

## **GNFAC Avalanche Advisory for Sun Mar 2, 2014**

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Sunday, March 2 at 7:30 a.m. The **[Pinhead Classic Telemark Festival](#)**, in partnership with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Skies got very bright in Bozeman yesterday as if there were some sort of bright object in the sky. I'm not sure what it was nor will I find out because more clouds and snow are coming today. Yesterday the mountains near Cooke City and West Yellowstone received 2-4 inches of snow and the mountains near Bozeman and Big Sky received a trace to 1 inch. Cold air moved east this morning and mountain temperatures were in the low to mid teens F with valley locations near or below 0 F. Winds were blowing 10-15 mph gusting to 25 mph from the S and SW. Today temperatures will be in the 20s F and winds will blow 15 mph gusting to 25 mph from the SW. The northern mountains should get 2-4 inches while the southern mountains should get 5-7 inches.

### Snowpack and Avalanche Discussion

#### Cooke City

During the last two days near Cooke City, Eric and his partner observed two very different avalanche problems ([video](#) explaining both). 1) They looked at a very large skier triggered slide ([photo](#)) that occurred four days ago and broke near the ground. The trigger point for this slide was a thin rocky area. Watch for and avoid these thin areas. Slides like this are rare but will remain a possibility (aka low probability but high consequence) as long as it keeps snowing ([snowfall chart](#)). 2) New snow and wind-blown snow are the other problem. They found a fresh avalanche that broke 1.5 feet deep on an ice crust ([photo](#)). Skiers triggered similar slides nearby. For today avalanches happening on their own remain possible but skiers or snowmobilers will likely trigger slides making the avalanche danger **CONSIDERABLE**.

#### Gallatin Range Madison Range

#### Lionhead area near West Yellowstone

The snowpack continues surprise us as it did yesterday near West Yellowstone when skiers triggered a large slide near Hebgen Lake on a wind loaded NE aspect (photo of [crown](#) and [runout](#)). It broke on facets buried 3 feet deep. This slide is scary for two reasons. First, the snowpack in this area seemed like it was getting stronger but obviously hasn't. Two, the second skier triggered it when they entered the gully 150 feet below the ridge where it was only 30 degrees in steepness. Nearby on Lionhead the same faceted layer exists but avalanches have also broken near the ground ([video](#), [photo](#)).

Several human triggered slides occurred near Big Sky on Wednesday and Thursday that broke on a thin layer of facets buried about 3 feet deep ([Chippewa](#), [Little Bridger](#)). Yesterday in Hyalite just south of Bozeman a skier observed small new snow slides breaking about 1 foot deep. He also spotted two slides breaking 3 feet deep but not very wide on a thin layer of facets. A similar slide was seen on Friday ([photo](#)). It too did not propagate very far. This faceted layer hasn't been too active in Hyalite but could make more and possibly bigger avalanches with more snow. We'll be watching it.

Personally I'd avoid riding in avalanche terrain today, but it can be done safely. Recent wind loading is an obvious clue for unstable slopes. The difference on non-wind loaded slopes between stable and unstable ones will be more subtle and require a careful stability evaluation. Today the avalanche danger is [CONSIDERABLE](#) on both wind loaded slopes and non-wind loaded slopes steeper than 35 degrees. The isolated slopes that don't have a wind load and are less than 35 degrees in steepness have a [MODERATE](#) danger.

### The Bridger Range

The Bridger Range continues to remain free of reported avalanches. Recent east winds created slabs on slopes that normally don't get much wind effect as a skier found on Saddle Peak recently and chose not to ski it. These wind slabs shouldn't remain much of a problem for long but are the primary problem to avoid today. For this reason wind loaded slopes steeper than 35 degrees have a [CONSIDERABLE](#) danger. All other slopes have a [MODERATE](#) danger.

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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

### **BACKCOUNTRY SKIERS AND RIDERS NEEDED FOR MSU SURVEY**

This project aims to collect GPS location information and survey responses from backcountry skiers and riders to better understand what types of terrain decision we make. The focus is on backcountry skiers and riders of all abilities and experience. You need not be an expert backcountry skier to participate in this research. For more information and to sign up: [www.montana.edu/snowscience/tracks](http://www.montana.edu/snowscience/tracks)