GNFAC Avalanche Forecast for Mon Jan 27, 2014

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, January 27 at 7:30 a.m. **Yellowstone Club Community Foundation** in partnership with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours 1-2 inches of snow fell in most mountain locations. Temperatures have plummeted and are now in the single digits F. Winds are light blowing 5-15 mph out of the WNW. Today, temperatures will remain below average with highs climbing into the teens F under partly cloudy skies. Winds will continue to blow 5-15 mph out of the WNW. No accumulating snowfall is expected over the next 24 hours.

Snowpack and Avalanche Discussion

Gallatin Range Madison Range

Lionhead area near West Yellowstone

The storm system yesterday did very little to raise the avalanche hazard - in fact the cold temperatures may have helped stability by locking up the snowpack. There may be a few isolated wind drifts on upper elevation slopes capable of producing small slides, but these will be easy to recognize and avoid.

A less likely, but scarier situation will be triggering an avalanche on weak layers buried 2-4 feet deep. We are now entering a low probability/high consequence situation, where the places you could trigger an avalanche are isolated, but the resulting slide could be large and dangerous.

Yesterday, Doug and I rode to Cedar Mountain in the Buck Ridge area south of Big Sky. Along the way we observed many natural and human triggered avalanches - most were at least a week old and partially filled in by wind-blown snow. However, we found a few that were more recent - bull's eye data of what's still possible (photo, photo).

Slopes below corniced ridgelines, specifically those that have received a wind load will be the most likely to produce human triggered slides. It will be easiest to impact buried weak layers in areas where the snowpack is shallow - such as slope convexities, scoured ridgelines, or steep rocky terrain. It will be possible for weak layers to propagate into deeper portions of the snowpack creating large, deep slab avalanches.

A future concern – yesterday's snowfall likely capped layers of surface hoar and near surface facets that formed during the past 10 days of high pressure. These layers won't be much of problem now, but could produce dangerous avalanche conditions once we get more snow (photo).

Today, human triggered avalanches are possible and the avalanche danger is rated **MODERATE**.

Bridger Range

The Bridger Range has the deepest and strongest snowpack outside of Cook City. Faceted layers near the ground do exist, but are not widespread. This does not mean the light is green on every slope. Avalanches are still

possible, primarily in steep-rocky terrain where the snowpack is shallow and variable.

There is the possibility of triggering isolated wind slabs below the ridgeline today. These will be small in nature, but could potentially push a skier or rider into unfavorable terrain.

Today, human triggered avalanches are possible on slopes steeper than 35 degrees and the avalanche danger is rated **MODERATE**. Slopes less than 35 degrees have a **LOW** avalanche danger.

Cooke City

Although the snowpack is generally strong around Cooke City, slopes with unstable snow can be found. This was demonstrated by the human triggered slide up Sheep Creek on Saturday (photo, photo).

It will be easiest to trigger slides in areas where the snowpack is shallow - such as slope convexities, scoured ridgelines, or steep rocky terrain. It will be possible for weak layers to propagate into deeper portions of the snowpack creating large, deep slab avalanches.

There is the possibility of triggering small wind slabs in upper elevation terrain today. These will be small in nature, but could potentially push a skier or rider into unfavorable terrain.

A future concern – yesterday's snowfall likely capped layers of surface hoar and near surface facets that formed during the past 10 days of high pressure. These layers won't be much of problem now, but could produce dangerous avalanche conditions once we get more snow.

Today, human triggered avalanches are possible on slopes steeper than 35 degrees and the avalanche danger is rated **MODERATE**. Slopes less than 35 degrees have a **LOW** avalanche danger.

Doug 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.

January 29, 30 & February 1, BOZEMAN: Wednesday and Thursday 7-9:30 p.m.; all day Saturday in field, **Advanced Avalanche Workshop with Field Course**. Pre-registration is required: https://www.ticketriver.com/event/7114-asmsu-advanced-avlanche-workshop-w-field-course

January 31, February 1, BOZEMAN: Friday 6-8 p.m., Saturday 10-2 p.m; **Companion Rescue Clinic**. Preregistration is required: www.rei.com/stores/bozeman.html

February 6, BOZEMAN: Thursday, 6-8 p.m., Beall Park; Women's Specific Avalanche Awareness Class and Transceiver Practice.

February 8, BUCK RIDGE: Saturday, 10 a.m. to 4 p.m., **Companion Rescue Clinic for Snowmobilers**, Pre-Registration is required. https://www.ticketriver.com/event/9446

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.

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