GNFAC Avalanche Advisory for Fri Mar 28, 2014

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, March 28 at 7:30 a.m. Montana Import Group in partnership with the Friends of the Avalanche Center sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

The big winner yesterday was Big Sky which received 12 inches of new snow. All other areas received 4-5 inches. This morning temperatures were in the mid-teens to low 20s F. Winds were blowing 15 mph gusting to 25 mph from the W and SW. Today will be a mix of sun and clouds and high temperatures will be near 30 F. Winds should increase some by late afternoon and blow 15-30 mph from the SW. Snowfall will return tonight and favor the mountains near West Yellowstone and Cooke City where 3-4 inches should fall. Areas further north should get 1-2 inches.

Snowpack and Avalanche Discussion

Northern Madison Range

The mountains near Big Sky received 12 inches of snow yesterday containing 0.9 inches of SWE. Most of this snow fell during a 7 hour period. This area received 0.4 inches of SWE the previous day. Avalanches will be likely within the new snow especially on any wind loaded slope. The Big Sky Ski Patrol easily triggered shallow wind slabs yesterday with ski cuts.

A less likely but deadly problem will be avalanches breaking on weak facets near the ground. Yesterday's snowfall is exactly the scenario that can reactivate this deeply buried weak layer (video). You may not see natural avalanches on this layer nor will these big avalanches occur on every slope. Also, a slope may have many tracks on it before it produces a large avalanche. For these reasons today the avalanche danger is rated CONSIDERABLE.

Bridger Range Gallatin Range Southern Madison Range

Lionhead area near West Yellowstone Cooke City

The rest of the advisory area received 4-5 inches of snow containing 0.4-0.6 inches of SWE. Snowfall the previous day contained 0.3-0.6 inches of SWE. Winds increased since yesterday. Avalanches can easily be triggered on steep, wind loaded slopes. Additionally some surface hoar was observed yesterday in the Bridger Range and may have been buried by snowfall yesterday afternoon.

As the load of new snow slowly piles up, the odds of triggering an avalanche on facets near the ground slowly increase. With more snow coming this weekend, the odds will increase a little more. The problem is that we don't know exactly what those odds are. What we do know is (1) The odds are increasing with each storm. (2) Deep slabs are hard to trigger but areas with thin snow are good trigger points. (3) The consequences if caught in one of these slides are severe. Read this **article** and watch this **video** on the problems with deep slab avalanches.

For today, the avalanche danger is rated **CONSIDERABLE** on wind loaded slopes that are steeper than 35 degrees. All other slopes have a **MODERATE** danger.

Eric will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations drop us a line at mtavalanche@gmail.com or call us at 587-6984.

Our last daily avalanche advisory will be Sunday, April 6th. If conditions warrant we will issue intermittent advisories the following week.