GNFAC Avalanche Advisory for Thu Mar 3, 2016

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Thursday, March 3, at 7:00 AM. Today's advisory is dedicated to **Ben Richards**, a young skier who was killed in an avalanche on Yellow Mountain near Big Sky on this day in 2007. This advisory does not apply to operating ski areas.

Mountain Weather

The mountains received around 1" of snow in the last 24 hours. Winds overnight were out of the west-southwest with average speeds of 5-10 mph and 20 mph near ridgetops with gusts in the 30s. Temperatures are in the mid-20s F this morning and will rise to high 30s today under mostly cloudy skies. Wind will remain out of the west-southwest with speeds up to 35 mph. Snow showers are expected this afternoon with 1-2" of snow by tomorrow.

Snowpack and Avalanche Discussion

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Southern Madison Range Southern Gallatin Range
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Lionhead area near West Yellowstone Cooke City

The southern mountains have received up to a foot of snow in the past week that totaled around 1" of <u>snow water</u> <u>equivalency</u> (SWE). Strong westerly winds transported this snow to form wind slabs on many slopes at all elevations. These wind slabs will be possible to trigger today. Steep convex slopes are likely places to find and trigger these slabs.

Buried surface hoar exists throughout the southern ranges and the recent snow added enough weight to keep it unstable. Doug was at Bacon Rind yesterday and found unstable test results in the same spot that Eric, Karl, and I found stable results one week ago (video, photo). Identify this layer as a stripe in the snowpit wall (photo) and avoid steep slopes where it exists. It does not exist on every slope, but it does exist throughout the southern half of our advisory area. If you don't find it, dig another pit to make sure it is not there.

Wind slabs and buried surface hoar make avalanches possible to trigger today and the avalanche danger is **MODERATE**.

Bridger Range Northern Madison Range Northern Gallatin Range

The northern mountains were not favored with much snow in the past week and their snowpack is relatively stable (**photo**). The few inches of snow that did fall was high density and bonded well to the old snow surface. Strong winds may have blown this snow into isolated wind slabs that are most likely found on steep alpine slopes near ridgelines (**video**).

My partner and I toured in the backcountry west of Bridger Bowl yesterday and found a variety of snow depths and structures. We found slopes with shallow, weak snow, and slopes with deep, strong snow (**photo**). The weak snow has not been loaded and stressed by much snowfall in the last couple weeks and is mostly stable. However, this shows that poor snowpack structure does exist and could produce avalanches in isolated areas.

Today, the avalanche danger is rated <u>LOW</u>. Avalanches are unlikely, but not impossible. Small slides can be deadly in high consequence terrain, such as above cliffs, trees, or confined gullies. Consider the consequences of

terrain and watch for isolated pockets of unstable snow. It is a good idea to dig a pit before committing to a slope in order to be sure the snowpack is what you expect.

I 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.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found <u>HERE</u>.

Bozeman: Wednesday, March 9, 6-7 p.m. 1-hr Avalanche Awareness, REI.