# **GNFAC** Avalanche Advisory for Wed Nov 17, 2010

Good Morning. This is Mark Staples with an early season avalanche information bulletin issued on Wednesday, November 17 at 7:30 a.m. This bulletin is sponsored by **On Site Management**, in partnership with the **Friends of the Avalanche Center**. Please remember that uphill traffic is not allowed at Big Sky or Moonlight Basin Ski Areas. Bridger Bowl is not open and has backcountry snow conditions.

#### Mountain Weather

Yesterday the winds were ripping from the west and northwest with gusts in the morning near 60 mph in Hyalite and near Big Sky. Temperatures dropped throughout the day with an additional 2-3 inches of snow falling in most areas. No snow fell overnight and temperatures were in the mid to low teens F this morning at 5 a.m. with southwest winds blowing 10-15 mph. Some snow is possible today but it will not accumulate. Temperatures will be near 20 deg F with southwest winds blowing 15-20 mph and increasing to 40 mph by the end of the day. More snow should arrive by Thursday afternoon.

### Snowpack and Avalanche Discussion

Since Sunday the mountains have received 15-20 inches of dense snow with over 2 feet falling in the upper bowls of Hyalite Canyon. This snow combined with snowfall from last week and the end of October has created a solid foundation for the rest of the winter. Much can change in coming weeks, but we're off to a good start and looking pretty good.

Eric and I skied just north of Bridger Bowl yesterday where we found a settled snow depth of 3 feet (photo). Our primary concern was a layer of graupel and heavily rimed, new snow crystals buried about 4 inches deep. We felt this layer with our skis while breaking trail, and easily found the large graupel pellets in quick hand pits. To get an avalanche on this layer, it needs the load of wind-blown snow. With strong NW winds over the past 2 days, finding wind loaded slopes is easy. Skiers near Hardscrabble Peak in the northern Bridger Range yesterday, found recent debris from natural avalanches coming from wind-loaded areas near ridgetops. In areas not affected by the wind, both skiers and hunters have reported good stability.

A crust exists at the interface between snow from October and snow from November. In our snowpit yesterday, this layer was not a concern, but I found evidence of very slight faceting that occurred during the first week of November. Ski patrollers at Moonlight Basin observed a similar layer, but it had a greater degree of faceting and broke cleanly in stability tests. This layer doesn't appear to be much of a problem but warrants consideration until we get more snowpack data.

Hunters need to be especially tuned in to the avalanche potential since they are crossing many paths and exposing themselves to terrain traps, many times solo. Unlike the thin snowpack of a few weeks ago, the higher elevations have enough snow to bury a hunter, skier, boarder or ice climber. No matter your activity, be alert for signs of instability: recent avalanches and shooting cracks are telltale signs.

I will issue another Avalanche Information Bulletin Friday morning. If you have any snowpack or avalanche observations, drop us a line at mtavalanche@gmail.com or call us at 587-6984.

#### **Gallatin County Search and Rescue**

Gallatin County Search and Rescue is looking for members to join the winter backcountry hasty team. Members need solid avalanche rescue skills, excellent ski skills and medical training. This group trains five times during the winter and makes themselves available for avalanche related accidents and winter SAR operations. There is a meeting this Sunday, November 21, at 6:30 p.m. Call Scott Gill at 585-9006 for more information.

## **Upcoming Avalanche Education**

1 Hour Avalanche Awareness Class (Free) - Tonight, 7:30pm - 8:30pm - Grizzly Outfitters, Big Sky, MT (<u>more information</u>)

1 Hour Avalanche Awareness Class (Free) -Thu, November 18, 6:30pm - 7:30pm - Basecamp, Billings, MT (more information)

Basic Avalanche Awareness – Wed & Thurs, December 1 & 2, 7:00pm – 9:30pm at SUB Ballroom B&C; 12/4-Field day at Bridger Bowl (more information) (PrePay \$25 fee)

Avalanche Awareness for Snowmobilers – Wed & Thur, December 1 & 2, 7pm – 9:30pm at Team Bozeman, 2595 Simmental Way (more information)