GNFAC Avalanche Advisory for Tue Dec 6, 2016

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, December 6th at 7:00 a.m. Today's advisory is sponsored by **Mystery Ranch** and **Bountiful Table**. This advisory does not apply to operating ski areas.

Mountain Weather

Last night Bridger Bowl picked up 4 inches of snow while the rest of our area got a trace to an inch. Winds are blowing lightly out of the southwest at 10-15 mph and mountain temperatures are zero to -8F. Partly cloudy skies will become mostly cloudy this afternoon as temperatures warm into the high single digits. Tonight, scattered snow showers will amount to an inch with temperatures falling to at least -10F. Winds will remain light out of the SW to NW. Subzero temperatures are forecasted through Thursday morning, so wear your balaclava and fill up your thermos if you head into the mountains. It feels like Montana again.

Snowpack and Avalanche Discussion

Cooke City

The mountains around Cooke City, like always, have the deepest snowpack. There is 4-5 feet at the higher elevations where 30" of snow fell over the weekend (1.5" of <u>SWE</u>). On Sunday, a skier triggered a small avalanche in the new snow (<u>photo</u>). Near the ground a weak layer is breaking in stability tests and wind-loading from Sunday and Monday is making slopes even more dangerous. For today, it's likely a skier or snowmobiler could trigger an avalanche and the danger is rated <u>CONSIDERABLE</u> on all slopes.

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

The mountains from West Yellowstone to south of Big Sky started the weekend with a shallow, weak snowpack (video). The 2 feet of snow that subsequently fell (1.5" of SWE) doubled the overall depth and quickly created instability. We only have limited data from this zone, but it's safe to assume the older and weak snow will be straining to support this new load. Avalanches, collapsing and cracking are likely and the danger is rated CONSIDERABLE on all slopes.

Northern Gallatin Range Northern Madison Range Bridger Range

The northern mountains have close to 3 feet of snow on the ground. All the areas have weak, sugary facets in the bottom 12": some are sitting on an ice crust, some are on dirt, and others are sandwiched in between layers. Avalanches on Friday and Saturday, collapsing and cracking and poor test scores are evidence of this layer's instability. Skiers dug pits in Beehive yesterday (**photo**) getting unstable results that matched what Alex and I found in the Bridger Range on Sunday (**video**) along with skiers up Hyalite. The snowpack at lower elevations do not have this weak layer, but the higher you go the more prominent it is. Eric explains this variability in his **video**.

On Saturday I was able to trigger a small wind-loaded pocket in Hyalite while ice climbing (video). Yesterday, the Big Sky Ski Patrol was able to ski trigger wind-loaded slopes. Wind drifts will be more stubborn, but not impossible to trigger today. Between weak snow at the ground and wind-loading at higher elevations, the

avalanche danger is rated **MODERATE** on all slopes.

I will issue the next advisory tomorrow morning at 7:30 a.m.

We rely on your field observations. Send us an email with simple weather and snowpack information along the lines of what you might share with your friends: How much new snow? Was the skiing/riding any good? Did you see any avalanches or signs of instability? Was snow blowing at the ridgelines? If you have snowpit or test data we'll take that too, but this core info is super helpful! Email us at mtavalanche@gmail.com or leave a message at 406-587-6984.

Upcoming Events and Education

BOZEMAN

TONIGHT! 6 December, **Avalanche Awareness**, 6-7:30 p.m. at MSU with Backcountry Squatters Ski Club, SUB Procrastinator Theater.

TOMORROW! 7 December, Avalanche Awareness, 6-7:30 p.m. at REI.

15 December, Avalanche Awareness and Beacon Practice, 6-8 p.m. at Beall Park.

BIG TIMBER

TOMORROW! 7 December, Snowmobiling In and Identifying Avalanche Terrain, 6-8 p.m., American Legion

HELENA

8 December, Avalanche Awareness, 6-7:30 p.m. at The Basecamp.

WEST YELLOWSTONE

15 and 16 December, **Snowmobile Introduction to Avalanches w/ Field Day**, West Yellowstone Holiday Inn Conference Hotel. More info and sign up **HERE**.

COOKE CITY

Every Friday and Saturday, **Weekly rescue training and snowpack update**, Super 8 on Friday 6-7:30 p.m. and field location TBA for Saturday.

BILLINGS

15 December, **Snowmobiling In and Identifying Avalanche Terrain**, 6-8 p.m., Big Horn Resort.