

GNFAC Avalanche Advisory for Mon Mar 4, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, March 4 at 7:30 a.m. **Montana FW&P Recreation Trials Grant** in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday morning the mountains around Bozeman, Big Sky and Cooke City picked up 5-7 inches of new snow. The mountains around West Yellowstone picked up 3-5 inches. Currently, temperatures are in the single digits above or below zero F and winds are blowing 10-20 mph out of the WNW. Today, light snow showers will linger in the mountains but no further accumulation is expected. Skies will gradually clear by this afternoon as a weak ridge of high pressure begins to build. Temperatures will warm into the high teens to low twenties F and winds will gradually shift to the west blowing 10-20 mph. High pressure will dominate the weather pattern on Tuesday making for a warm and sunny day.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

It's amazing how fast conditions can change. Yesterday morning I was hiking in a t-shirt and by 1 p.m. I was blinded by intense snow and wind. Similar to the weather – snowpack stability quickly deteriorated yesterday afternoon. Skiers reported triggering sensitive wind slabs from the Bridger Range to Cooke City. South and east facing slopes were the most reactive to human triggers. One slide near Cooke City resulted in a close call; fortunately nobody was caught ([photo](#)). Today, wind loaded slopes will remain the primary avalanche concern. Since winds blew strong at all elevations, fresh wind slabs likely exist above and below treeline.

A trickier avalanche problem is buried persistent weak layers. Yesterday, two snowboarders were caught in a small but potentially dangerous avalanche near History Rock in the northern Gallatin Range ([photo](#)). The situation could have been ugly, but fortunately both escaped unharmed. The slide occurred on a small but steep slope that is not connected to the main meadows that most people ski. The two riders experienced three collapses (obvious signs of instability) before triggering the slide.

This event is a great example that avalanches can occur in unassuming terrain and can easily catch skiers or riders off guard. A recent avalanche fatality in Utah is a sobering reminder that small slides can be just as deadly as large ones ([accident report](#)).

The culprit for the History Rock event and others like it is a layer of facets buried 1-3 feet deep. A tricky part to this scenario is stronger snow rests over weaker snow - this makes it possible for skiers or riders to venture well onto a slope before it fails. Yesterday, my partner and I toured up Dudley Creek near Big Sky and found a variety of faceted layers that caused concern ([video](#)). This situation is fairly representative of what's been happening throughout much of our advisory area. Not all slopes harbor buried weak layers; however, it's safe to assume all slopes do until proven otherwise. The best way to combat this condition is with terrain management and snowpack assessment.

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.

Doug 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 or call us at 587-6984.

Montana Ale Works

Tickets are on sale now to the *5th Annual Friends of the Avalanche Center Dinner and Wine Pairing* on Wednesday, March 13th at 6:00 p.m. Call the host stand at 587-7700 to reserve your space. Tickets are \$75 and all proceeds go to the Friends of the Avalanche Center. There are only 40 tickets available and this event sells out every year so get them while you can!