GNFAC Avalanche Advisory for Fri Dec 4, 2015

Good afternoon. This is Alex Marienthal with early season snowpack information issued at 1:30 p.m. on Friday, December 4. Today's information is sponsored by <u>Yellowstone Club Community Foundation</u> in partnership with the Friends of the Avalanche Center. This information will be updated early next week.

Mountain Weather

Temperatures reached the high 30s and low 40s F yesterday and remained warm overnight. Winds have been out of the southwest around 20-30 mph. Wind gusts between 50 and 60 mph were recorded last night in Big Sky, Hyalite, and Cooke City. Recent precipitation is limited to one modest inch that fell Wednesday night. The mountains could receive 1-3 inches of snow tonight. Temperatures this afternoon and Saturday will be in the 20s F with overnight temperatures in the teens. Temperatures on Sunday will return to the 30s F. Wind will be out of the southwest around 20 mph and increase to 40 mph Sunday afternoon. The next chance for precipitation is Sunday night, and there are a few chances for snowfall through next week.

Snowpack and Avalanche Discussion

One inch of snow on Wednesday night may have softened the skiing and hidden the rocks, but it did not decrease stability. The ski patrols at Big Sky and Bridger Bowl have been testing the snowpack with explosives and ski cuts, and have had minimal avalanche activity to speak of. The Big Sky patrol noted an explosive triggered wind slab that failed on facets in the upper part of the snowpack. Strong winds last night did not have much snow to transport, so fresh wind slabs today are not an issue. Look for areas of instability where old slabs formed over facets (photo, photo). These slabs will be difficult to trigger, but make up the main hazard right now. Getting caught in even a small slide this time of year has high consequences due to exposed rocks and logs that can cause injury.

Cold temperatures last week and a shallow snowpack have formed weak faceted snow throughout the mountains. These weak facets will not go away with the moderately warm temperatures. There is still depth hoar on my front lawn. The sun angle is low, and cold clear nights will continue to make this snow weaker. In some areas these facets make up the entire snowpack (video, snowpit). In other areas they are limited to the surface or upper snowpack (video). Either way, this weak snow will lead to avalanches when we get a snowstorm that drops more than a few inches.

We will continue to issue information bulletins as conditions change. We will begin issuing daily advisories and danger ratings once we get more snow. In the meantime, we need your field observations so please drop us a line at mtavalanche@gmail.com.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found **HERE**.

Butte: December 6, Sunday, Avalanche Awareness for Snowmobilers, Redline Sports, 12-1 p.m.

Billings: December 8, Tuesday, Avalanche Awareness, MSU, 6-7 p.m.

Great Falls: December 9, Wednesday, Avalanche Awareness, Back Alley Pub, 6-7 p.m.

Bozeman: December 9, Wednesday, Avalanche Awareness, REI, 6-7:30 p.m.

Helena: December 10, Thursday, Avalanche Awareness, The Basecamp, 6-7:30 p.m.

Bozeman: December 15, Tuesday, Avalanche Awareness and Beacon 101, Beall Park, 6-8 p.m.

West Yellowstone: Snowmobiler Introduction to Avalanches with Field Course

December 17 and 18, 2015: https://www.ticketriver.com/event/17356

Five hours of lectures are followed by a full day field course. Topics include: avalanche terrain recognition, the affect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.