GNFAC Avalanche Advisory for Tue Dec 29, 2009

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, December 29, at 7:30 a.m. **Team Bozeman and Yamaha**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

The last two days have been stunning with lots of sun, mountain temperatures in the high teens and calm winds. Today a small disturbance will bring increasing clouds, winds at 15-20 mph out of the southwest and temperatures near 20F. There's not much moisture or energy associated with this system and I only expect a trace of snow near West Yellowstone by tomorrow morning.

Snowpack and Avalanche Discussion

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

I spent the last two days snowmobiling and skiing in the mountains outside Cooke City. I was not happy that the snowpack down there was even more unstable than I originally thought. On all aspects I found weak, sugary, faceted snow 2-3 feet under the surface. It was breaking clean in all my stability tests. As my partner and I skied and rode around we got collapsing and cracking and even saw a few recent avalanches. Late Sunday afternoon a snowmobiler triggered and was caught in a slide on the Miller Creek aspect of Crown Butte. It broke 400 feet wide, 2-4 feet deep and he was luckily not buried. This slope had 10-20 snowmobile tracks on it prior to sliding. The facets are underneath a thick hard slab of windblown snow. This slab is supportable in most areas and is letting folks climb high onto slopes. But, as this rider found out, there are spots where the slab is thinner allowing his weight to collapse the weak layer creating an avalanche which rips out all previous highmarks. The take home point: Tracks do not equal stability.

Also on Sunday a snowmobiler triggered and was buried in a small slide in Taylor Fork. I posted a picture on the web sent to us anonymously. The rider was in a terrain trap of a gully. Luckily he was dug out and uninjured, but I have no other details. On Saturday, a rider noted lots of collapsing and cracking on tame slopes in this same area. A small natural slide was also found near Buck Ridge and skiers got low scores in their stability tests in Beehive Basin. All of this activity in the last 72 hours points to unstable conditions. For today, human triggered avalanches are probable and the avalanche danger is rated **CONSIDERABLE**.

Many pictures of recent avalanches: http://www.mtavalanche.com/photo

A video of my Crown Butte avalanche investigation: http://www.youtube.com/watch?v=2O9OjMXIECo

The Bridger and northern Gallatin Ranges:

The new guy was showing off yesterday. Eric and his partner skied to the summit of Hyalite Peak, 15 miles roundtrip, and dug four snowpits along the way. When I used to ride up there on a snowmobile I was hard pressed to dig four snowpits! They found facets about a foot under the surface, but they were not breaking clean. These sugary grains will take a while to bond and get strong, so we're not out of the woods just yet. Although Eric found relatively stable conditions, it's worth noting that as recently as a week ago skiers on Divide Peak north of Hyalite Peak got widespread collapsing and cracking near the ridgelines. In the Bridger Range the

snowpack is similar. On Saturday, Mark went to Frazier Lake while Eric headed south of the ski area. They both concluded that without a load of new snow the stability was improving. However, anytime we're dealing with buried facets our hackles are raised since they can be unpredictable. Consequently, it's still possible to trigger an avalanche and the danger is rated **MODERATE**.

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.

AVALANCHE EDUCATION

1. WEST YELLOWSTONE

Snowmobilers and Skiers: Saturday, January 2 from 12-5 pm at the Holiday Inn is avalanche lectures. Sunday, January 3 will be an all day field session for both skiers and snowmobilers. \$30 suggested donation. No sign up required. http://www.mtavalanche.com/education/classes/snowmobilers

2. BOZEMAN

Level 1: 7-10 January, Montana Outdoor Science School is offering a Level 1 Avalanche Course. Instructors are Angela Patnode and Jay Pape. For more information, contact Montana Outdoor Science School at 406-582-0526.

3. BOZEMAN

Level 1: American Avalanche Institute is offering a Level 1 Avalanche Course January 22-24, 2010 at Bridger Bowl. Get more information and register at: www.americanavalancheinstitute.com

4. FOUR CORNERS

Rescue Lecture: On Tuesday, 26 January, the Gallatin Valley Snowmobile Association is having it annual Chili Feed at 6:30pm in the Groomer Shack. At 7:00 there's a free Avalanche Rescue Talk. http://www.mtavalanche.com/workshops/calendar

5. BOZEMAN

Basic Avalanche Workshop: The Friends of the Avalanche Center and MSU are offering a Basic Avalanche Awareness Class the evenings Wed, Thur, 27 & 28 January with a field day on Saturday, 30 January. \$25 donation. No sign up required. http://www.mtavalanche.com/education/classes/basic