GNFAC Avalanche Advisory for Fri Feb 12, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Friday, February 12, at 7:00 AM. Today's advisory is sponsored by <u>Cooke City Motorsports</u> and <u>World Boards</u>. This advisory does not apply to operating ski areas.

Mountain Weather

The mountains received 1-2" of new snow last night to begin a change in the weather pattern. Temperatures this morning are in the high 20s F and wind has been out of the west at 10-20 mph. Skies will be mostly cloudy today, temperatures will reach the high 30s F, and wind will be out of the west-northwest at 15-20 mph. Anticipate more snow Saturday afternoon and Sunday.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

I was in Cooke City the last two days and found a mixed bag of weak layers that create a poor snowpack structure. This setup is found throughout our advisory area. Depth hoar at the ground is found on most slopes. On some slopes, weak layers that formed on the surface in January are now buried 1-2 feet deep (**photo**, **photo**). Last weekend, strong winds loaded slopes and triggered a couple avalanches that broke on the depth hoar (**Woody photo**, **Republic photo**). On Sunday, skiers triggered a 2-3'deep x 150' wide wind slab that likely failed on a layer of facets. These layers have had time to adjust to last week's snow and wind, and avalanches are more difficult to trigger. However, avalanches are still possible to trigger in the right spot on some slopes.

It is worthwhile to dig for and test shallow buried weak layers before skiing or riding a slope. My arms are sore from digging for weak layers, despite what Doug says about being sore from getting my sled unstuck (okay, it's from both). On some south facing slopes we found unstable results and a poor structure that turned us away. On other slopes we found stronger snow that we felt comfortable riding (video). The most suspect slopes are steeper than 35 degrees and/or slopes that are wind loaded.

For today, the avalanche danger is **MODERATE** on slopes steeper than 35 degrees and on any slope that was wind-loaded. Lower angled terrain without a wind-load has a **LOW** danger.

Without recent snow and wind we are trending towards **LOW** danger. Low danger does not mean NO danger. The poor foundation of depth hoar at the base of our snowpack cannot be forgotten, and other weak layers may be unstable in isolated areas. I made <u>this video</u> discussing this structure and what to look out for.

Eric 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 <u>mtavalanche@gmail.com</u> or leave a message at 587-6984.

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 <u>HERE</u>.

West Yellowstone: Saturday, February 20, 7-8 p.m., *1-hr Avalanche Awareness for Snowmobilers* at the Holiday Inn.

Bozeman: Wednesday, February 24, 6-7 p.m. 1 hr Avalanche Awareness, Roskie Hall, MSU