

## **GNFAC Avalanche Forecast for Fri Dec 11, 2009**

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, December 11 at 7:30 a.m. **Team Bozeman**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

### **AVALANCHE FATALITY**

Yesterday in Hyalite Canyon a world renowned Canadian ice climber, Guy Lacelle, was killed in an avalanche. He and his partner had finished the climb Silken Falls and were hiking up a narrow drainage to a higher climb when two other climbers above them triggered a pocket of wind drifted snow that ran down the gully. His partner was off to the side, but Guy was hit and carried off the climb to his death. Our sympathies and condolences go out to his family and friends, many of whom are in town for the Bozeman Ice Festival this weekend.

### **Mountain Weather**

This morning mountain temperatures are a few degrees above zero F with winds blowing 10-25 mph and gust up to 35 mph generally from the west and slightly southwest. The Gallatin and Madison Ranges received a trace to 2 inches of snow and the mountains near Cooke City received 2-3 inches. Currently more cold air is descending from Canada while pacific moisture is moving up from central and northern California. Neither of these systems will affect southwest Montana today, and temperatures will climb into the mid teens under partly cloudy skies. Westerly ridgetop winds will remain strong blowing up to 25 mph. By tomorrow morning the tip of this Pacific moisture will reach West Yellowstone depositing an inch of snow with snowfall continuing through the day.

### **Snowpack and Avalanche Discussion**

*The Bridger, northern Gallatin, northern Madison Ranges and mountains around Cooke City:*

The last significant snowfall occurred last weekend. Since then southwest Montana has experienced extremely cold temperatures and strong winds from the north and west. This weather has significantly weakened the snowpack forming weak faceted snow now capped by widespread drifts and wind slabs. Unfortunately an avalanche does not have to large to have serious consequences. See a picture from the location of yesterday's fatality at: <http://bit.ly/7OGaao>. We will investigate this avalanche today and have more information tomorrow with an official report to follow. Many other climbers in Hyalite Canyon yesterday found drifts that were easily triggered. The Bridger Bowl Ski Patrol triggered wind slabs 8-10 inches deep mostly confined to areas near the ridge. Skiers in the northern Bridgers triggered a wind slab 30-40ft wide and 6-12 inches deep while ascending a south facing chute.

On Lone Mountain the Moonlight Basin Ski Patrol tested much of their north facing terrain in preparation for opening and triggered many avalanches mostly with explosives. The Big Sky Ski Patrol has continued to trigger many wind slabs 6-12 inches deep and yesterday they reported the "sudden onset of whumphing, cracking, and collapsing at or near treeline." These are obvious signs of a weak snowpack. All ski patrols have seen a noticeable weakening of the snowpack easily observed by sinking to the ground when stepping out of their skis. Avalanche activity was also reported within Bozeman City limits on Pete's Hill. Yes, you read that correctly and a photo is posted at: <http://bit.ly/73swl9> Although this avalanche was very small in area, it broke relatively deep and demonstrates the widespread weakness of the snowpack and the ability of recent winds to form unstable

drifts and wind slabs.

Today any slope with wind deposited snow should be approached with caution. Recent wind deposits of snow are not fracturing over large areas but they are very sensitive. Human triggered avalanches are probable and the avalanche danger is **CONSIDERABLE** on these slopes. Slopes without wind deposited snow have a **MODERATE** avalanche danger.

*The southern Gallatin and southern Madison Ranges, the Lionhead Area near West Yellowstone:*

Before this week's extremely cold weather, the snowpack in the southern Gallatin and Madison Ranges and the mountains near West Yellowstone was highly faceted and very weak. After recent cold temperatures, I'm not sure the snowpack in these areas could get much worse. All it's lacking for widespread avalanche activity is more snow which may come this weekend. For today any cohesive piece of snow resting on this snowpack will easily fracture under the weight of a human trigger. With a recent dusting of snow and strong winds, pockets of unstable snow may not be large but will be widespread. Today any slope with wind deposited snow has a **CONSIDERABLE** avalanche danger. All other slopes have a **MODERATE** avalanche danger.

Eric will issue the next advisory tomorrow morning at 7:30 a.m. If you get out in the backcountry give us a call or email with your observations. You can reach us at 587-6984 or email us at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com).

## **AFTERNOON TWITTER UPDATES**

When we find interesting snowpack conditions or hear of avalanche activity we send out tweets. This gets you information quicker than waiting for the next morning's advisory. Check out our latest at:

<http://www.mtavalanche.com/twitter> or <http://twitter.com/avalancheGuys>

## **AVALANCHE EDUCATION**

1. GREAT FALLS: On Saturday, December 12 at 10am until 3pm a FREE Avalanche Awareness Workshop will be offered at the Fish and Game Office in Great Falls. This class will have multiple presentations covering terrain, avalanches, weather, rescue, and human factors.
2. BOZEMAN: On Tuesday, December 15 at 7pm there will be a FREE one hour Avalanche Awareness Lecture at the Bozeman Public Library.
3. WEST YELLOWSTONE: TWO DAY GUIDES COURSE. On Thursday, December 17, (noon-5pm) at the Holiday Inn is an afternoon of avalanche lectures. Friday, December 18, will be in the field. Registration is NOT required. More info at: <http://www.mtavalanche.com/education/classes/snowmobilers>
4. BOZEMAN: Montana Outdoor Science School is offering a Level 1 Avalanche Course January 7-10. For more information, contact Moss at 406-582-0526.