

## **GNFAC Avalanche Forecast for Fri Feb 21, 2014**

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, February 21 at 7:30 a.m. **Grizzly Outfitters**, in partnership with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Since yesterday morning the mountains near Cooke City received 6-8 inches of snow, near West Yellowstone 4-6 inches, and near Bozeman and Big Sky 3 inches. Winds were blowing 20-30 mph and gusting to 50 mph from the SW in some places and NW in others. Temperatures ranged from 10 F to 15 F. Today's forecast is more wind, more snow, and cold temperatures. Westerly winds should average 20 mph and gust to 40 mph. Temperatures may rise to near 20 F but fall this afternoon as cold air descends from the north. By tomorrow morning most areas should get another 1-3 inches. With moisture and cold air coming from the NW for the next few days, it is possible that we could see another good dump in the Bridger Range but these events are hard to forecast. The good news is that winds should finally calm this weekend.

### Snowpack and Avalanche Discussion

#### Cooke City

The mountains near Cooke City have received snow in 22 of the last 25 days and very strong winds for the last 10 days. New snow and wind combined always make avalanches like one spotted last week just inside Yellowstone N.P. ripping down Barronette Mtn. ([photo](#)). There is plenty of great riding on low angle slopes but consider this avalanche when considering how much distance to put between yourself and big avalanche paths. Watch out for small steep slopes and road cuts. These can easily bury a person too. The good news is that this snowfall is burying weak layers deeper and deeper in the snowpack, and the long term forecast for stability is good if snow and wind ever stop.

For today however, expect avalanches to occur on their own especially on wind loaded slopes where the avalanche danger is rated **HIGH**. A skier or rider can easily trigger slides on non-wind loaded slopes where the avalanche danger is **CONSIDERABLE**.

#### Madison Range Gallatin Range

#### Lionhead area near West Yellowstone

The rest of the advisory area has received at least some snow for 19 of the last 25 days. Just like Cooke City, these areas have received very strong winds for the last 10 days. With more snow falling yesterday and continued strong winds, wind loaded slopes should be avoided.

A more difficult problem to avoid is a weak layer of faceted snow buried about 2 feet deep. It exists nearly everywhere as an obvious stripe in snowpit walls. This layer is variable and produces avalanches on some slopes but not on others. Assessing it with stability tests is difficult too because it will produce unstable results on some slopes and stable results on others.

What to do: The best advice is to stick to slopes less than 30 degrees in steepness without a wind load and enjoy the good powder and good coverage. You can ride steeper slopes but doing so will require a very careful

snowpack evaluation. With buried facets lurking in the snowpack, this is a dangerous game. Check out [photos](#) of recent slides in [Beehive Basin](#), [Quake Lake](#), [Carrot Basin](#), [Bacon Rind](#). Some are big, some are small but they can all bury a person or cause injury if they run you into a tree or over rocks.

Unfortunately we have not found a clear pattern for where this faceted layer will produce avalanches and where it will not. Buried facets should never be trusted especially when snow continues to fall and add stress to this layer. Assume every slope will slide until you can prove it won't with overwhelming evidence. For these reasons today, the avalanche danger is rated [\*\*CONSIDERABLE\*\*](#).

### Bridger Range

Yesterday the Bridger Range had nearly a foot of new snow and overnight another 3 inches has fallen. Winds have eased a little this morning but should increase again. Yesterday Doug and I went to Saddle Peak. From the top we could see plenty of fresh drifts and chose not to ski it. Instead we dug a snowpit to the ground just outside Bridger Bowl's south boundary to assess facets near the ground that caused avalanches in January. The good news is that this layer has gotten much harder (1 finger hardness) and we don't expect more avalanches on this layer unless we get an extraordinary weather event.

There are facets buried about 2 feet deep in the Bridger Range on some slopes like a skier found yesterday near Ross Peak. His findings matched many other observations that this layer does not seem to be a problem. Additionally it has not produced any avalanches that we know of. Because this layer does exist and isn't buried deeply, look for it and perform a stability test just to make sure you haven't found an isolated area where it is a problem. Otherwise, the main issue in the Bridger Range will be fresh wind slabs and drifts. With so much new snow and wind ([photo](#)), wind slabs are the main concern and the danger is rated [\*\*CONSIDERABLE\*\*](#) on slopes steeper than 35 degrees that have a wind load. All other slopes have a [\*\*MODERATE\*\*](#) danger.

### **Beehive Basin Accident Report**

The Beehive Basin Accident report is posted online and can be read here:

<http://www.mtavalanche.com/accident/14/02/18>

Eric 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.

### **EVENTS/EDUCATION**

**TOMORROW, February 22, WEST YELLOWSTONE: Saturday, 7:00-8:00 p.m., Holiday Inn, 1 –hour, FREE Avalanche Awareness for Snowmobilers lecture.**

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