

## **GNFAC Avalanche Advisory for Wed Jan 1, 2014**

Good morning and Happy New Year. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Wednesday, January 1 at 7:30 a.m. A **Montana FWP Recreation Trails Grant** sponsors today's advisory. This advisory does not apply to operating ski areas.

### **AVALANCHE WARNING**

The Gallatin National Forest Avalanche Center is issuing a **Backcountry Avalanche Warning for the northern Gallatin Range**. Rain and snow has fallen in the northern Gallatin Range with about 7 inches of snow. More importantly the equivalent amount of water is nearly an inch of liquid precipitation. This precipitation was accompanied by very strong winds. This snow has fallen on a weak and unstable snowpack which was producing avalanches prior to this storm. **The avalanche danger is rated HIGH on all slopes in the northern Gallatin Range**. Very dangerous avalanche conditions exist. Travel in avalanche terrain is not recommended and avalanche run out zones should be avoided.

This warning will either be terminated or updated by 6:30 AM on Thursday, January 2.

### Mountain Weather

Since yesterday morning the mountains near Bozeman and Big Sky have received 5-7 inches of new snow. Areas further south near West Yellowstone and Cooke City received about 4 inches. Some areas received a little rain as well. Temperatures dropped overnight and this morning ranged from the mid-teens F to 20 degrees F. Winds were blowing 15 mph gusting to 35 mph from the WNW. A little more snow should fall this morning but not accumulate. Today temperatures will be in the low 20s F and winds blow 10-30 mph from the WNW. More snow should come Friday.

### Snowpack and Avalanche Discussion

#### Northern Gallatin Range

The amount of snow that has fallen doesn't matter as much as the snow water equivalent (SWE) of yesterday's precipitation. In Hyalite Canyon the Showers Falls SNOTEL site recorded 0.8 inches of SWE with 7 inches of snow. The upper bowls may easily have a foot or more of new snow. Additionally winds were blowing 23 mph and gusting to 46 mph this morning on top of Flanders Mountain. Prior to this storm the snowpack has given us plenty of warnings in the form of avalanches occurring on Mt Ellis and throughout Hyalite Canyon. Some slides occurred on slopes just under 30 degrees in steepness. Other slides propagated over very wide areas. For these reasons today the avalanche danger is rated HIGH on all slopes.

#### Bridger Range

At Bridger Bowl precipitation since yesterday totaled 0.6 inches of snow water equivalent (SWE) while in the northern half of the range the Brckett Creek SNOTEL site recorded 1.6 inches of SWE. Whether this precipitation fell as rain or heavy wet snow, it doesn't matter because it is all weight added to the snowpack, and any amount over an inch is a lot of weight. Some places received graupel yesterday morning that will act as a temporary weak layer under the new snow. Honestly, I'm not entirely sure what I'd expect to see in the Bridger Range today, but I know I'd be very nervous and wouldn't be surprised to see avalanches. Today the avalanche danger is rated HIGH on wind loaded slopes and CONSIDERABLE on those without a wind load.

Southern Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

New snow and wind will keep the snowpack on edge and make human triggered avalanches likely. Since Christmas avalanches have either been triggered or found in Lionhead ([photo](#)), Teepee Basin ([photo](#)), Beehive Basin ([video](#)), and Cooke City ([video](#)). Weak, faceted snow near the ground continues to be unstable. We have been traveling in the mountains very conservatively and closely watching our slope angles to avoid anything near 30 degrees or steeper. Today the avalanche danger is rated [CONSIDERABLE](#).

Watch our [videos](#) and look at all our [pictures](#) to get a broader understanding of the avalanche danger.

After Doug recovers from last night's festivities, he will issue tomorrow morning's advisory 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

TODAY: January 1, BOZEMAN: Wednesday, January 1, 10 a.m., **Hyalite Tour** at the Hyalite Reservoir. Classic skiing, free waxing and free lunch. More info [HERE](#).

January 4, BOZEMAN: Saturday, 10:30 a.m. at Bridger Bowl, **Free Avalanche Transceiver Workshop**, next to rental shop at Jim Bridger Lodge.

January 7, BILLINGS: Tuesday, 6:30-8:30 p.m. at High Mountain Recreation, **90-Minute Rescue Presentation**.

January 8, BOZEMAN: Wednesday, 6:30-8 p.m. at REI, **Sidecountry IS Backcountry** lecture.

January 9, BOZEMAN: Thursday, 6-7 p.m. at Mystery Ranch, **1-hour Avalanche Awareness** lecture.

January 9, HELENA: Thursday, 6:30-7:30 p.m. at Exploration Works, **1-hour Avalanche Awareness** lecture.

January 11, COOKE CITY: Saturday, 10 a.m. to 4 p.m., **Companion Rescue Clinic for Snowmobilers**, Pre-Registration is required. <https://www.ticketriver.com/event/9445>

January 11, 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](#).