

## **GNFAC Avalanche Advisory for Fri Mar 16, 2012**

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, March 16 at 7:30 a.m. The Big Sky Ski Patrol and Lone Peak Brewery, in partnership with the Friends of the Avalanche Center, sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Yesterday's weather had rain, sun, clouds, snow, and wind; everything but cold temperatures. Since yesterday morning areas near the Taylor Fork, West Yellowstone, and Cooke City received 0.2-0.4 inches of [water](#) in the form of rain in valleys and snow above about 7500 ft. This morning winds were blowing 20 mph from the S and SW with gusts of 40-50 mph. Temperatures did not cool overnight and this morning remained near freezing at ridgetops and in the high 30s F in mountain valleys.

Strong SW winds and above freezing temperatures will continue today. More precipitation will fall mostly near West Yellowstone where the mountains will receive 4-6 inches of snow by tomorrow morning. The mountains near Cooke City will receive 2-4 inches and the rest of the area will receive 1-3 inches.

### Snowpack and Avalanche Discussion

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

Stability is changing rapidly and difficult to assess with many factors affecting the snowpack right now:

1. Above freezing temperatures, wet snow, and rain can produce wet slab avalanches especially below 7500ft and abnormal conditions above this elevation. Eric found weird conditions during avalanche control work yesterday at Bridger Bowl. Avalanches occurred in steep, rocky terrain with buried, wet facets covered by fresh wind slabs ([photo](#)).
2. Recent snow in most of the advisory area added stress to buried facets and depth hoar 1-3 feet above the ground. Yesterday on Lionhead these facets required hard force to break in Doug's stability tests, ECTP25 and 29 ([video](#), [photo](#)). A snowmobile guide in Teepee Basin found similar conditions yesterday ([photo](#)) and stuck to low angle slopes.
3. Recent strong winds from the SW transported snow to the lee sides of both ridges and gullies. The wind slabs themselves are not the problem. The additional stress they add to buried facets is the problem.

Recent avalanches have demonstrated the ability of buried facets to fracture and produce avalanches. These avalanches will be hard to trigger but will be big, a low probability high consequence situation. An avalanche on Lionhead last Sunday (four days after the last snowfall) is a good example (helmet cam [video](#)). This avalanche also shows that many people can ride on a slope before it avalanches. The trigger point is often a spot with shallow snow.

The snowpack this season has given us little reason to trust it. Additionally, recent weird weather can lead to weird avalanches and catch us by surprise. Now is a good time to be conservative in terrain selection and decision making. Today, on wind loaded slopes steeper than 35 degrees, the avalanche danger is [CONSIDERABLE](#). Other slopes have a [MODERATE](#) avalanche danger.

We define avalanche [danger](#) by avalanche size, avalanche distribution, avalanche likelihood, and travel advice. Today's danger rating is based primarily on travel advice. Frankly, if avalanches weren't my business, I'd be home watching March Madness and rooting for my hometown favorite, the VCU Rams.

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

Events/Education

### [31<sup>st</sup> Annual Pinhead Classic](#)

Come to Bridger Bowl on TOMORROW, March 17<sup>th</sup> (St. Patrick's Day) with telemark skis, AT skis, alpine skis, snowboards, split boards, or even snow blades. The theme is Snowpocalypse based on the wildly popular Mayan 2012 apocalypse. \$30 gets you into the races, a pint glass, t-shirt, a good time, a raffle ticket, and food by Cafe Fresco. Pre-register at Mystery Ranch or Grizzly Ridge by TODAY. Visit <http://pinheadclassic.com/> or the Pinhead [Facebook](#) page for more info.

### [1-hour Avalanche Awareness at REI, Bozeman](#)

Tuesday, March 20 at 6:30 pm. Sign up for this FREE class [here](#).