skiing but good stability. The layer of facets formed during the January dry spell is obvious in snowpits, but is not producing unstable results in stability tests.

Today, steep-wind loaded slopes below the ridge will be the most susceptible to avalanche activity. Yesterday, moderate west-southwest winds were strong enough to transport two inches of low density snow on the leeward slopes. Recently formed wind slabs won't break deep or wide, but will be large enough carry or potentially burry a skier or rider.

With more snow and wind in the forecast, I expect wind slabs to grow in size and distribution throughout the day.

Today, human triggered avalanches are likely on wind loaded slopes steeper than 35 degrees which have a **CONSIDERABLE** avalanche danger. All other slopes have a **MODERATE** 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 mtavalanche@gmail.com or call us at 587-6984.

KING AND QUEEN OF THE RIDGE

Saturday, February 15th is the **12th Annual King and Queen of the Ridge** Hike/Ski-a-thon fundraiser to support avalanche education in southwest Montana. Collect pledges for one, two or the most ridge hikes you can do in the five hours of competition. 100% of the proceeds go to the Friends of Gallatin National Forest Avalanche Center. Kids and families are encouraged to hike too! Hike as an Individual or Team. <u>Make a Pledge</u> . <u>Sign Up</u>. <u>More Info</u>.

EVENTS/EDUCATION

TODAY, February 8, WEST YELLOWSTONE: Saturday, 7-8 p.m., Holiday Inn, **1-hour Avalanche Awareness** lecture.

February 12, BOZEMAN: Wednesday, 6:30-7:30 p.m., MSU Procrastinator Theater, **Sidecountry IS Backcountry** lecture.

February 22, BIG SKY: Saturday, 10 a.m. – 2 p.m., Beehive Basin Trailhead, **Companion Rescue Clinic**. Space is limited and pre-registration is required. <u>https://ticketriver.com/event/9964</u>

More information our complete calendar of events can be found **HERE**.