

GNFAC Avalanche Advisory for Sat Mar 29, 2014

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, March 29 at 7:30 a.m. **Montana FW&P Recreation Trials Grant** in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours the mountains around West Yellowstone and Cooke City picked up 2-3 inches of snow totaling .3 inches of SWE. The rest of the advisory area picked up a trace to one inch. This morning temperatures are in the upper 20s to low 30s F and winds are strong out of the WSW blowing 20-40 mph with ridgetop gusts near Big Sky reaching close to 60 mph. Today, temps will warm into the upper 30s F under mostly cloudy skies and winds will remain strong out of the WSW. An approaching storm system will work its way into the area this afternoon increasing the chance of precipitation. By tomorrow morning the mountains around Cooke City will likely receive 5-7 inches of new snow. The mountains around West Yellowstone and Big Sky should receive 4-6 inches, while the mountains around Bozeman will pick up 2-4 inches.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

The snowpack held up well to the most recent loading event. Yesterday, my partner and I toured around Beehive Basin in the northern Madison Range and found generally stable conditions on slopes up to 35 degrees. We did not observe any recent avalanche activity and found the new snow to be well bonded to the old snow surface. However, we did avoid steep slopes, especially those that appeared to be wind loaded. A skier outside of Cooke City found similar conditions yesterday.

Today, there will be two avalanche problems to look out for. The easiest problem to recognize and avoid will be wind slabs. Strong winds combined with fresh snow will create drifting along the leeward side of upper elevation ridges. Recently formed wind slabs should be predictable in size and depth and will be most hazardous in steep, high consequence terrain.

The more serious and unpredictable problem will be avalanches failing at or near the ground. As the load of new snow piles up, the odds of triggering a deep slab avalanche will steadily increase ([video](#), [article](#)). The problem is – predicting what slopes will produce a deep slab avalanche is a tricky proposition. Until proven otherwise, it's safe to assume every slope has weak facets near the ground and is capable of producing a large and dangerous avalanche. The best defense against this problem is avoiding steep slopes, particularly those in steep, rocky terrain where the snowpack is shallow and weak.

Today, human triggered avalanches are likely on steep wind loaded slopes which have a [**CONSIDERABLE**](#) avalanche danger. All other slopes have a [**MODERATE**](#) 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.

Our last daily avalanche advisory will be Sunday, April 6th. If conditions warrant we will issue intermittent advisories the following week.