GNFAC Avalanche Forecast for Fri Jan 23, 2015

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, January 23, at 7:30 a.m. Cooke City Motorsports & Yamaha in partnership with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Mountain temperatures were in the teens to low 20s F this morning. Winds were blowing 10-15 from directions ranging from SW to NW. In the Bridger Range, however, winds were blowing 20-40 mph from the W and S. Clouds moved over the area last night, and an inch of snow may fall this morning. The sun should start to appear this afternoon when temperatures climb into the upper 20s and low 30s F. Winds should blow from the W and NW at 10-20 mph and may continue to blow stronger in the Bridger Range.

Snowpack and Avalanche Discussion

Southern Gallatin Range Southern Madison Range

Lionhead area near West Yellowstone Cooke City

In areas near West Yellowstone, a layer surface hoar is buried 8 inches deep (**photo**, **video**). Yesterday Karl Birkeland was conducting research on this layer. It would not propagate a fracture which is a necessary step to get an avalanche. However, it would when he added a layer of cohesive snow on top of it. What does this mean? It means that places with this layer and a little wind deposited snow will be places to trigger an avalanche. Look for this combination near treeline. There were two small avalanches on this layer triggered by skiers early this week.

The mountains near Cooke City have small facets with an ice crust buried 2 feet deep. It's distribution is more isolated (<u>video</u>), and could catch you by surprise. With a buried weak layer present that has produced some small avalanches, more are possible today and the danger is rated <u>MODERATE</u>.

Bridger Range Northern Madison Range

Northern Gallatin Range

Yesterday the Bridger Bowl Ski Patrol triggered some fresh wind slabs about 1 foot deep that broke 50-100 feet wide. On Wednesday in Hyalite Canyon in the northern Gallatin Range, Eric found stable conditions but observed increasing winds that were forming fresh wind slabs (**photo**). In most places winds have run out of snow to transport, and these wind slabs may be less sensitive today. These wind slabs are the main problem today making the avalanche danger **MODERATE** on wind loaded slopes and **LOW** on all others.

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.

Doug wrote a short piece about surface hoar for *The Avalanche Review*. It won't be printed until April, but read it on our blog since it's relevant to the current stability. http://www.mtavalanche.com/blog/some-thoughts-surface-hoar

Avalanche Forecaster's Beer Social Fundraiser

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

AVALANCHE EDUATION and EVENTS

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

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

Gallatin Valley Snowmobile Association Poker Ride, Buck Ridge, Highway 191, Saturday, January 24. Beacon clinic too! More information here: http://gvsa.net/

1-hour Avalanche Awareness for Snowmobilers, West Yellowstone, 7 p.m., Saturday, January 24, Holiday Inn.

1-hour Avalanche Awareness, Dillon, UM Western, 6:30 p.m., Tuesday, January 27.

1-hour Avalanche Awareness for Snowmobilers, Livingston, 7 p.m., Tuesday, January 27, Yellowstone Ranger District.

1-hour Avalanche Awareness for Snowmobilers, West Yellowstone, 7 p.m., Saturday, January 31, Holiday Inn.

1-hour Avalanche Awareness for Snowmobilers, Lewistown, 9 a.m. and 11:30 a.m., Saturday, January 31, Fergus Country Trade Center. More info here: http://www.mtavalanche.com/images/15/thunderstruck-13-premiere-and-avalanche-classes