## **GNFAC** Avalanche Forecast for Sat Nov 27, 2010

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, November 27, at 7:30 a.m. The **Montana Import Group**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas. Please remember uphill traffic is not allowed at any of the ski areas today.

## Mountain Weather

Over the past 24 hours a brief ridge of high pressure brought southwest Montana clearing skies and warmer temperatures. Yesterday, mountain temperatures climbed into the mid to high twenties F under mostly sunny skies and winds were blowing out of the W at 15-25 mph. Currently, mountain temperatures are in the mid teens to low twenties F and ridgetop winds are blowing out of the W at 20-30 mph with the <a href="Hyalite weather station"><u>Hyalite weather station</u></a> recording gusts close to 50 mph.

Today, the ridge high pressure will begin to break down as the next wave of pacific moisture pushes in from the west. This will produce cloudy skies with an increasing chance of precipitation this afternoon. Temperatures will stay mild with highs reaching the upper twenties F and winds will increase out of the W blowing 20-40 with gusts up to 50 mph. We can expect light precipitation to begin this evening, with a better chance of snow tomorrow. The southern mountains should see 2-4 inches by tomorrow night with 4-6 inches falling in the north.

## Snowpack and Avalanche Discussion

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

Key West Florida recorded a temperature of eighty one degrees F on Black Friday. We are having a relative heat wave of our own, with most areas in southwest Montana managing to break twenty degrees yesterday, ending the run of sub-zero temperatures. Along with the reprieve from bitter cold conditions, southwest Montana saw the sun yesterday for the first time nearly a week. This short break in the unsettled weather pattern is allowing the snowpack time adjust to its new load, helping reduce the avalanche danger. Although the snowpack is working hard to find a balance, triggering an avalanche is still possible.

Our main concern at this point is thick, meaty wind slabs sitting over weaker low density snow (photo). Strong ridgetop winds over the past five days have loaded leeward slopes, mainly along ridgelines. However, strong winds in the Bridger Range on Thanksgiving Day blew from the base area to the ridgetops, cross loading many leeward slopes at mid-elevations. Yesterday, a skier reported a good sized wind slab that pulled out on the Football Field just south of Bridger Bowl. Though we don't have a profile on this slide, it is a good indication that the snowpack is struggling to support the weight of recently wind deposited snow. The Bridger Bowl Ski Patrol also reported triggering wind slabs 12-16 inches deep while doing control work yesterday.

Although our primary avalanche problem exists in the top 1-2 feet of the snowpack, it's a good idea to pay attention to layers closer to the ground. Skiers on Elephant Mountain up Hyalite Canyon found weak faceted snow near the ground on an east facing slope at 10,000 ft. This layer produced mixed results in stability tests, but it did demonstrate the ability to propagate a fracture with a stability score of ECTP 25. With three to four feet of snow on the ground, it's easy digging to the bottom of the snowpack to examine the strength of these layers; a good idea before dropping the big line.

For today, heightened avalanche conditions do exist in specific areas, mainly wind loaded terrain. Here human triggered avalanches are 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 or call us at 587-6984.

## **Upcoming Avalanche Education**

Basic Avalanche Awareness – Wed & Thurs, December 1 & 2, 7:00pm – 9:30pm at SUB Ballroom B&C; 12/4-Field day at Bridger Bowl (more information) (Prepay \$25 fee)

Avalanche Awareness for Snowmobilers – Wed & Thur, December 1 & 2, 7pm – 9:30pm at Team Bozeman, 2595 Simmental Way and a field session either Sunday, Dec 5th or 12th depending on snow (more information)