

GNFAC Avalanche Advisory for Sat Nov 10, 2012

Good morning. This is Doug Chabot with early season snowpack information issued Saturday, November 10 at 7 a.m. Today's information is sponsored by Grizzly Outfitters in partnership with the Friends of the Avalanche Center. Please remember that uphill traffic is not allowed at Big Sky or Moonlight ski areas. It is permitted at Bridger Bowl, but backcountry conditions exist within the ski area boundaries. This information will be updated as conditions change.

Mountain Weather

The storm is tapering off this morning and will drop only an inch or two more. At 5 a.m. the snowfall amounts are approximately 16 inches in the Bridger Range, 8-12 inches in the mountains around Big Sky and Bozeman, and 6-8 inches outside West Yellowstone and Cooke City. Winds have been blowing 5-15 mph out of the southeast to southwest with temperatures dropping in the last 36 hours to the single digits. Tonight, temperatures will read near zero under clearing skies. The rest of the week looks chilly with the possibility of flurries Wednesday followed by high pressure.

Snowpack and Avalanche Discussion

The snowpack depth doubled in many areas. The snow from this storm also weighed a lot; it measured 10% density. In many places the new snow fell onto a dense, strong base, but this may not be the case everywhere. We do not know. However, we do know that rapid, large loads of snow, like this storm, can cause avalanches.

Mark found two feet of strong snow around Cooke City on October 31 ([photo](#), [video](#)) and we've gotten reports of 1-2 feet of strong basal snow elsewhere. My immediate concern is the interface between the old snow surface and new snow. Last Monday (November 5) we received a report of widespread surface hoar around Cooke City. It might have melted during the warm pre-storm weather, but then again maybe it didn't. We do not like buried surface hoar since its prone to avalanche.

With all the new snow and excitement of skiing and boarding there are a few things you can do to be safe.

1. Dig down to the old snow surface and check if the new snow is sticking to it. It's worth taking the time to do a quick [stability test](#).
2. Probe to the dirt with ski poles. Pushing through dense snow only to meet less resistance near the ground is a sign of a slab overlaying weaker snow, a recipe for avalanches.
3. As you ascend near the ridgelines be careful about wind drifts. These may avalanche, especially immediately following a storm.
4. Only travel one at a time in avalanche terrain, which is defined as slopes steeper than 30 degrees.
5. Early season outings deserve the same respect and attention to detail as mid-season. Do not cut corners. Shallow snowpacks avalanche. Always carry a beacon, shovel and probe.
6. [Read the avalanche accident report](#) about three skiers caught in a slide on October 28. They shared some great information that we can all learn from.

7. [Take an avalanche class](#). If you've already taken one, then take another. Avalanche education is the first line of defense in being safe and responsible to your backcountry partners and family.

Hunters are especially vulnerable 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. We will not be issuing danger ratings until we get more snow and more field data.

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 West Yellowstone December 20 and 21. Sign up for this class [HERE](#).

FREE 1 hour lectures:

November 14 at Grizzly Outfitters, Big Sky, 7 p.m.

November 14 at the Basecamp, Billings, 6:30 p.m.

November 15 at the Basecamp, Helena, 6:30 p.m.

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

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