

GNFAC Avalanche Advisory for Sun Mar 3, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, March 3 at 7:30 a.m. **Montana Import Group** in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory is dedicated to Ben Richards who died in an avalanche on this day in 2007. This advisory does not apply to operating ski areas.

Mountain Weather

Overnight 1-2 inches of snow fell in the mountains around West Yellowstone and Cooke City. This morning temperatures are ranging from the mid-20s to low 30s F and winds are blowing 15-25 out of the WSW with gusts reaching 40 mph around Big Sky and Hyalite. Today, conditions will change drastically as a cold front moves over the area. The front will arrive mid-morning delivering gusty winds and a brief shot of snow. Winds will shift to the WNW after the frontal passage and temperatures will drop throughout the day. By tomorrow morning, 3-5 inches of snow will likely accumulate in the mountains around Bozeman, Big Sky and West Yellowstone. The mountains around Cook City will pick up 6-8 inches.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Yesterday's warm temperatures reduced snow available for transport and helped stabilize recently formed wind slabs. On sun exposed slopes, the snow surface became damp and large pin wheels were observed in steep terrain. Unlike my sunburnt nose, north facing slopes managed to avoid the most adverse effects of above freezing temperatures and strong solar input. Last night, freezing temperatures worked their magic creating a crust on all but north facing slopes. This favors stability, but will make riding conditions marginal at best.

Thankfully, we have a storm on the doorstep. Today, avalanche problems will compound as conditions change. This morning, the primary avalanche concern will be buried persistent weak layers ([photo](#), [photo](#)). As skiers and riders seek out soft snow, most likely on north facing slopes, they may encounter faceted layers buried 1-3 feet deep. Yesterday, Mark found a layer of facets a foot below the surface in the mountains around Cooke City. On Friday, a skier found a layer of buried surface hoar a foot below the surface on an east facing slope in Beehive Basin ([photo](#)). Skiers also got a large collapse and unstable results on a layer of surface hoar in Bacon Rind. Digging 2-3 feet down to assess the strength the distribution of buried weak layers is a fast and effective insurance policy before jumping into steep terrain.

As snow and wind increase through the day, wind slabs will become a concern. Upper elevation slopes leeward to west-northwest winds will see the most rapid loading. Fortunately this hazard is easy to recognize and avoid.

Today, human triggered avalanches are possible and the avalanche danger is rated **MODERATE**. However, increased snow and wind could bump the danger up to **CONSIDERABLE** on wind load slopes by this afternoon.

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.