

GNFAC Avalanche Forecast for Sun Dec 13, 2009

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, December 13 at 7:30 a.m. **Gallatin County Search and Rescue**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

The Gallatin National Forest Avalanche Center is issuing a **Backcountry Avalanche Warning for the southern Gallatin and southern Madison Ranges, the Lionhead area near West Yellowstone, the mountains around Cooke City and the Washburn Range in northern Yellowstone National Park.** New snow over the last 24 hours was deposited on an extremely weak snowpack. **Today the avalanche danger is HIGH on all slopes.** Areas of unstable snow exist. Natural and human triggered avalanches are likely. **Avalanche terrain including avalanche runout zones should be avoided.**

Mountain Weather

Montana is under the influence of two powerful weather systems. At 4 a.m. this morning the mountains around Cooke City have received a total of 16" of new snow. The southern Gallatin and Madisons have received 6-12" with most snowfall being around West Yellowstone. Only a trace has fallen in the northern areas. Winds for these areas are strong out of the W-SW at 20-25 mph and will continue throughout today. An additional 6" will accumulate by tomorrow morning in the southern ranges. Big Sky will pick up 2-4 inches by tomorrow while the northern Gallatin Range and Bridgers will only receive a trace.

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:

Heavy snow and strong winds have created an avalanche warning for the southern ranges. This heavy load has arrived very quickly adding an incredible amount of stress to an extremely weak snowpack. Mark Staples and his partner traveled to the Taylor Fork yesterday and found unstable conditions. He experienced cracking, collapsing and even triggered a 10" deep avalanche on a leeward slope (see photos).

South of the Taylor Fork in the Lionhead area outside West Yellowstone, 12" of new snow has fallen on a purely faceted snowpack. This rotten snowpack has the strength of a wet paper bag and stands no chance of supporting the load it just received. I would avoid travel in and underneath avalanche terrain at all costs. The mountains around Cooke City have a slightly stronger snowpack, but have received the heaviest load. The cold temperatures over the past week have created a weak faceted surface for the new snow to fall on creating an extremely unstable and dangerous conditions. With avalanche activity reported before this storm, you can be sure that avalanches are happening right now. Today the avalanche danger is HIGH on all slopes. This means natural and human triggered slides are likely. With more snow and wind forecasted through today, travel in avalanche terrain is not recommended.

The Bridger, northern Gallatin, northern Madison Ranges:

Even though the snow gods are favoring the southern mountains creating an avalanche warning there are still stability concerns in the north. New wind slabs are unquestionably forming on weak faceted snow creating unstable conditions. This combination killed an ice climber on Thursday when an avalanche swept him off a cliff. Yesterday, a skier was caught in a small avalanche on Mt Blackmore in the northern Gallatin Range. The slide broke 20 feet above him on NE facing, 38 degree slope. The avalanche ran approximately 400 downhill and had a crown of 8-14". The skier was able to arrest himself before being strained through some trees and was unharmed.

See a video of the accident site at: <http://bit.ly/6Muawj>

See photos at: <http://www.mtavalanche.com/photo>

Farther south, a skier in Beehive reported a large amount of cracking on wind slabs that were not confined to just ridgelines. On Friday another skier triggered a small avalanche in this area. Throughout the northern mountains skiers and climbers continue to trigger avalanches on wind loaded slopes. Today any slope with wind deposited snow has a **CONSIDERABLE** avalanche danger. Slopes without wind deposited snow have a **MODERATE** avalanche danger.

Doug 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. BOZEMAN: On Tuesday, December 15 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.