

GNFAC Avalanche Advisory for Thu Jan 16, 2014

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 16 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

The leading edge of a high pressure ridge will move over SW Montana today. Last night ridge top winds in many places were gusting to 40 mph, but decreased this morning to 10-15 mph with gusts of 25 mph from the W and NW. Temperatures were near 20 degrees F and a little colder near West Yellowstone and Cooke City. Today will be a great one to be in the mountains. Temperatures should be near 30 degrees F under mostly sunny skies. Winds will blow 10 mph and gust to 30 mph from the W and NW. The ridge of high pressure should remain over the area through the weekend.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone

Don't let your guard down and let beautiful weather fool you into thinking that stability is better than it is. Avalanche danger and stability go up and down, and we are on the back side of the danger curve now. Unfortunately stability should not improve as quickly as we would like.

What we know for sure is that many avalanches have happened ([photos](#), [videos](#)). Most of these broke on facets about a foot above the ground. Yesterday Doug and I rode in the Taylor Fork area. We saw a few slides from the weekend that mostly broke in the storm snow and found encouraging results in our stability tests. We also installed our [Taylor Fork weather station](#) that provides wind data for this area in conjunction with snowfall data from the [Carrot Basin SNOTEL](#). Just a little further south on Lionhead, several slides occurred two days ago. One was a natural ([photo](#)), and 3-4 others were snowmobile triggered including one that was triggered from low angle terrain under a steep, wind loaded slope.

Last weekend, most slopes were unstable. Now, it's more variable. Slopes with a heavy load of wind-blown snow will be the most likely to slide especially in steep rocky areas. A good example is a slide triggered yesterday by the Big Sky Ski Patrol ([photo](#)). A skier in the northern Bridger Range yesterday experienced very strong winds and found many hard wind slabs that he did not trust.

What to do? Avoid wind loaded slopes and stay off hard wind slabs. Be conservative and assume every slope can slide. If a slope would carry you into trees, over rocks, or into a gully or hole; pick a different one. Also, dig quick snowpits in several places and do multiple stability tests. One stable test result is not enough. If snowmobiling make a point to hit many small slopes and see how they react.

For today, the avalanche danger is rated **CONSIDERABLE** on all wind-loaded slopes AND on all slopes steeper than 35 degrees. Lower angled slopes without a wind-load have a **MODERATE** danger.

Cooke City

Yesterday Beartooth Powder Guides found 3.5 feet of new snow that had fallen since this weekend at their backcountry yurt. This new snow contains over 3 inches of [snow water equivalent \(SWE\)](#) which is a lot of weight. Fortunately the snowpack is relatively strong. There's a chance it could break in deeper layers, but the primary concern will be wind slabs. Strong winds occurred less than 48 hours ago, and wind slabs should remain ready to fracture. With so much new snow, these wind slabs could break several feet deep and over surprisingly large areas. Today the avalanche danger is rated [CONSIDERABLE](#) on all wind-loaded terrain. Slopes without a wind-load have a [MODERATE](#) 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.

MONTANA ALE WORKS FUNDRAISER DINNER, Wednesday, January 22

On Wednesday, January 22, Montana Ale Works is hosting the 6th Annual Fundraiser Dinner for the Friends of the Avalanche Center. Chef Roth is creating an elegant, multiple course menu. His culinary creation will be paired with wines from the Ale Works cellar. Seating is limited to 40. Get your tickets early.

<https://www.ticketriver.com/event/9572>

BACKCOUNTRY SKIERS AND RIDERS NEEDED FOR MSU SURVEY

This project aims to collect GPS location information and survey responses from backcountry skiers and riders to better understand what types of terrain decision we make. The focus is on backcountry skiers and riders of all abilities and experience. You need not be an expert backcountry skier to participate in this research. For more information and to sign up: www.montana.edu/snowscience/tracks

ANDROID APP

If you have an android phone or tablet, you can download our new free app. It's a slick way to get the advisory. [Search Google Play for GNFAc](#). An iOS version is coming soon. Stay tuned.

EVENTS/EDUCATION

January 16, BOZEMAN: TODAY, 6-8 p.m., Beall Park, **1-hour Avalanche Awareness and Transceiver Practice**.

January 18, COOKE CITY: Saturday, 6-7 p.m., Community Center, **1-hour Avalanche Awareness** lecture.

January 18 & 19, BOZEMAN: Saturday, 12-4:30 p.m. Bozeman Public Library; Sunday, all day in the field, **Snowmobiler Introduction to Avalanches with Field Course**. Pre-registration is required:

<https://www.ticketriver.com/event/8565-bozeman--snowmo-intro-to-avalanches-w-field>

January 22,23 & 25, BOZEMAN: Wednesday and Thursday 7-9:30 p.m.; all day Sunday in field, **Introduction to Avalanches with Field Course**. Pre-registration is required: <https://www.ticketriver.com/event/7113>

January 22 & 23 & 26, BILLINGS and COOKE CITY: Wednesday and Thursday 6-9 p.m.; all day Sunday in field, **Snowmobiler Introduction to Avalanches with Field Course**. Pre-registration is required:

<https://www.ticketriver.com/event/9380>

January 25, WEST YELLOWSTONE: Saturday, 7-8 p.m. at Holiday Inn, **1-hour Avalanche Awareness** lecture.

More information our complete calendar of events can be found [HERE](#).