

## **GNFAC Avalanche Advisory for Sun Feb 17, 2013**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 17 at 7:30 a.m. A **Montana Ale Works** in partnership with the Friends of the Avalanche Center sponsors today's advisory. This advisory does not apply to operating ski areas.

The GNFAC would like to extend a huge thanks to everyone who participated in the 11<sup>th</sup> annual King and Queen of the Ridge. This year's event was one of the most successful ever. Congratulations to the King John Curry – who set a new course record by throwing down a very impressive 30 hikes. Jenny Pierce was the Queen - with a hard fought 22 hikes. Montana Ale Works arrived with a strong team of 20 and won the team competition. Team Ale Works had an outstanding combined total of 297 hikes! Beartooth Powder Guides was a force to be reckoned with, averaging 25 hikes per member. All the proceeds from this fun and torturous event go directly towards avalanche education.

### Mountain Weather

Overnight the mountains around Big Sky picked up 5-7 inches of new snow and it's still snowing. The Bridger Range, southern Madison Range and mountains around Cooke City picked up 3-5 inches, while the mountains around West Yellowstone picked up around 1 inch. Snow will continue through the day with additional 4-6 inches likely in the mountains near Bozeman and Big Sky. The mountains around West Yellowstone and Cooke City will see additional accumulations of 3-5 inches.

Currently, temperatures are in the high teens to low twenties F and winds are blowing 20-30 out the WNW. Temps will not warm much as a cold front moves over the area. Highs today will stay in the twenties F and winds will remain out of the WNW blowing 15-25 mph. Colder air will remain over the area the next few days.

### Snowpack and Avalanche Discussion

#### Northern Gallatin Range

The northern Gallatin Range received the least amount of snow early season. This allowed the snowpack to become weak and faceted during a cold and dry January. Since the 1st of February, heavy amounts of snow have buried these faceted layers 2-3 feet deep. In some areas buried facets exist [near the ground](#) while in others they can be found [mid-pack](#). Either way, they continue to produce a snowpack that's on edge. As more snow and wind arrive today, the snowpack will remain stressed. For this reason human triggered avalanches are likely and the avalanche danger is rated **CONSIDERABLE**.

#### Bridger Range Madison Range Southern Gallatin Range

Over six inches of snow has fallen in the past five hours in the mountains around Big Sky; 3-4 inches has fallen in the Bridger Range and southern Madison Range. This latest shot of snow has been accompanied by WNW winds blowing 20-30 mph. Today, wind slabs will be the primary avalanche concern. Upper elevation slopes facing south and east will be most prone to slab development. Wind slabs will grow in size and distribution as the storm continues through the day.

Non-wind loaded slopes will also feel the stress of this additional load. On Friday, snowmobilers near Sage Peak in the southern Madison Range remotely triggered an avalanche that broke 200 feet wide and ran 400 vertical. Also, the Big Sky ski patrol got a full depth release in the A-Z chutes while doing control work

yesterday. South and west facing slopes have the thinnest and weakest snowpack; however, buried facets can be found on north and east aspects as well.

Today, the avalanche danger is rated [\*\*CONSIDERABLE\*\*](#) on wind loaded slopes. Non-wind loaded slopes have a [\*\*MODERATE\*\*](#) avalanche danger.

#### Cooke City

Over the past 24 hours, strong winds from the WNW have produced wind slabs in upper elevation terrain. Slopes below ridgelines or on the lee side of cross loaded terrain features will be likely areas to find wind deposited snow. While I don't expect wind slabs to break far and wide, they will easily pack enough punch to carry or even burry a skier or rider.

Fortunately this area mostly lacks buried persistent weak layers in the snowpack. The exception is areas with a thinner snowpack mostly at mid to low elevations. On Friday a skier experienced cracking and collapsing in mid-elevation terrain ([\*\*photo\*\*](#)).

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

#### Lionhead area near West Yellowstone

A layer of facets buried 1.5-2 feet deep is most pronounced in areas where the snowpack is thinner, mainly below 8,500 ft. This layer is gaining strength, but should not be fully trusted.

Today, buried facets make human triggered avalanche possible and the avalanche danger is rated [\*\*MODERATE\*\*](#).

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.

**Avalanche on Alex Lowe Peak in Hyalite** – Read the accident report with a video, photos, and a snowpit; all posted [\*\*here\*\*](#).