GNFAC Avalanche Advisory for Fri Apr 2, 2010

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, April 2, at 7:30 a.m. The **Big Sky Ski Patrol**, in cooperation with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday 5 inches of snow fell in the northern Gallatin Range, and 2-3 inches fell in the southern Madison Range and the mountains near West Yellowstone. All other areas received a trace of new snow. This morning temperatures were in the low teens F with NW and W winds blowing 10-15 mph. Today temperatures will rise into the upper 20s F and winds will shift to the SW and increase this afternoon. A fast moving storm hitting the west coast this morning will arrive this evening and deposit 2-3 inches of snow in the southern half of the advisory area and 1-2 inches in the northern half.

Snowpack and Avalanche Discussion

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

Winter continues in the mountains with plentiful snow and cold temperatures. Avalanches have been observed on <u>Woody Ridge</u> near Cooke City, <u>Fan Mountain</u> near Big Sky, Argentina Bowl near Saddle Peak, and Frazier Basin in the northern Bridger Range. A group of snowmobilers near Cooke City triggered 3 slides while playing in the trees and crossing several chutes. They wisely used this data to assume bigger slopes would also be unstable.

Many avalanches occurring after Tuesday's storm were confined to the new snow but not all. Some broke on a layer of facets that formed during the dry spell from mid February to mid March now buried about 1.5-3 feet deep. Eric and I found this layer last week in the northern Bridger Range (video) on a NE facing slope and Karl found it 2 days ago on Mt Ellis. In both places we came to the same conclusion that this layer would produce human triggered avalanches and should not be trusted. However, this layer is not uniform and a group of skiers yesterday in the northern Bridger Range carefully evaluated stability and found several steep slopes with stable snow and good skiing.

Stability assessments can be challenging this time of year when we want to believe the snowpack is stronger than it really is. The key is to continually hunt for signs of instability throughout the day. Also remember the history of this snowpack. It has produced many avalanches on facets near the ground, and it gives me little confidence. Evaluating the strength of these facets is difficult. For this reason consider the consequences of a slide in case your stability evaluation is wrong, and look for slopes with a run out free of any terrain trap. Today human triggered avalanches are probable on wind loaded slopes steeper than 35 degrees near ridgelines or above treeline where the avalanche danger is rated **CONSIDERABLE**. All other slopes have a **MODERATE** avalanche danger.

Eric will issue the next advisory tomorrow morning at 7:30 a.m. If you get out in the backcountry let us know what you find. You can reach us at 587-6984 or email us at <u>mtavalanche@gmail.com</u>.