

## **GNFAC Avalanche Advisory for Thu Mar 18, 2010**

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, March 18, at 7:30 a.m. **Sweet Pea's Nursery**, 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 at 4 a.m. temperatures had cooled to the mid 20s F with light winds blowing 5-10 mph from all directions. Today will see mostly cloudy skies and high temperatures in the mid 20s as north winds blowing 10-15 mph bring cold air into the area. Snowfall should begin tonight with 3-4 inches accumulating in the Bridger Range. Most other areas should get 2-3 inches except the mountains near West Yellowstone which may only get a trace to one inch of snow.

### 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:*

Lately it seems the snowpack has gained more weak layers than new snow, and recent warm weather has not been sufficient to add any strength to the snowpack. Within the top 2 feet of snow, multiple weak layers exist. Generally these layers are buried surface hoar 1.5 - 2 feet deep and small facets 6-10 inches deep. Yesterday in the Taylor Fork area of the southern Madison Range, my partners and I found these layers on all aspects. They were obvious on north facing slopes with dry snow and decent skiing and less obvious on south facing slopes which had a hard crust in the morning and wet snow in the afternoon. As we dug a snowpit on a north aspect, we immediately noticed two things: a very shallow snowpack for this time of year and facets near the ground. While isolating a 30 cm X 90 cm column of snow, it broke on these facets and knocked me over upon isolation, a bad sign. I didn't think this stability test result (ECTPV) indicated horribly unstable conditions, but it demonstrated the weak and persistent nature of these facets.

Yesterday on a south facing slope, the Big Sky Ski Patrol intentionally triggered a loose, wet snow **avalanche** that quickly entrained more snow as it stepped down to these facets near the ground. Four days ago backcountry skiers on a north facing slope on Lone Mountain triggered an impressive **avalanche** initially on a layer of facets 10 inches deep but also stepping down to facets near the ground. Skiers nearby on Mt Wilson found similar stability issues and limited their skiing to slopes less than 30 degrees. With very low confidence in the snowpack, my partners and I did the same. Because the snowpack has not been stressed by recent snow, avalanche activity has been limited, but the snowpack continues to show its weak nature and its ability to produce human triggered avalanches. With these avalanches possible today, a **MODERATE** danger exists on all slopes.

### New Beacon Park

The Friends of the Avalanche Center used a donation from **Yellowstone Adventures** to help purchase this 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](#)).

I 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](mailto:mtavalanche@gmail.com).