

## **GNFAC Avalanche Forecast for Mon Nov 30, 2009**

This is Eric Knoff from the Gallatin National Forest Avalanche Center with an early season Avalanche Information Bulletin issued at 7:30 a.m. on Monday, November 30. **Team Bozeman** in cooperation with the **Friends of the Avalanche Center** sponsor this bulletin. This information will be updated on Wednesday morning. This advisory does not apply to operating ski areas and uphill traffic is not allowed at Moonlight Basin.

### Mountain Weather

A nice shot of snow Friday night into Saturday dropped 4-5 inches from Big Sky to the Bridgers. Only 1-2 inches fell in the southern ranges. Warm temperatures and sunny skies followed this storm making for a great weekend to get out and burn off some holiday cheer. The existing ridge of high pressure will begin to break down today as a cold front approaches from the north. This system will bring more snow than rain, but accumulations of 2-4" can be expected in the upper elevations by Tuesday afternoon. Winds will become strong by tonight and could produce gusts up to 50 mph with the frontal passage. Conditions will improve by Tuesday afternoon, but lingering clouds and strong ridgetop winds will impact our area through Wednesday. Partly cloudy skies and cooler temperatures can be expected until the weekend.

### Snowpack and Avalanche Discussion

#### *The Bridger and northern Gallatin Ranges:*

Three to five inches of light density snow fell over the Bridgers and northern Gallatin Range Friday night into Saturday. This storm came in warm and left cold creating a good bond between the old and new snow. Moderate W-NW winds did develop some isolated soft slabs at ridgetop levels. Bridger Bowl Ski Patrol reported 10-14" soft slabs being triggered along the ridgetops with hand charges and ski cuts. However, these slabs did not have much substance and ran only a short distance. The overall snowpack in the Bridgers and northern Gallatin range remains relatively stable at this time.

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

The Madison Range and mountains around West Yellowstone have a thinner and weaker snowpack. Doug and I skied in Beehive and Bear Basin yesterday finding variable conditions on different aspects. On west and southwest aspects around 9,000 ft we found 18" of settled base with a very weak layer of facets sitting under an ice crust (see video). These facets produced clean shears with light force and will more than likely be a problem when more snow falls. East and northeast aspects at 9,000 ft held a different snowpack with close to 30" of settled base. We did find a thin ice crust surrounded by a small layer of facets 15" below the surface, but stability tests did not create clean shears on this layer (see photo).

Video: <http://www.youtube.com/watch?v=JHxLiJCfh2k>

Photo: <http://www.mtavalanche.com/images/09/bear-basin-29-nov-2009>

The mountains around Cooke City have a conditionally stable snowpack. A snowmobiler reported a settled base of 35" on the north side of Daisy Pass. Snowmobile tracks were visible on many steep slopes with no visible signs of natural or human triggered avalanches.

With more snow and strong winds forecasted through tomorrow expect avalanche activity to increase.

We will begin to issuing danger ratings and daily advisories as we gather more information about the snowpack.

Doug will issue the next advisory Wednesday Morning at 7 a.m. If you get out in the backcountry give us a call or send us an email with your observations. You can reach us at 587-6984 or at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com).

## **AVALANCHE EDUCATION THIS WEEK**

### **Basic Avalanche Awareness at MSU (12 Hour Course)**

Evening Sessions: December 2 and 3, 2009, 7:00pm to 9:30pm, at MSU in Leon Johnson Hall, room 339.

Field Session: December 5, 2009, 9:15am to 3:00pm, at Bridger Bowl Ski Area.

Cost for the entire workshop is \$25.00 (\$5 each evening and \$15 for the field session). **Registration is not required for the evening sessions, but is required for the field session, which can be done at either of the evening sessions.**

### **Basic Avalanche Awareness for Snowmobilers (12 hour Course):**

Bozeman:

Evening Sessions: Wed and Thursday, December 2 and 3, 2009, 7-9:30 pm; **Team Bozeman**

December 13 is an all day field session, exact location TBD. (\$30 Donation)

**No Registration Required.**

### **One Hour awareness:**

A basic one hour awareness class will be offered at Red Line Sports in Butte, Dec 9<sup>th</sup> at 6 p.m.

A full listing of the avalanche classes offered in southwest Montana can be found on the education page of our website: <http://www.mtavalanche.com/education>