

## **GNFAC Avalanche Advisory for Sun Feb 5, 2012**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 5 at 7:30 a.m. Planet Natural and Grizzly Outfitters in partnership with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Southwest Montana remains under a dominating ridge of high pressure. Currently skies are clear and temperatures are in the mid teens to low twenties with the exception of a few areas near West Yellowstone and Cooke City which are in the single digits. Winds are light out of the W blowing 5-15 mph. Today will be a near carbon copy of yesterday. Plenty of sunshine will allow mountain temperatures to climb into the mid to upper 30s and winds will stay light out of west at 5-15 mph.

### Snowpack and Avalanche Discussion

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

The mountains around Cooke City have the deepest snowpack out in our forecast area. Currently, the [Fisher Creek Snotel](#) site is recording a settled base depth of eighty one inches. The top 3-4 feet consist of a dense slab, which in many areas it is resting over weaker snow near the ground ([video](#)). This is a recipe for deep slab instability, a scenario that is tricky and dangerous for many reasons.

- Impacting the weak layer under a slab 3-4 feet thick requires finding the right spot on the right slope, also known as the sweet spot or trigger point.
- The snowpack will often feel supportable and stable, providing a false sense of security.
- Due to the strong and supportable nature of the slab, many riders may hit a slope before it avalanches.
- Also, the snowpack will display very few warning signs, concealing its unstable nature.
- Remember, it will be easy to ride and climb steep slopes because the snowpack is supportable, but supportable does not mean stable.

On Thursday, I triggered a large slide on the south face of Mt. Abundance ([photo](#), [photo](#)). Southerly aspects have the shallowest and weakest snowpack in the area, making them more susceptible to human triggered avalanches. However, a skier up Republic Creek got cracking and collapsing on multiple aspects yesterday, obvious signs of instability. In conditions like these following the three rules of backcountry travel is imperative - everyone carries rescue gear and knows how to use it, only expose one rider at a time and always be watching your partner from a safe location.

The [Taylor Fork](#) area and mountains around [West Yellowstone](#) have a settled base depth of around fifty inches. The snowpack in these areas is shallower and weaker than the pack around Cooke City and is having difficulty supporting any type of load. Yesterday, riders in the Lionhead observed a large natural slide off the Lionhead Ridge, the result of a recent wind load. Due to the unstable nature of the pack, steep and wind loaded slopes should be avoided.

Today, a weak snow structure makes human triggered avalanches likely and avalanche danger is rated [CONSIDERABLE](#).

#### The Bridger Range and northern Madison Range:

Yesterday, I took part in the GVSA Porker Ride on Buck Ridge. The weather was great and so were the hot dogs. During my ride I observed a slide on an east facing slope below a ridgeline. The slide failed on weak snow near the ground and appeared to be the result of a wind load. In the northern Madison Range, wind loaded slopes are the primary avalanche concern.

The Bridger Range has a similar set up. Dense slabs resting over weak snow near the ground is providing a structure capable of producing avalanches ([video](#)). Areas where the snowpack is thinner, specifically rocky terrain below ridgelines will present the greatest risk for triggering a slide.

Today, heightened avalanche conditions exist on specific terrain features and the avalanche danger is rated [MODERATE](#).

#### The northern Gallatin Range:

Over the past week numerous observations from the northern Gallatin Range have described a strong and stable snowpack. Skiers and riders are continuously venturing into steeper terrain without incident - an encouraging sign. However, avalanches remain possible, especially on steep-upper elevation slopes.

If you are heading into avalanche terrain, always consider the consequence of a slide. Conditions like these are when avalanches have a tendency to catch people off guard.

Today, on slopes steeper than 35 degrees human triggered avalanches are possible and the danger is rated [MODERATE](#). Less steep slopes have a [LOW](#) 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.

#### [FUNDRAISING](#)

February 8: 4<sup>th</sup> Annual Montana Ale Works Wine Dinner

Join us for a wonderful evening with a multi course dinner and wine pairings created just for this event at Montana Ale Works. Menu and ticket information is here: <http://bit.ly/wEg01>

February 11: 10th Annual King and Queen of the Ridge

The 10th Annual King and Queen of the Ridge Hike/Ski-a-thon fundraiser is Saturday, Feb 11th. The event supports avalanche education in southwest Montana. Collect pledges for one, two or the most Ridge hikes you can do in the five hours of competition. 100% of the proceeds go to the Friends of Gallatin National Forest Avalanche Center. Kids and families are encouraged to hike too! [More Information](#) / [Registration Form](#)

#### [EDUCATION](#)

Bozeman

FREE 1-hour Avalanche Awareness at REI on Thursday, February 16 at 6:30 p.m. For more information call REI at 406-587-1938

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