GNFAC Avalanche Advisory for Wed Dec 25, 2013

Merry Christmas, Feliz Navidad, Happy Kwanzaa, Mubarak! This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 25 at 7:30 a.m. **Montana Import Group** in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Last night's cold and clear skies made good flying conditions for Santa. I could barely sleep, all excited about what he was bringing me. But when I looked outside for my new truck, I just saw my dented old one. I was dissed by Santa again. But at least I've got a nice day ahead of me: fresh snow from the weekend, southwest winds blowing 15 to 30 mph (NW direction in Cooke City), and temperatures in the teens that will reach into the high twenties this afternoon under mostly sunny skies. Overall, high pressure dominates with no snowfall predicted in the next few days.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

The Avalanche Warning for the Bridger and northern Gallatin Range has expired. Whew. It's nice to have that behind us, although there's still plenty of slopes where you could trigger avalanches.

To recap, below freezing temperatures in early December created weak, sugary facets near the ground. Snowpacks that were only 1-3 feet deep got affected the most. Snow started to fall in earnest on Saturday and ended on Monday. Almost four inches of water (<u>SWE</u>) fell in the Bridger Range, near 2.5 inches up Hyalite and Cooke City, 1.5 inches in the Madison Range and 1 inch in Lionhead. This snow was low density and easily blown around. This storm added a lot of water weight and avalanches ensued.

We are on the backside of this loading event and the avalanche danger is decreasing, but still bad. It's like getting one lump of coal in your stocking instead of two. Better, yes, but it's still not something to celebrate. Although snow depths vary from area to area with Cooke City and the Bridger Range being the deepest and Lionhead being the shallowest, the snow structure is similar. New snow formed slabs of varying thickness which have weighted the weaker, sugary facets underneath. Mark's **video** of the snow structure prior to the storm explains the situation well. Yesterday, Mark and I rode into Taylor Fork in the southern Madison Range and found three feet of snow with this very set-up (**video**). Although we did not see natural avalanche activity we knew if we were not careful we could trigger a slide on a steeper slope, especially a wind-loaded one. Eric investigated a large avalanche up Hyalite on Monday (**video**) and we've got **many photos** posted of avalanche activity over the last few days. Dig a snowpit and you're almost guaranteed to find the large, unbonded facets near the ground. Around Cooke City you may even see a stripe of feathery surface hoar buried three feet under the surface which is another type of weak layer.

Furthermore, winds have picked up. Yesterday the Big Sky Ski Patrol was able to release large, deep avalanches. Some were comprised of the wind-loaded storm snow and broke up to 6 feet deep(!) while others ran on the facets near the ground. Wind-loading is the equivalent of a snowstorm as far as the snowpack is concerned and today's winds will keep things touchy.

Poor snow structure, a big dump of new snow, strong winds, and large avalanches should give us all pause. Take a deep breath and choose your route carefully because triggering avalanches in our entire forecast area is still likely. For today, the avalanche danger is rated **CONSIDERABLE** on all slopes.

Mark 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.

EVENTS/EDUCATION

January 4, BOZEMAN: Saturday, 10:30 a.m. at Bridger Bowl, **Free Avalanche Transceiver Workshop**, next to rental shop at Jim Bridger Lodge.

January 7, BILLINGS: Tuesday, 6:30-8:30 p.m. at High Mountain Recreation, **90-Minute Rescue Presentation**.

January 8, BOZEMAN: Wednesday, 6:30-8 p.m. at REI, Sidecountry IS Backcountry lecture.

January 9, BOZEMAN: Thursday, 6-7 p.m. at Mystery Ranch, 1-hour Avalanche Awareness lecture.

January 9, HELENA: Thursday, 6:30-7:30 p.m. at Exploration Works, 1-hour Avalanche Awareness lecture.

January 11, COOKE CITY: Saturday, 10 a.m. to 4 p.m., **Companion Rescue Clinic for Snowmobilers**, Pre-Registration is required. https://www.ticketriver.com/event/9445

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