## **GNFAC Avalanche Advisory for Fri Nov 18, 2011**

Good morning. This is Mark Staples with an early season avalanche information bulletin issued on Friday, November 16 at 7:30 a.m. This bulletin is sponsored by Mystery Ranch, in partnership with the Friends of the Avalanche Center. Please remember that uphill traffic is not allowed at Big Sky or Moonlight Basin Ski areas. Uphill traffic is permitted at Bridger Bowl, but backcountry conditions exist. This information will be updated as conditions change.

## Mountain Weather

Since yesterday most areas received 6 inches of snow (0.6" of <u>SWE</u>); however, the mountains near Cooke City received 16 inches of snow (1.6" of <u>SWE</u>). This snow is relatively heavy and dense. Temperatures were in the teens F this morning. Winds calmed and were blowing 10-15 mph except in the Bridger Range where midmountain winds were blowing 15-25 mph from the S. Prior to this storm winds were blowing 20-40 mph, and they should increase again by this afternoon. Today, temperatures will remain in the teens and winds will blow 20-30 mph from the SW. The mountains near Cooke City should get another 6-8 inches of snow. All other areas should get 3-5 inches.

## Snowpack and Avalanche Discussion

We have limited snowpack data right now, and will begin issuing danger ratings once we collect more data. For now let's review what we know.

This fall was generally warm and dry, but many slopes have been covered in snow since October. This snow is the problem because it is weak and faceted.

- I found this weak snow under stiff wind slabs on N facing slopes on Sphinx Mountain one week ago (photo).
- Skiers near Beehive Basin found similarly weak snow at the ground on a NW facing slope (snowpit).
- Skiers at Bridger Bowl, which has backcountry conditions, were able to trigger an avalanche on these facets in the 2<sup>nd</sup> Finger above the PK lift (video).
- This week skiers on Mt Blackmore and at History Rock in Hyalite Canyon found facets near the ground that produced very low scores in stability tests and propagated fractures in Extended Column tests. For one group these ECT's broke as soon as the column of snow was isolated without any taps.

Many slopes do not contain this weak, faceted snow, and just a few days ago many slopes near Bridger Bowl still had grass showing and very little snow. Unfortunately last night's snow will make it difficult to tell which slopes harbor these weak facets and which do not.

The combination of facets with wind slabs from this week's strong winds with a load of snow overnight will make it easy to trigger avalanches today. Many slopes containing this combination will be ones with the deepest snow where the best riding can be found.

If you get out in the backcountry, please drop us a line at <a href="mailto:mtavalanche@gmail.com">mtavalanche@gmail.com</a> or call us at 587-6984. Any snowpack or avalanche information is especially valuable this time of year.

## **EVENTS/EDUCATION**

Wednesday, November 30, BOZEMAN

Introduction to Avalanches with Field Course at MSU. Wednesday and Thursday evening lectures with a field course on Saturday. More info at http://www.mtavalanche.com/education/classes/workshops