# **GNFAC** Avalanche Advisory for Thu Feb 27, 2014

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Thursday, February 27 at 7:30 a.m. Montana Import Group in partnership with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

#### Mountain Weather

Under mostly clear skies mountain temperatures are in the low 20s with west to southwest winds blowing 15-20 mph. No new snow fell overnight, but cloud cover will increase later today and bring scattered snowfall tonight. Winds will remain light and temperatures will rise to the high 20s before dropping to the teens this evening. By morning I expect 2-4 inches with more falling on Friday.

Snowpack and Avalanche Discussion

#### Cooke City

A skier triggered a deep slab avalanche south of Cooke City on the west side of Woody Ridge yesterday (photos). He found the cafeteria tray (see this article on deep slabs to understand this analogy). He was the second of two skiers descending when he triggered it from a very thin (~1'deep) area of the slope. The first skier was 400 feet below waiting in thick trees when it happened. The slide broke in a gully over ten feet deep and 50 feet wide on facets on the ground. The slope was barely 35 degrees. It was a big slide, rated R3.5-D3 in avalanche lingo. The skier in the trees wrote, "When the debris came by me I had to tilt my head towards the sky to see all of it...it was terrifying to say the least." This is scary, stuff. This avalanche confirms that the huge load from February added a few more cafeteria trays into the mix. Ten inches of water weight this month is stressing out the weak layer at the ground. The trigger points are not numerous and it's impossible to assess where they might be. I get the sweats just thinking about it since we do not deal with deep slab instability like this very often. The problem is unmanageable. Ski and ride the deep powder on low angled slopes...that's my recommendation for now. For today, wind-loaded slopes steeper than 35 degrees have a CONSIDERABLE danger and all others are rated MODERATE, a palm-sweating moderate.

## The Bridger Range Northern Gallatin Range

### Northern Madison Range

In the last week new snow and wind created instability which is still lurking in a few select areas. Although many wind-loaded slopes will be stubborn to trigger, I'd give them a wide berth. This is the primary concern throughout the northern Ranges. In the northern Madison and northern Gallatin Ranges a layer of facets 2-3 feet deep (it's not prevalent in the Bridger Range) has gained strength making avalanches hard to trigger, but not impossible as a solo snowboarder found out yesterday in the sidecountry of Big Sky on Chippewa Ridge (
<a href="mailto:photo2">photo1</a>, photo2). He avalanched a steep, rocky slope three feet deep and 250-300 feet wide and 200 feet vertical. He is ok. This avalanche, along with the one last Monday in Beehive Basin, is a good heads-up about the instability. You can certainly go out and play, but I don't recommend blindly going for it on any slope. Dig, test and decide. For today, given wind-loads, a buried weak layer, and a recent avalanche, the avalanche danger is rated MODERATE on all slopes.

### Southern Madison Range Southern Gallatin Range

#### Lionhead area near West Yellowstone

The southern mountains are a bit of a problem child. The mountains are quiet at the moment, but *two things* will cause us concern as these mountains get more snow. *The first* is the layer of facets buried 2-3 feet under the surface. These are showing significant gains in strength which makes us happy for the moment. Karl saw this on Bacon Rind yesterday during his pit digging extravaganza in the name of "science". Last week his stability tests propagated fractures; this week they did not. Mark and I had similar results in our pits around Hebgen Lake and Lionhead. However, even though we are finding stability we believe that there are still slopes you can trigger. *The second issue* is facets near the ground that formed in December. On Tuesday Mark was surprised to find three avalanches that released on this layer around Lionhead (video, four photos). This area did not get near the load as Cooke City, but it sends a clear message: an avalanche on this layer, while not likely or widespread, is certainly possible. We do not like surprises in the avalanche world and avalanches like these snap us to attention. For today, the avalanche danger is rated MODERATE.

Mark 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.

#### **EVENTS/EDUCATION**

BOZEMAN, Thursday, March 6, 6:30-8:00 p.m.; REI, 1-hour Avalanche Awareness Lecture.

Our complete calendar of events can be found **HERE**.