GNFAC Avalanche Advisory for Mon Mar 21, 2016

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Monday, March 21, at 7:00 AM. Today's advisory is sponsored by **Grizzly Outfitters** in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

Mountain Weather

Yesterday, under sunny skies, temperatures touched 50F in the mountains. Last night, clouds rolled in and temperatures remained a few degrees <u>above</u> freezing except in Lionhead and Cooke City. Winds are currently blowing 20 mph out of the southwest and gusting to 45 mph. Today will be cloudy and temperatures will rise to 40F as winds remain steady out of the southwest. Tonight, temperatures will cool and rain and snow will fall. By morning, there should be an inch of new snow in the north with 2-4 inches around West Yellowstone and Cooke City. Tomorrow will be stormy and snowy.

Snowpack and Avalanche Discussion

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone Cooke City

Yesterday's above freezing temperatures moistened the upper 2-4 inches of the snowpack on all but the most shaded, northerly facing slopes. Today will be windy and cloudy which will inhibit wet avalanche activity. In the southern mountains our primary avalanche concern regards two buried weak layers. I rode and skied into Carrot Basin and Lightening Creek yesterday and found one of the two: a layer of facets sitting atop an ice crust. This was only 18" under the surface and broke in my stability test (ECTP 19) which I show in this **video**. I found these facets on both an east and southwest slope. The second layer of concern is a layer of buried surface hoar 2-4 feet deep. I looked for this on a north facing slope, but could not find it, although Alex did in his snowpits in Lionhead (**video**). The mountains around Cooke City continue to reveal weak layers too. Yesterday, skiers observed two slab avalanches around Goose Lake that likely broke since Friday, which is in addition to a slides on Barronette and Republic Creek (**photos**).

Many slopes are stable; however, avalanche activity, weak layers buried in the snowpack, and poor stability test scores point to a **MODERATE** avalanche danger since triggering avalanches is possible today.

Bridger Range Northern Madison Range Northern Gallatin Range

The northern mountains do not have buried layers that we are currently concerned with and triggering avalanches is unlikely today. Eric found stable snow during his tour to Alex Lowe Peak on Friday which matched findings from the Bridger Range, both in the north and west side, as well as the northern Madison Range. On sun exposed slopes, the upper 4" of the snowpack got moist yesterday and remains so this morning. Fortunately, this will not pose a wet avalanche danger since clouds and winds will inhibit further melting. For today, the avalanche danger is rated **LOW** on all slopes.

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 mtavalanche@gmail.com or leave a message at 587-6984.