GNFAC Avalanche Advisory for Sun Dec 2, 2012

This is Eric Knoff with early season snowpack information issued on Sunday, December 2nd at 7:30 a.m. Today's information is sponsored by Montana FW&P Recreation Trails Grant 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 until the ski area opens, but backcountry conditions exist within the ski area boundaries.

Mountain Weather

Over the past 24 hours the southern mountains picked up 4-6 inches of snow at elevations above 8,000 ft. The mountains around Bozeman and Big Sky picked up 1-2 inches. Currently, temperatures are in the high 20s to mid-30s and winds are blowing 20-30 mph out of WSW with gusts reaching close to 50 in many locations.

Today, the weather pattern will remain active as another storm moves into the region. Temperatures will remain warm with highs reaching into the upper 30s. Snow will develop late this morning and winds will stay strong out of the WSW. The southern mountains will receive the heaviest amount of snow with 8-10 inches possible by tomorrow morning. Big Sky will likely see 4-6 inches by tomorrow and the Bridgers will see 2-4 inches. Temperatures will drop this evening as a cold front moves over the area.

Snowpack and Avalanche Discussion

No matter how hard I try, I just can't get used to rain in December. Fortunately, valley rain this time of year usually translates into mountain snow. Since Friday, the mountains around West Yellowstone and Cooke City have picked up over 1.5 inches of SWE (<u>snow water equivalent</u>) resulting in 8-10 inches of heavy, dense snow. The northern portions of our forecast area received less precipitation in general - though Friday night the Bridger Range managed to pull out an inch of moisture totaling 4 inches of snow above 8,000 ft. The mountains around Big Sky have received 2"-3" of snow since Friday.

Today, the primary avalanche problem will be wind slabs. As another storm pushes into southwest Montana, winds will increase out of the southwest. These strong winds, combined with another round of snow, will provide fresh ammunition for slab development. The southern mountains will see the most snow and strongest winds making these areas the most susceptible to avalanche activity. However, the mountains around Bozeman and Big Sky will also see snow and wind. Human triggered avalanches will be most likely on steep, upper elevation slopes on the north and east half of the compass.

A secondary concern will be storm slabs. As more snow accumulates today, avalanches within the new snow will be possible. This problem will most notable in the mountains around Cooke City and West Yellowstone. Avoiding slopes steeper than 35 degrees will be the best way to mitigate this problem.

Thankfully our snowpack lacks widespread persistent weak layers, helping us narrow our avalanche concerns. Yesterday, Mark was in Cooke City and found a relatively stable snowpack (video from Cooke City, photo). Doug also found stable conditions yesterday while climbing in Hyalite and I found a strong snowpak in the Bridgers. Although these reports are encouraging, they do not mean you can throw caution to the wind. Exercising the three rules of backcountry travel remains essential.

Rule #1 – Everyone carries rescue gear and knows how to use it.

Rule #2 – Only expose one person at a time.

Rule #3 - Always watch your partner from a safe location.

We will begin issuing advisories with danger ratings starting tomorrow.

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 <u>mtavalanche@gmail.com</u> or call us at 587-6984. Thank you.

EDUCATION

Snowmobiler Introduction to Avalanches at Greenup Performance in Black Eagle near Great Falls, MT, December 8, 9 a.m. to 2 p.m. FREE.

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 <u>HERE</u>

Snowmobiler Introduction to Avalanches with Field Course in West Yellowstone on December 20 and 21. Sign up for this class <u>HERE</u>.

FREE 1 hour lectures:

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

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