GNFAC Avalanche Forecast for Sat Jan 28, 2012

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 28 at 7:30 a.m. **Indulgence** and **Madison River Brewing Company** sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

No snow fell overnight and this morning temperatures were in the single digits F with winds blowing 30-50 mph from the W and SW. Clouds will move over the area today and temperatures should warm into the teens and low 20's F. Westerly winds will blow 15-35 mph. A few snowflakes may fall late today but not accumulate.

Snowpack and Avalanche Discussion

The southern Madison and southern Gallatin Ranges, the Lionhead area near West Yellowstone, and the mountains around Cooke City:

The weakest and most unstable snowpack exists near West Yellowstone. On all slopes, the bottom half of the snowpack contains weak facets which will be evident when you step off your sled or out of your skis and sink to the ground. Unfortunately this situation will not change any time soon. Without any new snow, natural avalanche activity has subsided, but human triggered avalanches remain likely.

Near Cooke City conditions are more variable. S facing slopes have an ice crust with weak facets on it buried 2-3 ft deep (**video**). Many N facing slopes have similar faceted layers but lack the ice crust; however, some N facing slopes have a relatively strong and stable snowpack. Yesterday just south of Silver Gate, a natural avalanche was observed (**photo**), a clear sign that unstable conditions persist. Decision making can be difficult if you see tracks on a slope, but tracks are not a reliable sign of stability.

Storms during the last two weeks deposited a slab of cohesive snow on top of weak snow on most slopes and conditions are ripe for human triggered avalanches. Today the avalanche danger is **CONSIDERABLE**.

The Bridger, northern Madison and northern Gallatin Ranges:

Near Big Sky and Bozeman, a wide range of conditions exist.

- The Bridger Range has a very weak snowpack capped by hard wind slabs in places. Without the stress of new snow in this area, avalanches will be difficult to trigger.
- Yesterday on Mt. Ellis, Eric found plenty of weak snow but no slab or load to make it unstable.
- In Hyalite the snowpack is strong on most slopes.
- Two days ago on Yellow Mountain near Big Sky, Eric and I found a weak layer of facets on a crust about 1 ft deep on S aspects (**photo**), lots of weak facets in the bottom half of the snowpack on N aspects, and I triggered an avalanche in a steep, wind loaded pocket (**video**).
- Yesterday skiers in Middle Basin found a slope with a deep and strong snowpack.

Some slopes have strong snow. Some slopes have weak snow. What it will take to get an avalanche is the load (ie-the stress) from wind deposited snow. With very strong winds recently, certain terrain features will have an unstable combination of weak snow and a wind load. For these reasons, human triggered avalanches are definitely possible today and the avalanche danger is **MODERATE**.

Special Note: Today Seth Meyer would like to ask his girlfriend Kirsten Drake to marry him. If you see them out skiing, wish Seth good luck and hope she says yes.

Eric 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

Bozeman

Advanced Avalanche Workshop with Field Course. MSU, Wednesday and Thursday, February 1 and 2 from 7-9:00 p.m. with a field day Saturday, February 4. **Advanced registration** is required.

Helena

1-hour Avalanche Awareness lecture at Exploration Works on Tuesday, January 31 at 7:00 p.m. Call 457-1800 or check our **calendar** for more information.

Dillon

Snowmobiler Introduction to Avalanches with Field Course. Lectures on Saturday, February 4 with a field day Sunday, February 5. **Advanced registration** is required.