GNFAC Avalanche Advisory for Thu Mar 21, 2013

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, March 21 at 7:30 a.m. **Mystery Ranch** in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Snow fell yesterday and early this morning. In most places snowfall was ending this morning with 24 hour totals of 4 inches in the Bridger and Northern Gallatin Ranges and 6-8 inches everywhere else. Winds were blowing 15-20 mph and gusting to 35-50 from the SW. As temperatures began dropping into the teens F, winds eased and shifted to the W. Today will be cold with temperatures reaching the low teens F. Mostly cloudy skies will produce snow with 1-3 inches by tomorrow morning. Winds will blow from the W at 10-15 mph with gusts of 25.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

New snow + wind will make fresh **wind slabs** the primary avalanche problem today. Human triggered avalanches will be likely on steep, wind loaded slopes. On slopes without wind deposited snow, the main avalanche concerns will be layers within snow that has fallen since Saturday. Yesterday in Hyalite Canyon, my partner and I triggered a 4 inch thick slab in a steep north facing couloir by dropping a cornice. We backed off another couloir; however, we skied many other slopes where we found stable conditions and good bonding within the new snow.

What about older layers of facets buried deeper in the snowpack? Recent warm weather followed by a good refreeze of the snowpack helped many of these older layer gain strength. There may be a few slopes where avalanches can break deeper in the snowpack, but this situation is unlikely.

What to do? First, avoid fresh wind slabs and steep wind loaded slopes. Second, assess bonding in the new snow through a combination of quick stability tests, slope cuts on small, steep slopes, and simple observations. Look for recent avalanches or any cracking in the new snow around your skis or your track. Finally, make sure to base your decisions on data and concrete observations. The draw of good powder and the desire to ride a slope is powerful.

For today, all wind loaded slopes steeper than 35 degrees have a **CONSIDERABLE** avalanche danger. With plentiful new snow since Saturday, human triggered avalanches are possible on all other slopes which have a **MODERATE** avalanche danger.

A few thoughts on decision making: Yesterday the lure of good powder in a steep couloir almost convinced me to ski it. I might have done so safely, but I'm not a gambling man. Several things helped me walk away to come back another time.

- 1. A good partner is priceless and can help you make clear, thoughtful decisions.
- 2. The Bull's-Eye Approach helps rank information. We triggered an avalanche on a somewhat similar slope. This is bull's eye information that should be ranked the highest. We had a few signs of stability which fall on the outer rings of the bull's eye and do not provide very meaningful information. Also, this couloir provided the quickest way back to the truck and had great snow. While powerful, these last two points need to be recognized and removed from the decision making process.
- 3. The post-mortem or obituary test ask you to think what your friends would say if you died or got hurt. If they would say "what was he thinking?" perhaps it's a bad decision.
- 4. Fortunately we were skiing. I find decision making really hard or sometimes non-existent when snowmobiling. Take the time to literally stop and think, even if just a few seconds.

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.