

## **GNFAC Avalanche Advisory for Thu Mar 10, 2016**

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Thursday, March 10, at 7:00 AM. Today's advisory is sponsored by [Montana Ale Works](#) and [Alpine Orthopedics](#). This advisory does not apply to operating ski areas.

### Mountain Weather

Since yesterday morning, the mountains near Bozeman and Big Sky received 1" of new snow and the southern mountains got 2-3". Temperatures this morning are in the 20s F, and wind is out of the southwest at 20-30 mph with gusts around 50 mph near Big Sky and south of Bozeman. Today, wind will be strong, out of the southwest at 30-40 mph with lighter speeds in the southern mountains. Skies will be mostly cloudy with temperatures in the 30s F. Scattered showers will bring possible rain this afternoon and 1-2" of snow overnight.

### Snowpack and Avalanche Discussion

#### Lionhead area near West Yellowstone

Two days ago the Lionhead area near West Yellowstone received 11" of snow that totaled .9" of [snow water equivalency](#) (SWE). Since yesterday morning, this new snow was transported by moderate southwest winds to form wind slabs on leeward slopes. These slabs will be found near ridgelines and will be sensitive to trigger today, especially where they rest over buried weak layers. Doug was in Lionhead on Tuesday and found a layer of small facets that are now buried 1-2 feet deep under recent snow. He witnessed one small avalanche that likely failed on these facets ([photo](#)). Buried surface hoar also exists in this area and could produce a larger avalanche. For today, fresh wind slabs and buried weak layers make the avalanche danger [CONSIDERABLE](#) on wind-loaded slopes and [MODERATE](#) on all other slopes.

#### Southern Madison Range Southern Gallatin Range Cooke City

The mountains south of Big Sky and near Cooke City have weak layers of either surface hoar or facets, which are buried 1-3 feet deep. Avalanches last weekend near Lulu Pass ([photo](#)), Republic Mountain ([photo](#)), and Pebble Creek ([photo](#)) likely failed on facets buried 1-2 feet deep. Last weekend I investigated the instabilities near Cooke City and decided that no matter the weak layer, there was enough recent snow and a poor structure to elevate the avalanche danger ([video](#)). Karl was at Bacon Rind yesterday and found unstable test results on the surface hoar layer and got a large collapse while skinning. Moderate winds combined with 6-8" of snow since Monday will be enough to keep these weak layers on edge. Today, buried weak layers and wind-loading make the avalanche danger [MODERATE](#).

#### Bridger Range Northern Madison Range Northern Gallatin Range

The mountains near Bozeman and Big Sky have a relatively stable snowpack that has supported the weight of this week's snow. The main avalanche problem today will be fresh wind slabs that formed from strong winds overnight and today. It is unlikely to trigger an avalanche on buried persistent weak layers today, but it is a good idea to look for unexpected instabilities before committing to a slope. Skiers near Ross Peak in the Bridger Range on Monday avoided a steep couloir after they found unstable test results on a weak layer buried 2 feet deep ([photo](#)). Skiers north of there yesterday saw small natural avalanches and had unstable test results 6" to 1' deep, and chose a new line. These instabilities may have been isolated or short-lived, but they were avoided by digging. Due to recent snow and strong winds, the avalanche danger today is [MODERATE](#) on wind loaded

slopes and [LOW](#) on other slopes.

I will issue the next advisory tomorrow morning by 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com) or leave a message at 587-6984.

## **EVENTS and AVALANCHE EDUCATION**

*A complete calendar of classes can be found [HERE](#).*