GNFAC Avalanche Forecast for Sun Jan 18, 2015

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, January 18, at 7:30 a.m. Today's advisory is sponsored by **Gallatin County Search and Rescue** in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

Overnight the mountains around West Yellowstone and Cooke City received 3 inches of new snow. The mountains around Big Sky picked up 1-2 inches while the Bridger Range remained dry. This morning snow continues to fall in the mountains south of Bozeman and temperatures range from the upper teens to midtwenties F. Winds are blowing 15-30 mph out of the W-SW with ridgetop gusts over 40 mph being recorded near Big Sky and Hyalite. Today, temps will warm into the upper twenties to mid-thirties F and winds will continue to blow 15-30 out of the W-SW. Snow will continue through the day in the mountains south of Bozeman. An additional 3-5 inches is likely around West Yellowstone and Cooke City while the mountains around Big Sky will pick up 2-4 inches. The Bridger Range might squeeze out 1-2 inches. Snow will taper off this evening and temperatures will drop into the teens F.

Snowpack and Avalanche Discussion

Cooke City Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

The southern half of the advisory area has been favored by a moist westerly flow. Over the past 48 hours <u>Fisher Creek</u> Snotel site near Cooke City has picked up over eight inches of snow totaling .8 inches of SWE. <u>Carrot Basin</u> in the southern Madison Range has received 6 inches of snow totaling .6 inches of SWE and <u>Madison Plateau</u> near West Yellowstone is up to 5 inches of snow totaling .5 inches of SWE.

The snowpack in these areas is strong and should have little trouble supporting this recent load. Yesterday, Mark and his partner skied in the southern Madison Range near Lightning Creek and found a stable snowpack. He found no discernable weak layers near the ground or mid-pack. Similar snowpack conditions exist around West Yellowstone and Cooke City.

This makes today's primary avalanche concern new snow instabilities - mainly fresh wind slabs. The new snow will be pushed around by moderate to strong west-southwest winds which will create dense slabs in upper elevation, leeward terrain. With more snow and wind in the forecast, winds slabs will grow in size and distribution throughout the day. These slabs may be a bit stubborn due to the warmer temperatures, but I still wouldn't trust any steep, wind loaded slope today.

For this reason human triggered avalanches are likely on steep, wind loaded slopes which have a **CONSIDERABLE** avalanche danger. Steep, non-wind loaded slopes have a **MODERATE** avalanche danger and generally safe conditions exist in less steep terrain which has a **LOW** avalanche danger.

Bridger Range Northern Gallatin Range

Northern Madison Range

The northern half of the advisory has only picked up an inch or two of new snow. This will do little to change the avalanche danger. There is the possibility of a skier or rider triggering an isolated wind slab in steep, upper elevation terrain. This problem could become a growing concern today if the mountains get hit harder than expected with snow and wind.

Aside from fresh wind slabs, there is little in the way of avalanche danger. Weak layers formed earlier in the season have gained strength and the snowpack is generally stable. This however does not mean it's time to throw caution the wind. It's still worth digging a snowpit to assess the snowpack structure before committing to steep terrain. Also, pay attention to changing weather conditions and don't be afraid to alter plans if instability is on the rise.

Today, human triggered avalanches are about as likely as the Packers beating the Seahawks or the Colts beating the Patriots. It's not a likely outcome, but it is possible on slopes steeper than 35 degrees, mainly wind loaded slopes, which have a **MODERATE** avalanche danger. Less steep slopes have a **LOW** 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.

AVALANCHE EDUATION and EVENTS

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

Today - Companion Rescue Clinic, Cooke City, 9 a.m.-3 p.m. on Sunday, January 18. More details and registration: https://www.ticketriver.com/event/13990

Introduction to Avalanches with Field Course, MSU Bozeman, evening lectures 7-9:30 p.m. Wednesday and Thursday, January 21 and 22, with an all-day field session on Saturday or Sunday (your choice). Get more information and register here: https://www.ticketriver.com/event/13090

Advanced Avalanche Workshop with Field Course, MSU Bozeman, evening lectures 7-9:30 p.m. Wednesday and Thursday, January 28 and 29, with an all-day field session on Saturday. Get more information and register here: https://www.ticketriver.com/event/12445

The **Friends of the Avalanche Center** and **Montana Ale Works** are hosting an *Avalanche Forecaster's Beer Social Fundraiser* the evening of January 27th. Get more information and buy tickets here: https://www.ticketriver.com/event/14010