

## **GNFAC Avalanche Advisory for Sat Mar 31, 2012**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, March 31 at 7:30 a.m. Bridger Bowl sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Since yesterday morning 4-6 inches of high density snow totaling 1.2 inches of [SWE](#) fell in the mountains around Cooke City. The Lionhead area and southern Madison Range picked up .7-.8 inches of [SWE](#) which fell as very dense snow or rain. The mountains around Bozeman and Big Sky picked up a trace to one inch of snow.

At 4 am this morning, mountain temperatures are in the mid to high 30s and winds are blowing out of the WSW at 20-40 mph. Today, skies will be partly to mostly cloudy, temperatures will warm into the 40s and winds will continue to blow 15-30 mph out of the WSW. Another storm will move into southwest Montana by tomorrow morning. Valley rain and mountain snow can be expected through the day tomorrow.

### Snowpack and Avalanche Discussion

#### The southern Madison Range and Lionhead area near West Yellowstone:

Over the past twenty four hours nearly 1" of precipitation has fallen. Below 8,000 feet this fell in the form of rain. On low elevation slopes wet loose avalanches are the primary concern. Wet loose avalanches typically start as point releases, but can entrain large volumes of snow in a short distance. Terrain traps such as gullies and creek bottoms are especially dangerous in these types of conditions.

On upper elevations slopes both slab and loose snow avalanches are a concern. Faceted layers buried mid-pack and near the ground could be weakened by the influx of liquid water.

For this reason the avalanche danger is rated [CONSIDERABLE](#) on slopes steeper than 35 degrees. Less steep slopes have a [MODERATE](#) avalanche danger.

#### The Bridger Range, Gallatin Range and northern Madison Range:

The lack of measurable precipitation, cooler temperatures and absence of prolonged periods of sun are contributors to the improving stability. With this said, the snowpack structure in the Bridger Range and mountains around Big Sky is still set up to produce avalanches ([photos](#)). What it will take to trigger an avalanche is becoming harder to figure out. Such uncertainty warrants extra caution when traveling in avalanche terrain.

Today, the avalanche danger is rated [MODERATE](#). However, if the sun appears the danger could rise on sun exposed slopes.

#### The mountains around Cooke City:

The primary avalanche concern for the mountains around Cooke City is fresh wind slabs. Moderate to strong west/southwest winds and new snow have created dense slabs and drifts along ridgelines and in upper elevation starting zones. These drifts should be well bonded to the old snow surface, but could be triggered by a skier or

rider.

A secondary concern for the mountains around Cooke City will be wet loose avalanches. If the sun appears for extended periods of time, the new snow could become unstable on sun exposed slopes. Point releases and pin wheels are prime indicators of rising instability.

Aside from new snow instabilities, the snowpack is generally stable ([video](#)).

Today, the avalanche danger is rated [MODERATE](#) on wind loaded slopes. 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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

#### Avalanches: Decision-making and Psychology

On March 28 the GNFAC and Friends hosted a Professional Development Workshop on "Decision-making and Psychology". All six lectures are uploaded to YouTube. Making high consequence decisions in dynamic, dangerous environments is tricky stuff. These lectures are by an avalanche worker, forecaster, SEAL, airline pilot, and psychologist. Watch, listen and learn. You can view the lectures here:

[http://www.youtube.com/playlist?list=PLEFAE2148A0027DF6&feature=view\\_all](http://www.youtube.com/playlist?list=PLEFAE2148A0027DF6&feature=view_all)

#### Events

#### Big Sky

Free avalanche beacon instruction. Grizzly Outfitters, Today, March 31st, 3-5 p.m.