

GNFAC Avalanche Advisory for Tue Jan 29, 2013

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, January 29 at 7:30 a.m. **Cooke City Motorsports** in partnership with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Cough, cough. Call in sick today and head up to Bridger Bowl, and don't forget your snorkel. The range is under a strong, moist, northwest flow and the Bridger Bowl Cloud is in full effect. At 6 a.m. it has snowed 18 inches in five hours! It's anyone's guess how long it will last, but the models show good energy and moisture into this afternoon. [Click here](#) for the latest snowfall amounts. The rest of our forecast area has 1-3 inches of new snow. Winds are averaging 15-20 mph out of the west with gusts of 25 mph. Mountain temperatures dropped last night into the single digits. This week looks to be snowy, a welcome relief to our powder drought. By tomorrow morning I expect 4-6 inches in most areas with the Bridger Range getting another foot or two.

Snowpack and Avalanche Discussion

The Bridger Range

With a snow storm raging in the Bridger Range today, the avalanche danger is rising. Westerly winds will quickly load slopes further spiking the danger. Today is a day to be cautious in your backcountry travel. Snowfall rates hitting over four inches an hour almost guarantee avalanches: sluffs on steeper terrain, soft slabs elsewhere. For today, the avalanche danger is rated **HIGH** on wind-loaded terrain and on slopes steeper than 35 degrees. All other terrain has a **CONSIDERABLE** danger.

Northern Madison Range Northern Gallatin Range Cooke City

With 2-3 inches falling last night and 5-8 inches the day before, the northern Gallatin and Madison Ranges are slowly getting a load of snow. The mountains around Cooke City received over a foot this past weekend too. The winds were light yesterday and wind drifts were small, but even so, a skier around Cooke City was able to get cracks shoot out 15 feet on thin, soft wind slabs. In general, the snow is falling onto a relatively strong snowpack, however there are some areas where the new snow is interfacing with sugary facets and will not bond well. For today, the avalanche danger is rated **MODERATE** on all avalanche terrain.

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

The southern Madison, southern Gallatin Ranges and Lionhead area have a weak layer buried 6-8 inches under the surface. This layer is comprised of small, sugary, faceted grains and/or feathery crystals of surface hoar. By far, this is the weakest layer in the snowpack and it will become increasingly unstable as more snow falls in the next few days. Eric skied into the mountains around Hebgen Lake yesterday and got this layer to fracture in his tests ([Eric's video, photo](#)). I skied into Bacon Rind and could easily find the buried surface hoar, identified as a one inch thick stripe in my snowpit wall ([photo](#)). This layer will not support much new snow. Contrary to Eric's tests, I could not get this layer to fracture, but it really didn't matter since anytime we bury a surface hoar layer I know avalanches will likely follow at some point ([Doug's video](#)).

A skier or snowmobiler would likely trigger an avalanche today on a wind-loaded slope, thus I'm rating the danger **CONSIDERABLE**. All other slopes have a **MODERATE** danger, but another 4-6 inches today would quickly bump it up to **CONSIDERABLE**.

Hot Tip: With this type of weak layer, cracks shooting out from your ski tips and/or audible collapses (whumphs) are clear red flags the snowpack is dangerously ripe to avalanche. Stick to lower angled slopes with these signs of instability.

Two separate avalanche fatalities in Wyoming

On Sunday a skier was killed in an avalanche south of Jackson while another skier died in a slide in the northern region of Teton National Park. An article in the Jackson Hole News has details:

http://jhnewsandguide.com/article.php?art_id=9491

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.

EDUCATION

Tomorrow, 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 8th 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>