GNFAC Avalanche Forecast for Tue Feb 9, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 9, at 7:00 AM. Today's advisory is sponsored by Mountain Valley Motorsports of Cody and Katabatic Brewery. This advisory does not apply to operating ski areas.

Mountain Weather

At 4 a.m. mountain temperatures range from the high 20s to low 30s F. Winds are out of the west-northwest at 20-30 mph with gusts near 40 mph. Today will be sunny with seasonally warm temperatures reaching the 40s F and winds out of the northwest at 15-25 mph. Warm and dry conditions will continue through Thursday, and then the weather pattern begins a slow shift back to cooler temperatures and light snowfall through the weekend.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Warm, dry conditions this week are a sharp contrast to the cold smoke powder last week. Strong winds dominated the transition between these conditions and left an imprint on every slope along the way. In upper elevation terrain, windward slopes were scoured to the ground and leeward slopes were loaded with thick, dense wind slabs.

Over the weekend, natural and human triggered wind slabs were reported near Cooke City, in the Bridger Range, and in the Northern Madison Range (**photo**, **photo**). Near Cooke City, some of these avalanches were up to 150' wide, 2-3 feet deep, and likely failed on a thin layer of small facets. A lack of recent snow available to grow these wind slabs has provided time for them to stabilize. However, it is still possible to trigger one of these slabs, so wind loaded slopes should be approached with caution.

It is also possible to trigger an avalanche on buried weak faceted layers. Depth hoar exists at the ground on most slopes and facets can be found in the middle of the snowpack on some slopes (video). It has become more difficult to trigger an avalanche on these layers, but there are still spots on some slopes where it is possible (video). An avalanche on one of these layers is more likely on wind loaded slopes, where they have additional stress and variable slab thickness where you may find a thin trigger point.

Wet loose avalanches are possible on solar aspects this afternoon due to above freezing temperatures. A consolidated snow surface and moderate wind should help minimize this problem, but watch for changing surface conditions on southeast-south-west aspects throughout the day.

Today, wind slabs and buried weak layers are becoming more difficult to trigger, but avalanches remain possible and the avalanche danger is rated **MODERATE**.

Doug will issue the next advisory tomorrow morning by 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or leave a message at 587-6984.

Darren Johnson Avalanche Education Memorial Fund

The National Avalanche Foundation set up an education fund in memory of Darren Johnson, the Yellowstone Club ski patroller who died in an avalanche on January 19. You can check out details and make donations here: http://www.mtavalanche.com/sites/default/files/NAF%20Darren%20Johnson%20Memorial%20Fund.pdf.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found **HERE**.

<u>Bozeman</u>, **TONIGHT!!**, February 9: *1hr Avalanche Awareness for Snowmobilers*, Summit Motorsports, 6-7 p.m.

Wednesday, February 10: Ihr Avalanche Awareness for Women, REI, 6-7 p.m.