

GNFAC Avalanche Forecast for Fri Nov 16, 2012

Good morning. This is Mark Staples with early season snowpack information issued Friday, November 16 at 11:00 a.m. Today's information is sponsored by Montana Import Group in partnership with the Friends of the Avalanche Center. This information will be updated as conditions change.

Mountain Weather

Yesterday was a beautiful sunny day with calm winds. Overnight, southerly winds increased to 20-40 mph and calmed a little this morning. A small disturbance may bring a dusting of snow tonight; otherwise, the next few days will have warm dry weather and relatively calm winds. Winds should increase Sunday ahead of an approaching cold front that will bring colder temperatures and more snow starting late Sunday.

Snowpack and Avalanche Discussion

We currently have limited snowpack data, but we can make a few generalizations that will help guide your hunt for instabilities. There have been 3 weather events that have formed the 3 basic layers in the snowpack.

- Just before Halloween many areas received heavy wet snow followed by drenching rain. This combination of snow and rain has formed a hard layer of ice and snow at the ground.
- One week ago, just before Veteran's day weekend, most areas received substantial snowfall and cold temperatures. In the Bridger range 15 inches of snow fell, near Big Sky and south of Bozeman 8-12 inches fell, and near Cooke City and West Yellowstone 6-8 inches fell. This snowfall was followed by strong winds and has formed the middle layer of the snowpack.
- During the last 5 days, a few small storms have deposited 2-6 inches of fresh snow forming the top layer of the snowpack.

Compared to last year which was plagued by weak snow at the ground, things are looking much better now. Although a lot can change this fall, the snowpack currently has a strong foundation; however, this does not mean the light is entirely green. Some stability problems exist near the top of the snowpack.

Last weekend, strong winds formed many wind slabs that were easily triggered but have likely stabilized in most places. This week's snowfall has also been transported by the wind and formed fresh wind slabs near ridgelines that you could trigger. A skier on Miller Mountain near Cooke City found wind slabs that collapsed and cracked, a sign of instability. Also near Cooke City a layer of widespread surface hoar was reported on November 5 and may now be buried but we are not sure. Yesterday Eric and I skied in the Northern Bridger Range where we found a strong and stable snowpack in areas that did not have recent wind loading ([photo](#), [video](#)).

Skiing and riding conditions have improved greatly in many areas but keep a few things in mind if you go out:

1. Find a slope less than 30 degrees with a similar aspect and elevation to the slope you hope to ski or ride and dig a snowpit to assess bonding between layers in the snowpack. This assessment should take only 5 minutes because the snowpack is shallow, and there are only a few layers to assess.
2. As you approach ridgelines, watch for fresh wind drifts and wind slabs. These can easily avalanche if they have recently formed or if they are sitting on a faceted layer of snow.
3. We've received one report of weak, faceted snow at the ground on North aspects. Look for this sugary snow in your snowpit.

4. Consider the consequences of being caught in an avalanche. A thin snowpack means any avalanche will probably hurt because it will carry you through or over rocks that aren't buried yet.
5. [Read the accident report](#) from a slide on October 28. They shared some great information and some great lessons.
6. [Take an avalanche class](#). If you've already had one, consider taking another as an early season refresher.

Hunters are especially prone to avalanches as they often travel alone and are thinking of elk not avalanches. Avoid any snow covered open slopes, especially ones with wind drifts or ones that drain into gullies or other terrain traps.

If you have any snowpack or avalanche observations, drop us a line at mtavalanche@gmail.com or call us at 587-6984.

EDUCATION

Introduction to Avalanches with Field Course at MSU in the evenings of November 28 and 29 with an all-day field session on December 1. Sign up for this class [HERE](#).

Snowmobiler Introduction to Avalanches with Field Course in Bainville at the Bainville School on December 2, 8 a.m. - 12 p.m. and the field course on January 20 in Cooke City. Sign up for this class [HERE](#)

Snowmobiler Introduction to Avalanches with Field Course in Billings at Hi-Tech Motor Sports on December 12 and 13, 6-9 p.m. and the field course on January 20 in Cooke City. Sign up for this class [HERE](#)

Snowmobiler Introduction to Avalanches with Field Course in West Yellowstone on December 20 and 21. Sign up for this class [HERE](#).

FREE 1 hour lectures:

November 20 Avalanche Movie at the West Yellowstone Holiday Inn at 6 p.m.

December 3 at Northern Lights Trading Company, Bozeman, 7 p.m.

December 8 at Greenup Performance in Black Eagle near Great Falls, MT, 7 p.m.