

GNFAC Avalanche Forecast for Sun Jan 27, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, January 27 at 7:30 a.m. **Mystery Ranch** 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 2-3 inches of snow fell in the mountains around West Yellowstone and Cooke City. A trace to one inch fell in the mountains around Bozeman and Big Sky. These numbers will increase today as moisture arrives on a southwest flow. By this evening, an additional 3-5 inches will accumulate in the southern mountains and 2-4 inches will fall in the north.

This morning temperatures are in the 20s F and winds are blowing 5-15 mph from the WSW. Today, temperatures will climb into the upper 20s to low 30s under snowy skies and winds will continue to blow 10-20 from the WSW. Snow will taper off this evening and temperatures will drop to around 10 degrees F. Another potent storm is scheduled to arrive Monday night into Tuesday.

Snowpack and Avalanche Discussion

Cooke City

The primary avalanche concern for the mountains around Cooke City will be wind loaded slopes. Yesterday, gusts up to 40 mph out of the WSW were recorded near [Lulu Pass](#). Although winds have subsided this morning, yesterday's windy conditions transported snow onto leeward slopes, forming fresh wind slabs. Upper elevation terrain leeward to the predominant WSW winds will be the most likely to hold wind deposited snow.

Today, human triggered avalanches will be possible for skiers or riders who venture onto wind loaded slopes which have a **MODERATE** avalanche danger. Non-wind loaded slopes have a **LOW** avalanche danger.

Lionhead area near West Yellowstone Southern Madison Range

Southern Gallatin Range

Over the past 48 hours the mountains around West Yellowstone including the southern Madison Range picked up 5-7 inches of snow totaling .5 to .7 inches of SWE. This has not put a tremendous amount of stress on the snowpack, but has added just enough to cause concern. There are now two distinct weak layers buried in these areas (**facets**, **surface hoar**). One is a layer of near surface facets buried roughly a foot and a half below the surface. This layer has been gaining strength, but is worth looking for and assessing before committing to steep slopes. A second concern is a layer of near surface facets and/or surface hoar that is now buried 6-8 inches below the surface. This layer could produce small slab avalanches on slopes steeper than 35 degrees, especially if snow continues through the day. Fortunately, this layer is not buried deep and will be easy to look for and assess.

Today, human triggered avalanches are possible on slopes steeper than 35 degrees which have a **MODERATE** avalanche danger. Less steep slopes have a **LOW** avalanche danger.

Bridger Range Northern Madison Range

Northern Gallatin Range

The snowpack in the mountains around Bozeman and Big Sky is generally stable. Today, the primary avalanche concern will be new snow. With 2-4 inches possible by this afternoon, small loose snow or slab avalanche may occur in steep terrain. If you are heading into the backcountry, pay close attention to changing conditions and don't be afraid to change plans if instability is on the rise.

Today, the avalanche danger will start out **LOW**, but could rise to **MODERATE** on steeper slopes if snow and wind continue through the day.

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.

OTHER RELEVANT STUFF

No Snow, Big Problem. [Read an article](#) on how surface snow can become the next weak layer and future avalanche problem.

Practice using your beacon. The Friends of the Avalanche Center in partnership with the City of Bozeman Recreation Department recently installed a beacon training site at Beall Park on North Black Avenue. It's free and easy to use.

EDUCATION

In **Helena**, next Thursday (1/31) at 6:30 p.m., the Friends are giving a free *1-hour Avalanche Awareness* lecture at Exploration Works (995 Carousel Way).

In **Bozeman**, on Wednesday, February 6, REI is hosting a *1-hour Avalanche Awareness lecture for Women*. Space is limited and registration is required: <http://www.rei.com/event/47916/session/64605>