## **GNFAC** Avalanche Forecast for Sat Dec 12, 2009

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, December 12 at 7:30 a.m. **Bountiful Table**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

## Mountain Weather

Wow - I spent a majority of yesterday outside and could feel my hands and feet the entire time. It's amazing how 15 degrees can feel like a heat wave. The next few days will keep the warm spell going with high temperatures extending into the mid to high twenties with Lows dropping into the teens. Winds and precipitation will be mixed depending on your location. Far southern Montana will be in a moist southwesterly flow with 4-6 inches of snow possible by Sunday afternoon. Winds in the south will be strong out of the W-SW at 20-30 mph. In the northern Gallatin and Madison Ranges along with the Bridgers conditions will remain drier with winds out of the west at 15-25 mph. 1-3 of snow can be expected in these ranges by Sunday afternoon. The Bridgers did receive a trace of new snow overnight.

Snowpack and Avalanche Discussion

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

Unusual weather normally creates unusual conditions. Extreme cold temperatures and strong winds over the past week have been no exception. The once deep and stable snowpack of the northern ranges has become significantly weaker with thick wind slabs overlaying weak layers of faceted snow.

The Bridger Bowl Ski Patrol triggered numerous pockets of dense wind slabs up to 18 inches deep in the Slushmans area. These pockets were isolated and confined mainly to the ridgetops, but ran up to a 1,000 ft. They also experienced widespread whumphing and cracking indicating sever instability. Not only were signs of instability reported in the Bridgers, but a skier closer to home reported collapsing and fracture lines 50-80 feet across on a west facing slope in the the Story hills. Another skier experienced very sensitive conditions in Beehive Basin triggering an avalanche that broke 5-6" deep and ran 200 vertical feet on a SE facing slope. The mountains around Cooke City have seen their snowpack deteriorate over the past week as well. A snowmobiler reported a small avalanche north of Daisy Pass on Thursday.

Yesterday, Doug, Mark and I traveled into Hyalite Canyon to investigate the avalanche that killed an ice climber Thursday morning. This slide was triggered by a pair of climbers ascending the gully above the victim. The avalanche occurred on a 38 degree slope in a west facing gully at 8,600 ft. The avalanche consisted of hard wind slab that broke 40 feet across and 18 inches deep. This hard slab failed on a thin layer of facets and triggered other small pockets of wind slab as it traveled down the gully. The consistent loading and confined nature of these gullies in Hyalite make them a very dangerous place. See a video of the accident site at: <a href="http://bit.ly/6Muawj">http://bit.ly/6Muawj</a>

See photos at: http://www.mtavalanche.com/photo

We will issue a full report of this accident on Monday.

Today any slope with wind deposited snow has **CONSIDERABLE** avalanche danger. Slopes without wind deposited snow have a **MODERATE** avalanche danger

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

The southern Gallatin and Madison Ranges and the mountains near West Yellowstone have an extraordinarily weak snowpack. In fact, I don't think the snowpack can get any worse. At this point it does not matter if we get 3 inches or 10 inches of new snow. With the snowpack as weak as it is, any amount of snow that falls over the next few days will dramatically increase the avalanche hazard especially on wind loaded slopes.

Today all wind loaded slopes have a **CONSIDERABLE** avalanche danger. All other slopes have a **MODERATE** avalanche danger.

I 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.

## 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.