GNFAC Avalanche Advisory for Fri Jan 21, 2011

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, January 21, at 7:30 a.m. Bridger Bowl, in cooperation with the Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday morning the mountains near Cooke City and West Yellowstone received 3-6 inches of snow. The mountains near Big Sky and Hyalite Canyon received an inch and the Bridger Range remained dry. Strong winds continue. This morning they were blowing 20-40 mph from the W except near Cooke City where they were blowing from the N. Temperatures were in high single digits F near Cooke City and West Yellowstone and mid to high teens F everywhere else. Today, winds should decrease slightly and temperatures should warm into the 20s F. Snowfall will come again tonight. The southern areas will again do well with 3-6 inches. Closer to Bozeman and Big Sky, 1-3 inches should fall.

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:

Bull's eye information today involves recent avalanche activity, new snow, and strong winds. Many natural avalanches were observed. Yesterday the Bridger Bowl Ski Patrol found many naturals involving fresh wind slabs and easily triggered many sizeable avalanches with both explosives and ski cuts. One notable natural avalanche, on a NE aspect of Saddle Peak, broke 3-4 ft deep and 150-200 ft wide running to the top of the cliffs. This one seems to have broken on deeper layers of snow that had faceted and weakened in recent weeks. Another deep slab avalanche was observed on Fan Mountain on a S aspect. Further south, a skier triggered a wind slab in the Taylor Fork area (photo), and a skier near Cooke City observed four recent avalanches involving fresh wind slabs. Plentiful new snow from early this week and continued strong winds will continue to form fresh wind slabs in most areas. A skier on Saddle Peak commented that it was "mostly just one big wind slab." These wind slabs are the primary concern today.

If recent avalanche activity, new snow and wind aren't enough of a problem, we've got one more. Isolated areas have a weak snowpack. These areas do not have a specific pattern with respect to aspect or elevation. The common factor is a relatively shallow snow depth which was less than 1 meter prior to this week's snowfall. Some slopes have been scoured during previous wind events while others at lower elevations simply have not received much snow. An avalanche on Saddle Peak, two on Lone Mountain at Big Sky (photo), one on Fan Mountain, and several near Cooke City (photo1, photo2) all highlight this instability that required the load of new snow and wind-blown snow to produce avalanches. At lower elevations, Doug found a slope in Beehive with this weak snow, and a skier on Mt Ellis found similar weak snow but felt okay skiing because it had not been stressed by enough new snow and wind-blown snow. Despite these findings, many slopes have a deep and strong snowpack where fresh wind slabs are the only concern.

For today, wind loaded slopes are widespread and have a <u>CONSIDERABLE</u> avalanche danger. All other slopes have a <u>MODERATE</u> avalanche 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.

SURVEY

The *Friends of the Gallatin National Forest Avalanche Center* are sponsoring a survey. We're trying to find out how we're doing, what we can do better and who our users are. The survey is 4 pages long and takes 5-10 minutes to complete. http://www.surveymonkey.com/s/YFCKDZH

Beacon Park Opening Celebration

The Bozeman Recreation Department is celebrating the opening of the Bozeman Beacon Park on Friday, January 28th from 4:00 to 6:00 p.m. at Beall Park, 415 N. Bozeman. The Recreation Department will offer food, refreshments, music, and training on how to use the park with your avalanche beacon. This event is free to the public. For information call 582-2290.

Avalanche Education

January 26, 27 and 29 in Bozeman

Basic Avalanche Awareness – Next Wednesday & Thursday 7:00 p.m. – 9:30 p.m. at MSU EPS Building, Room 103 with a field day on Saturday at Bridger Bowl (more information) (Prepay)

February 2, 3, and 5 in Bozeman

Advanced Avalanche Awareness – Wednesday & Thursday 7:00p.m. – 9:30 p.m. at MSU SUB Room 235 with a field day on Saturday at Bridger Bowl. ADVANCED REGISTRATION REQUIRED (<u>more information</u>) (
<u>Register</u>)

For additional information and a listing of other avalanche classes, go to: http://www.mtavalanche.com/workshops/calendar