

## **GNFAC Avalanche Forecast for Sun Feb 24, 2013**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 24 at 7:30 a.m. **406 Brewing Company** and **Pinhead Classic Telemark Festival** sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Yesterday, the Bridger Range picked up 8 inches of new snow. The northern Gallatin Range and mountains near Big Sky picked up 5-6 inches and the mountains near West Yellowstone and Cooke City picked up 3-5 inches. Currently, temperatures are in the single digits and winds are blowing 5-20 mph out the WNW. Today, our region will remain under a dry northwest flow which will keep temperatures on the cool side. Highs today will warm into the upper teens to low twenties F under partly cloudy skies and winds will stay light to moderate out of the WNW. No new snow is expected today or tonight.

### Snowpack and Avalanche Discussion

#### Northern Madison Range

The northern Madison Range had a wild day yesterday. Heavy snow and strong winds from the NW rapidly loaded leeward slopes. A report from the Big Sky Ski Patrol said snow transport was maxed out and soft slabs were forming faster than you could ski cut them. Slab development was not confined to alpine terrain and the ski patrol triggered many touchy wind slabs at and below treeline. With northwest winds continuing to blow 10-20 mph overnight, I expect wind loaded slopes will remain hair trigger. For this reason the avalanche danger is rated HIGH on wind loaded slopes.

Non-wind loaded slopes will be less reactive; however, a layer of facets buried 1-3 feet deep remains a concern. Yesterday, a skier on Yellow Mountain got unstable results during stability tests and stuck to lower angle terrain. Initiating a slide in the new snow has the potential to step down to faceted layers buried deeper in the pack. Triggering a slide on deeper layers will be most likely in rocky terrain where the snowpack is thin.

Today, non-wind loaded slopes steeper than 35 degrees have a CONSIDERABLE avalanche danger. Less steep, non-wind loaded slopes have a MODERATE avalanche danger.

Bridger Range   Southern Madison Range   Gallatin Range

Cooke City   Lionhead area near West Yellowstone

Riding conditions yesterday were better than average. This can be attributed to the heavy snow that fell throughout the day. The trouble with more snow is that the avalanche danger is typically elevated. Today will be no exception. Playing in avalanche terrain safely today will require more skill than luck.

Today's elevated avalanche danger presents multiple avalanche problems. The most prominent avalanche problem today will be wind loaded slopes. Yesterday's blast of low density snow was easily transported by strong west-northwest winds. Prior to the passage of the cold front yesterday morning, winds blew out of the west-southwest which has put loading patterns all over the map. Yesterday, my partners and I toured around Palace Butte in Hyalite and turned around at 9,500 feet on a south facing slope due to rising instability. Wind slabs will be most common in upper elevation terrain, specifically below ridgelines or on the leeward side cross

loaded terrain features.

A secondary concern is layer of facets buried 1-3 feet deep ([video](#)). Yesterday, a skier near Flathead Pass in the northern Bridger Range triggered an avalanche that broke on a layer of facets two feet deep. The slide propagated 100 feet wide and failed on a slope less than 35 degrees. This slide sounds similar to the avalanche that occurred on Bridger Peak last Wednesday. A second hand report from Cooke City also mentioned a similar event that took place on a west facing slope south of town. A commonality between these larger avalanches is they were all triggered from areas where the snowpack is thin ([photo](#), [photo](#), [video](#)). Keep this in mind when traveling in the backcountry.

The bottom line: Fresh snow, wind and buried weak layers make a great recipe for producing avalanches. Safe travel today will require cautious route finding, conservative decision making and careful snowpack evaluation.

Today, human triggered avalanches are likely on wind loaded slopes which have a [CONSIDERABLE](#) avalanche danger. Non-wind loaded slopes have a “HEADS UP” [MODERATE](#) avalanche danger.

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.

## **BRIDGER PEAK AVALANCHE**

Read the accident report from this avalanche [here](#) (click on the pdf file). Fortunately everyone lived to tell a great story from which we can all learn some important lessons.

## **OTHER AVALANCHE READING ([Articles Page](#))**

[Accident report](#) by Mark Staples, from an avalanche on Alex Lowe Peak, February 9.

[Sidecountry is Backcountry](#), printed in the February issue of *Carve*, by Doug Chabot.

[Know Your Slope Angles](#), printed in the February *Montana Snowmobile Association Newsletter*, by Eric Knoff.