

GNFAC Avalanche Advisory for Tue Dec 15, 2009

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, December 15 at 7:30 a.m. **ProLite Gear**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Yesterday, scattered showers dropped 1-2 inches in the southern mountains and a trace to 1 inch in the north. Westerly winds were strong at 20-30 mph and are getting even stronger as the arctic front finally leaves. Everyone in the northern areas was held hostage to this frigid air, but now we're free to warm up and stretch our legs. Currently, mountain temperatures are 14F, 10-15 degrees warmer than the past few days. For the next 24 hours winds are expected to blow west to southwest at 20-40 mph. Snowfall will be limited to the southern mountains with 1-2 inches falling around West Yellowstone and 2-4 inches outside Cooke City.

Snowpack and Avalanche Discussion

The southern Gallatin and southern Madison Ranges, the Lionhead Area near West Yellowstone, the mountains outside Cooke City and the Washburn Range:

We issued an Avalanche Warning on Sunday and Monday for the southern mountains. The snowpack is weak and the 16-24 inches of snow made the backcountry unstable. Yesterday, Karl Birkeland and I went to the worst of the areas, Lionhead, to see how bad it was. Many slopes steeper than 35 degrees slid early in the storm without much snow load. We could see 1 foot deep crowns and soft slab debris on the slopes. The snowpack consists of two feet of faceted, sugary grains to the ground with the new snow capping it. We had widespread collapsing and cracking and our stability tests took little force to propagate a fracture. These are all signs of unstable, dangerous conditions. We stayed on terrain less than 30 degrees and were hyper conscious about getting underneath anything steep. These are the conditions where someone could trigger an avalanche from the bottom of a slope. Stay clear of runout zones. We took a few pictures and made a video clip showing these instabilities.

Video clip of stability tests: <http://www.youtube.com/watch?v=UfwsXndHeM>

Three photos from Lionhead: <http://www.mtavalanche.com/photo>

In Lionhead the facets reach the ground and the snowpack isn't supportable. Fat skis are mandatory to float, and the sugary snow is so deep that I actually got face shots of facets as I snowmobiled down a hill-a first. Around Cooke City and further north the snow is more supportable, but an 8 inch layer of large, weak, and now unstable facets are underneath all this new snow. Facets are like Kryponite--they rob the snowpack of its strength. For today, the avalanche danger is rated **HIGH** on all wind-loaded slopes and any terrain steeper than 35 degrees. All other slopes have a **CONSIDERABLE** danger.

The Bridger, northern Gallatin and northern Madison Ranges:

There's a common theme with all the snowpacks in our advisory region-facets. Some areas have layers a few feet thick while others are only inches wide. No matter. They're directly under the windblown slabs and new snow. In the northern mountains they have gotten weaker with the cold temperatures. Over the weekend skiers

triggered a slide near Mt. Blackmore and also in Beehive/Middle Basins. Climbers triggered slides up Hyalite and yesterday the ski patrols at Big Sky got widespread collapsing and cracking at treeline while Moonlight Basin reported a few small natural slides. Traveling and making good, smart, correct decisions regarding the snowpack is difficult right now. Facets scare me and they've been doing nothing but get weaker over the last few weeks-a trend I'm not happy with. Be conservative and second guess yourself before dropping into serious terrain. For today, the avalanche danger is rated **CONSIDERABLE** on all slopes.

Mark 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.

HYALITE ACCIDENT REPORT

We posted the accident report on the avalanche that killed Guy Lacelle in Hyalite Canyon on Thursday. You can read it out on our Accidents page at: <http://www.mtavalanche.com/accident/09/12/13>

TWEET TWEET: STAY IN THE LOOP

We're using Twitter to update folks at all hours on the snowpack, avalanches, accidents and other worthy topics. Check out our tweets at <http://www.mtavalanche.com/twitter> or <http://twitter.com/avalancheGuys>.

AVALANCHE EDUCATION

1. BOZEMAN: **TONIGHT** at 7pm there will be a FREE one hour Avalanche Awareness Lecture at the Bozeman Public Library.
2. 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>
3. BOZEMAN: Montana Outdoor Science School is offering a Level 1 Avalanche Course January 7-10. For more information, contact Moss at 406-582-0526.