GNFAC Avalanche Advisory for Tue Mar 18, 2014

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, March 18 at 7:30 a.m. <u>The Antlers Lodge</u> and <u>Ticket River</u> sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

At 6 a.m. we are at the tail end of a 24 hour storm that clobbered the northern Madison and northern Gallatin Ranges. Storm totals are 28" up Hyalite, 15-18" at Big Sky, 8" in the Bridger Range, 3-5" around West Yellowstone and 7" in Cooke City. Colder temperatures kept the new snow density around 7%. Winds are out of the northwest and averaged 15-20 mph but gusted 40-50 mph during the storm. Snowfall is tapering off and winds have calmed to 10-25 mph. Temperatures are in the mid to low teens and will warm into the low 20s as cloudy skies give way to sun this afternoon.

Snowpack and Avalanche Discussion

Northern Gallatin Range Northern Madison Range

The northern Gallatin Range is buried under 28" of new snow (1.9" <u>SWE</u>) while the Big Sky area got 15-18" (1.3" SWE). Winds were strong during the storm and there is no doubt there will be avalanche activity today. While most of the avalanches will be confined to new and windblown snow, a few slopes have weak snow near the ground which will be taxed further. On Sunday a skier saw two deep slab avalanches in Flanders Creek up Hyalite (**photo**). I expect a few more of these beasts to break free this morning. During and immediately after a storm is when the snowpack is most unstable and I would give avalanche terrain a wide berth. Today the avalanche danger is rated <u>HIGH</u> on all slopes steeper than 35 degrees and <u>CONSIDERABLE</u> on less steep slopes.

Cooke City

The mountains around Cooke City have gotten another 7+" with wind. Although wind-loaded slopes are the likely candidates to avalanche today, my real heartburn is the deep slab avalanche problem. Three large and deep avalanches have been triggered in the last week resulting in one fatality, one serious injury and one airbag ride. These avalanches are occurring on slopes with old and new tracks on them (**Daisy Pass photo**); they are breaking near the ground (**Crown Butte video1**, **video 2**) and are triggered from thin, rocky areas of the snowpack (**Mt. Abundance video**). Keep these three points in mind:

- Tracks do not mean the slope is safe.
- Deep slab avalanche problems are scary because we do not know how many trigger points are on a slope, nor where they are.
- Avoiding steep slopes seems to be the best course of action right now.

Today slopes steeper than 35 degrees have a **CONSIDERABLE** avalanche danger. Less steep slopes have a **MODERATE** avalanche danger.

You can read two accident reports on the recent avalanches here.

Bridger Range Southern Gallatin Range

Southern Madison Range Lionhead area near West Yellowstone

The Bridger Range got 8" with the mountains south of Big Sky to West Yellowstone only measuring 3-5". Winds have been blowing out of the northwest and wind drifts are our biggest concern today. The 7% density snow (.3 to .5" of SWE) will not overtly burden the weak facets found near the ground and mid-pack. Triggering avalanches on these deeper layers would involve finding a thinner, rockier spot on a slope coupled with bad luck. For today the avalanche danger is rated **CONSIDERABLE** on wind-loaded terrain and **MODERATE** on all other slopes.

I 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.