## **GNFAC** Avalanche Forecast for Thu Mar 27, 2014

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, March 27 at 7:30 a.m. Cooke City Motorsports and Yamaha in partnership with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

## Mountain Weather

Since yesterday 3-4 inches of new snow fell in most places except Cooke City which got 6 inches. Temperatures this morning were in the mid-teens to low 20s F and winds were blowing 5-10 mph from the S and W. Skies were clear early this morning but clouds and more moisture are returning. Snowfall should start by mid-day and winds should increase and blow 10-20 mph from the SW. Temperatures should rise into the high 20s F. By tomorrow morning 3-5 inches of snow should fall in the northern mountains. Further south near Cooke City and West Yellowstone, 5-7 inches should accumulate.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

With light winds, there shouldn't be many avalanche issues involving the new snow. The main concern continues to be faceted (aka weak) snow near the ground. Yesterday's snowfall contained 0.3-0.4 inches of <a href="mailto:snow">snow</a> water equivalent (SWE) in most areas and 0.6 inches of SWE near Cooke City. Assessing stability right now is difficult at best. Stability tests do not work well when weak layers are buried deeper than 3-4 feet. Instead there are three main questions to ask:

- 1. Is there a weak layer of facets near the ground? In most places the answer is yes, but some slopes have weaker facets than others. See this <u>video</u>. Slopes with a relatively thin snowpack are ones where the facets are weakest.
- 2. Have there been recent avalanches? Not many but yes. Seven recent slides were seen on the west side of the Bridger Range yesterday on SW aspects (**photo of debris**). Three of them had stepped down into wet snow and produced large debris piles. Two avalanches on N aspects were seen in the northern Gallatin Range near Mt Blackmore that broke near the ground and likely occurred last weekend.
- 3. Has there been a recent loading event? Yes. Yesterday's snow added some stress to the snowpack but not enough to dramatically increase the odds of triggering an avalanche near the ground. With more snow coming today and this weekend, the odds will be slowly creeping up.

Even as the odds of triggering a large avalanche increase, they still remain relatively low; HOWEVER, the consequences are severe. For today and through the weekend, play it safe and don't get on slopes much steeper than 30 degrees. Use your judgment and pick slopes with a consistently deep snowpack without rock bands or outcrops which can be good trigger points. Personally, I'll be waiting for the next round of high pressure to get into avalanche terrain. Today the avalanche danger is rated **MODERATE**.

## **Deep Slab Avalanches Explained (sort-of):**

Read a short <u>article</u> on deep slabs and watch a <u>video</u> outlining why they are so dangerous and what to look out for.

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.

Our last daily avalanche advisory will be Sunday, April  $6^{th}$ . If conditions warrant we will issue intermittent advisories the following week.