GNFAC Avalanche Forecast for Sat Mar 13, 2010

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, March 13, 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

This morning temperatures were in the mid to high 20s F with southerly winds blowing 15-30 mph. Much needed snowfall should arrive this afternoon with an associated cold front. Temperatures will reach the low 30s but start to cool later today. Winds will calm midday then shift to the north this afternoon bringing cold air as moisture comes from the west. This spring storm is moving fast but should deposit 3-5 inches of snow by tomorrow morning.

Snowpack and Avalanche Discussion

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

Without much new snow, the snowpack has not been stressed enough for widespread avalanche activity, but sporadic activity continues. Yesterday 2 natural avalanches were observed by the Moonlight Basin Ski Patrol. One occurred on a northerly aspect triggered by a small, wet snow point release near some rocks. Another happened on a southerly aspect possibly the result of intense solar radiation. Generally the snowpack has three weak layers:

- 1. Facets near the ground persist, and the last reported avalanche on this layer occurred early last week. With the addition of a rapid load like localized heavy snow plus a little wind blown snow and a skier or rider, and this layer could easily produce more avalanches.
- 2. About 1-2 feet deep in the snowpack, a layer of <u>surface hoar</u> exists through much of the advisory area. This layer is especially tricky because it does not exists on all slopes. On some slopes it remains sensitive while on others it has gained strength. Eric and his partner found this layer near Cooke City where it was their primary avalanche concern (video).
- 3. Near the snow surface only a few inches deep, a layer of either surface hoar or near surface facets exists. This layer can be found on most slopes and most aspects, but appears weakest on shaded north facing terrain (video). This layer will become a greater problem once more snow falls.

Weak layers closer to the snow surface are the primary concern and appear most sensitive on shaded, north facing slopes with the best skiing and riding conditions. Fortunately these layers are not buried deeply and stability assessments can be done quickly and easily. Variability in these layers can be an advantage and stable slopes can be found, but it also means human triggered avalanches are possible. Today the avalanche danger is rated **MODERATE**.

New Beacon Park: Skiing or riding near West Yellowstone? Test your beacon skills at a new beacon park near the old airport where you can search for pre-placed beacons switched on/off by a control panel. Look for it by orange snow fence and signage just south of the snow cross track. For more information on beacon parks, visit: http://bit.ly/dqXrFM

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 mtavalanche@gmail.com .				