GNFAC Avalanche Advisory for Fri Mar 19, 2010

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, March 19, at 7:30 a.m. **On Site Management**, in cooperation with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Overnight the Bridger Range received 7-10 inches of snow. Big Sky received 1-2 inches while all other areas either received a trace of new snow or remained dry. Temperatures this morning were in the mid to low teens F. Winds were blowing 10-20 mph from the NW except in the Bridger Range where mid mountain winds began blowing 20-30 mph just as snowfall ended. No more snow should fall and skies should be mostly cloudy today with high temperatures near 20 degrees F. Winds should eventually calm in the Bridger Range, and over most of the area northerly ridgetop winds will blow 10-15 mph.

Snowpack and Avalanche Discussion

The Bridge Range:

New snow in the Bridger Range fell on a wide variety of snow surfaces. On south and west facing slopes this old surface is likely a thick ice crust. On more shaded aspects the old snow surface may have a thin ice crust, but likely contains a layer of near surface facets that produced an avalanche last weekend (photo1, photo2, photo3). Regardless of what's underneath the new snow, 7-10 inches overnight plus strong winds this morning means the avalanche danger has increased. New snow is the primary concern, but avalanches can break deeper especially on shaded slopes where recently buried weak layers have not been cooked by the sun. Today the avalanche danger is rated **CONSIDERABLE** on any wind loaded slope or any slope steeper than 35 degrees. All other slopes have a **MODERATE** danger.

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

With 1-2 inches of new snow near Big Sky and a dusting of snow in other areas, stability concerns have not changed. The snowpack contains faceted snow near the ground, surface hoar buried 1.5-2 feet deep, and more facets buried 6-10 inches deep. Facets near the ground exist on all slopes. This layer is mostly dormant and unaffected by recent warm weather, but it continues to remind us of its existence with avalanches like one on Lone Mountain last weekend (photo). The existence of this layer alone has caused many experienced backcountry skiers to dial back their ambitions for this season. Faceted layers closer to the surface exhibit more variability and are weakest on shaded slopes with a northerly aspect. With these weak layers present, human triggered avalanches remain possible and the avalanche danger is rated **MODERATE**.

New Beacon Park

The Friends of the Avalanche Center used a donation from **Yellowstone Adventures** to purchase an avalanche beacon training park in West Yellowstone. You can search for pre-placed beacons switched on/off by a control panel. Look for it by the orange snow fence just south of the old airport (photo).

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.