

GNFAC Avalanche Advisory for Mon Mar 22, 2010

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, March 22, at 7:30 a.m. **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

The ridge of high pressure that brought us sunny skies yesterday has broken down as a moist pacific storm system pushes in from the west. This approaching storm has produced gusty ridgetop winds that are blowing 20-30 mph out of the W-NW. Currently, light snow has started to fall in the Bridger Range totaling close to an inch while the other ranges of our advisory are remain dry. Presently, mountain temperatures are in the mid to upper twenties, but will rise into the mid thirties by this afternoon. These mild temperatures will prevent snow from accumulating in the valley, but the mountains should see 3-5 inches by tomorrow morning. Winds will start to subside by this afternoon as the frontal passage moves past our area.

Snowpack and Avalanche Discussion

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

Yesterday's high clouds and stiff breeze helped abate any wet snow avalanche activity which has prolonged the endangered existence of our snowpack. However, the snowpack did absorb enough radiation on south and west facing slopes to soften up the top few inches, initiating the creation of yet another melt freeze crust on these aspects. These surface crust could become a problem if we receive more snow and wind today.

Yesterday, Doug and I rode into the Taylor Fork to assess snow conditions and have a look around. We found better than anticipated riding conditions in most areas thanks to strong winds and a few inches of new snow that fell earlier in the week. We did observe a few small point releases on south facing slopes, but these were minor and relatively harmless. No other avalanche activity was observed in the area.

Although our snowpack appears to be in a fairly idle state, avalanches are still possible. A snowmobiler found this out yesterday, when he was caught and fully buried in a slide near West Yellowstone. Lucky for this rider he was being watched by his partners and was rescued in a matter of minutes. The avalanche occurred on a north facing slope, and broke 1-2 feet deep on a layer of surface hoar sitting over facets ([photo1](#), [photo2](#)).

Although north facing slopes now hold the best riding conditions, they also hold a variety of weak layers, all of which are capable of failing and producing avalanches with the proper trigger.

Near surface facets sitting six to ten inches below the surface is one layer to look out for. This layer will likely be found on shady aspects and will become increasingly sensitive with the addition of more snow wind. Buried surface hoar 1.5 to 2 feet below the surface is another layer of concern. Although this layer is not as uniform in distribution as the weak near surface layers, it still has the ability to catch you by surprise, as demonstrated by the slide yesterday. The most widespread and persistent weak layer in the snowpack is the faceted layer near the ground. This layer has become increasingly quiet with the lack of snow, but still holds the potential to produce avalanches if tickled in perfect spot.

With multiple weak layers existing in the snowpack and more snow and wind forecasted through today and tomorrow, human triggered avalanches are 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](#)).

Doug 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.