

GNFAC Avalanche Forecast for Sun Mar 10, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, March 10 at 7:30 a.m. **Mystery Ranch** in partnership with the **Friends of the Avalanche Center** sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

At 4 a.m. mountain temperatures are ranging from the mid-teens to low twenties F and winds are blowing 10-20 mph out of the WNW. Today, clear skies and plenty of sunshine will allow temperatures to warm into the upper 20s to low 30s F. Winds will remain light this morning but will gradually increase through the day. Clouds will also increase this afternoon as the existing ridge of high pressure begins to break down. A weak weather disturbance will push into southwest Montana late tonight creating a chance of valley rain and mountain snow by tomorrow morning.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

The days are getting longer and the sun is getting stronger. Is this spring like pattern helping overall stability? The answer is – not really.

Technically, it's still winter and the snowpack continues exhibit winter like qualities. This means buried persistent weak layers and fresh wind slabs remain a concern. Yesterday, cool ambient air temperatures and a strong breeze kept the snow surface cold and dry at upper elevations. This allowed gusty northwest winds to transport available snow onto leeward slopes. Yesterday, the Big Sky Ski Patrol reported triggering fresh wind slabs 4-12 inches deep during control work. I also found wind loaded slopes to be the primary avalanche problem on my tour to Ernie Miller Ridge in the southern Madison Range ([photo](#)). Today, avoiding wind loaded slopes will be the best way to avoid triggering an avalanche.

A cold and dry snowpack also means buried persistent weak layers have yet to be affected by warming temperatures and strong solar input. Facets buried 2-3 feet deep continue to show up and propagate in stability tests ([video](#), [video](#)). The main reason human triggered avalanches have declined on these layers is the lack of significant snowfall. On Friday, Mark could still make out the snowpit he dug 18 days ago on Cedar Mountain in the northern Madison Range. Without the stress of new snow, triggering a slide on deeper persistent weak layers is becoming increasingly difficult. However, the pack remains suspect – primarily in steep, rocky terrain. The best way to mitigate this problem is to dig snowpits and manage terrain wisely.

Another problem: Cornices have grown very large and can break farther back than one might expect. Giving cornices a wide berth when traveling along ridgelines is a wise idea ([photo](#), [photo](#)).

Today, human triggered avalanches are possible on wind loaded slopes and slopes steeper than 35 degrees which have a **MODERATE** avalanche danger. Less steep, non-wind loaded 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 or call us at 587-6984.

Montana Ale Works Fundraiser Dinner

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!