

## **GNFAC Avalanche Advisory for Wed Jan 30, 2013**

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, January 30 at 7:30 a.m. **Bridger Bowl** in partnership with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Yesterday's storm dropped 22 inches in the Bridger Range. They just picked up another five inches this morning while the rest of our advisory area received 2-4 inches. Unsettled weather will continue to bring snow, but the real change is the wind. Relatively calm winds yesterday are no longer. Westerly winds are currently averaging 20-30 mph with gusts hitting 45 mph. These will continue today before tapering tonight. Mountain temperatures are near 10F this morning and will warm into the low 20s. By early tomorrow I expect an additional 3-6 inches.

### Snowpack and Avalanche Discussion

#### The Bridger Range

The avalanche equation is easy: 27 inches of 3% powder + 40 mph winds = avalanches.

Yesterday, the snow sluffed, but did not form slabs. The winds will change that. They are blowing strong at the ridgeline and will rapidly form soft slabs that will be easily triggered. Even at lower elevations it won't take much wind to create fresh wind slabs. Cracks shooting out in front of our skis are a red flag that wind drifts are ripe to avalanche. Today is not the day to jump onto exposed terrain off the ridge. Wind slabs will be like a school of hungry sharks waiting to eat skiers. Today the avalanche danger is rated **HIGH** on all wind-loaded terrain. Slopes steeper than 35 degrees without a wind load are rated **CONSIDERABLE** since its likely you can trigger fast moving loose snow avalanches; less steep slopes have a **MODERATE** danger.

#### Northern Madison Range Northern Gallatin Range Cooke City

Two to four inches fell around Big Sky, Hyalite Canyon and Cooke City. Mark toured through a few different areas in the northern Madison Range yesterday. He mostly found a strong snowpack, but noted a few south-facing slopes have weak snow buried a foot under the surface. Its distribution is spotty which means you have to carefully evaluate the snowpack; there are no shortcuts, and in Mark's words, "It's no joke." Increased wind speeds are loading slopes which will likely fracture and avalanche today, especially with a skier or snowmobiler trigger. Any wind-loaded slope has a **CONSIDERABLE** avalanche danger while those untouched by the wind are rated **MODERATE**.

#### Southern Madison Range Southern Gallatin Range Lionhead area near West Yellowstone

A snowmobiler triggered a small soft slab avalanche on Lionhead yesterday ([photo](#)). The southern mountains have a weak layer buried 8-10 inches under the surface. A few miles north of this avalanche, on Sunday, Eric did numerous stability tests and got this layer to propagate fractures in every one ([video](#), [photo](#)). There is potential for avalanches to break far across a slope on this layer, especially with more snowfall and wind-loading. This weak layer is easy to find: it's less than a foot deep and is identified as a two inch stripe ([photo](#)) in the pit wall. Take our word for it—if it's there, it's unstable. Additionally, cracks, whumphs and recent avalanche activity are Mother Nature's way of telling us to play somewhere else. For today, wind-loaded slopes have a **CONSIDERABLE** avalanche danger while all other slopes are rated **MODERATE**.

Mark 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.

## **February 16: 11<sup>th</sup> Annual King and Queen of the Ridge**

The 11<sup>th</sup> Annual King and Queen of the ridge Hike/Ski-a-thon fundraiser is Saturday, February 16. The event supports avalanche education. Enter as an individual or a team. Collect pledges for the number of hikes you can do in five hours. Kids and families are encouraged to hike too! Prizes will be awarded to the most hikes (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>); most money raised, most laps for a team, most money raised for a team. [More Information](#) / [Registration Form](#)

## **EDUCATION**

TONIGHT, Wednesday (1/30) and Thursday (1/31) evenings and all day Saturday (2/02), we are teaching an *Advanced Avalanche Workshop with Field Course* at **MSU**. Registration is required. For more info and to register, visit: <https://www.ticketriver.com/event/4974-advanced-avalanche-workshop-with-field-course>

In **Helena** on 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>

The Friends are teaching a free *Companion Rescue Course* in **Big Sky**, at Grizzly Outfitters, on Friday, February 8 from 6-8 p.m., followed by a field session the next day from 10 a.m. to 2 p.m. Space is limited and pre-registration is required: <https://ticketriver.com/event/5830-companion-rescue-clinic-for-skiers-&-boarders>