GNFAC Avalanche Advisory for Sat Mar 9, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, March 9 at 7:30 a.m. **Knap Sacks** and **Northern Lights Trading Company** sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours the mountains around West Yellowstone and Cooke City including the southern Madison Range picked up 2-3 inches of snow. The mountains around Big Sky picked up around one inch while the Bridger Range remained dry. Currently, temperatures are in the mid-teens to low twenties F and winds are blowing 5-15 mph out of the NW. Today, temperatures will warm into the upper twenties to low thirties F under clear skies and winds will stay light out the NW. Beautiful weather is on the books for the next 24 hours.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

I've recently been asked - where are human triggered avalanches most likely? This is a tricky question - and there is more than one answer.

Today - human triggered avalanches will be possible on wind loaded slopes. Upper elevation slopes below ridgelines or on the leeward side of cross loaded terrain features deserve special attention. Wind slabs will be most common above tree-line; however, forested slopes may also hold wind deposited snow. Rounded wind pillows and cornices are visual clues of active wind loading. Although wind slabs are gradually stabilizing, I wouldn't bet the farm that a wind loaded slope would stay put under the weight of a skier or rider- especially in high consequence terrain.

A more insidious problem is buried persistent weak layers. Like a blister on the heel, facets buried 2-3 feet deep continue to be a nagging concern (video). Yesterday, Mark and I toured around Cedar Mountain in the northern Madison Range. We found many stable slopes, but we also found facets willing to propagate in stability tests (snowpit). Areas where the snowpack is thin, primarily around scoured ridgelines or in steep-rocky terrain will be likely places to find weak snow. Also, mid to low elevation slopes where the snowpack is less than a meter deep may hold unstable conditions. Digging snowpits and doing stability tests is the best way to stack the deck in your favor (video).

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 – heightened avalanche conditions exist on specific terrain features making human triggered avalanches are possible. For this reason 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 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!