

## **GNFAC Avalanche Advisory for Fri Nov 30, 2012**

This is Eric Knoff with early season snowpack information issued on Friday, November 30<sup>th</sup> at 7:30 a.m. Today's information is sponsored by Cooke City Motorsports & Yamaha 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. It is permitted at Bridger Bowl, but backcountry conditions exist within the ski area boundaries. This information will be updated as conditions change.

### Mountain Weather

Since yesterday morning 1-2 inches of snow fell in the mountains around Cooke City and West Yellowstone; the rest of our advisory area remained dry. At 5 am temperatures are ranging from the high 20s to mid-30s and winds are blowing 20-30 mph out of the WSW with gusts reaching close to 50 mph. Today, highs will warm into the upper 30s to low 40s and winds will stay strong out of the SW. The first of a series of storms will move into southwest Montana by early afternoon. Snow will develop over the southern mountains where 4-6 inches is possible by tomorrow morning. The mountains around Bozeman and Big Sky will see 1-2 inches by tomorrow.

### Snowpack and Avalanche Discussion

Over the past 48 hours 4-5 inches of high density snow has fallen in the mountains around West Yellowstone and Cooke City; 1-2 inches has fallen in the mountains around Bozeman and Big Sky. This marks the third snow event in the past seven days, a vast improvement over last season when our area went nearly 40 days without snow. This latest round of snow isn't enough to produce widespread avalanche problems, but is something to consider as more storms impact southwest Montana this weekend.

Currently, the snowpack is a patchwork of wind slabs, dense powder with a few facet layers strewn about. On Wednesday we skied north of Bridger Bowl and found roughly two feet of dense snow above 8,000 ft. We did find a faceted layer below an ice crust in the lower portion of the snowpack ([photo](#), [snowpit](#)). This layer propagated with hard force during an ECT, but we felt it would take a large load to make this layer reactive.

Today, the main avalanche concern is wind slabs. In some cases, recently formed wind slabs will be resting over weaker snow, making them susceptible to human triggers. The most likely areas to find pockets of unstable snow will be in steep, upper elevation terrain, specifically where the snowpack is shallow. On Wednesday the Big Sky Ski Patrol triggered hard wind slabs during control work and yesterday the Moonlight Basin Ski Patrol also triggered pockets of wind deposited snow. Although these slides were triggered by explosives, it's a clear indication that human triggered avalanches are possible in wind loaded terrain.

More snow this weekend means the avalanche danger will likely rise. The highest snowfall amounts will be around West Yellowstone and Cooke City where over a foot is possible by Sunday. The mountains around Bozeman and Big Sky will also see snow, but total amounts will be in the 3-6 inch range.

### Pre-season Prep of Avalanche Gear:

We do not want our gear slowing us down in an emergency. A few minutes of gear maintenance can shave off lifesaving minutes during a rescue. Put fresh batteries in your beacon, snap together probes and ready your shovel for quick deployment. We made a video with this simple message [HERE](#).

Doug will issue the next advisory tomorrow morning at 7:30 a.m. When there is more snow we will begin issuing daily advisories and avalanche danger ratings. If you have any snowpack or avalanche observations to share, drop us a line at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com) or call us at 587-6984. Thank you.

## EDUCATION

Snowmobiler Introduction to Avalanches with Field Course in Billings at Hi-Tech Motor Sports on December 12 and 13, 6-9 p.m. and the field course on January 20 in Cooke City. Sign up for this class [HERE](#)

Snowmobiler Introduction to Avalanches with Field Course in West Yellowstone on December 20 and 21. Sign up for this class [HERE](#).

### FREE 1 hour lectures:

December 3, Northern Lights Trading Company, Bozeman, 7 p.m.

December 8, Greenup Performance in Black Eagle near Great Falls, MT, 7 p.m.

December 12, REI in Bozeman, 6:30 p.m.