

GNFAC Avalanche Advisory for Sun Mar 17, 2013

Good morning and happy St Patrick's Day. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, March 17 at 7:30 a.m. **Madison River Brewing Company** and **Javaman** sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Overnight 3-5 inches of snow fell in most mountain locations. Currently, it's still snowing and temperatures are in the upper teens to low twenties F. Winds are blowing 15-30 mph out of the west with ridgetop gusts reaching close to 40 mph. Today, temperatures will continue to drop as a cold front moves over the area. By noon, temperatures will be ten degrees colder and winds will continue to blow 15-30 mph out of the west/northwest. Snow will continue through the day with an additional 2-4 inches likely by this evening. With new precipitation, a rainbow may appear today but don't expect to find a fat pot of gold at its base – we're still be dealing with dust on crust conditions.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Last week's warm temperatures have placed the snowpack in a state of transition. On many slopes, particularly those at mid to low elevations, multiple days of above freezing temperatures have turned the pack into a mess of isothermal and poorly bonded wet grains. Weakening of the snowpack structure produced both wet loose and wet slab avalanches over the past few days ([photo](#), [video](#)).

At upper elevations, warm temperatures affected only the upper layers of the snowpack. On slopes where buried persistent weak layers are present, dry slab avalanches still remain possible. On Friday, outside of Cooke City, I had unstable test results on a layer of facets buried 2 feet deep on Mt Abundance. Don't panic, these buried faceted layers are not widespread - though they should not be forgotten.

Fortunately there is a bit of luck working in our favor. A strong cooling trend this week will eliminate the wet snow danger and will reduce the potential of triggering slides on deeper persistent weak layers.

Today, the primary avalanche concern will be new snow instabilities and buried leprechauns. As snow and wind continue through the day, wind slabs will become a concern on upper elevation, leeward slopes. Strong winds out of the west/northwest will make south and east facing slopes most susceptible to wind loading. Wind slabs will increase in size, distribution and sensitivity as the day progresses. Fortunately, this type of hazard is easy to recognize and avoid. Loose snow avalanches will also be a growing concern, especially in steep terrain.

Today, the avalanche danger will start out [MODERATE](#) on wind loaded slopes and slopes steeper than 35 degrees. The danger on these slopes could rise to [CONSIDERABLE](#) by this afternoon. Less steep, non-wind loaded slopes have a [LOW](#) avalanche danger.

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.