

## **GNFAC Avalanche Advisory for Wed Jan 20, 2010**

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, January 20, at 7:30 a.m. **The Dance Center**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory which is in memory of **Tyler Stetson**. Tyler was killed in an avalanche while skiing in Beehive Basin on this day in 2008. This advisory does not apply to operating ski areas.

### Mountain Weather

Yesterday morning a trace to 1 inch of snow fell from Big Sky to the southern ranges. Light southwest winds are still blowing 5-15 mph as temperatures cooled into the teens last night from their highs in the 20s. Mild weather will continue today with temperatures reaching the low 20s, light southwest winds and partly cloudy skies. West Yellowstone may only get a trace of snow late tonight, but don't despair, snow is forecasted for late Friday.

### Snowpack and Avalanche Discussion

#### *The Madison Range, the southern Gallatin Range, and the Lionhead area near West Yellowstone:*

After two weeks without a dump of snow I expected the snowpack to be stronger than it is. Karl Birkeland was down in Lionhead with a few other researchers and they found no difference in the snow stability since their last round of pit digging eight days ago. They got a large collapse as they skied uphill which is a symptom of a frail snowpack. ([Karl's Video](#)) Further north in Beehive Basin Mark found similar instabilities: unstable sugary snow that has not changed despite the warmer temperatures and lack of snow. And he didn't need to do any fancy tests to determine the strength; he just stepped out of his skis and sank to his waist in unsupportable snow. Digging in the snowpack is like playing in a sandbox. Mark investigated the avalanche that skiers triggered on Saturday. A steep rollover avalanched when the third skier came down the slope. Mark made a video of his investigation and we posted a few pictures earlier of the slide. ([Video](#)) ([Picture1](#)) ([Picture2](#))

We've got "equal opportunity" instability: skiers and snowmobilers are both getting widespread collapsing, cracking with some triggering avalanches. Since Friday these reports have filtered in from the Big Sky area, Buck Ridge, southern Gallatin Range, Bacon Rind, Taylor Fork, Beaver Creek and Lionhead. I love consistency since it makes my job easier. On a large, mountain range sized scale, I do not trust the snowpack. But I do know that on a smaller, slope specific scale, if you put time into thoughtfully evaluating the snow you'll find a few stable slopes to play on. Given the persistent weak layer, recent avalanches and widespread instability, for today the avalanche danger is rated **CONSIDERABLE** on all slopes steeper than 35 degrees. All other slopes have a **MODERATE** avalanche danger.

#### *The Bridger and northern Gallatin Ranges, the mountains around Cooke City and the Washburn Range:*

The Bridgers, northern Gallatins and Cooke City region also has [a weak snowpack structure](#), but after two weeks without much snow it's getting harder to trigger avalanches. Fractures are not propagating clean in many tests and it's taking increased force to get columns to break. Yesterday skiers on Ross Peak found good stability which matched what others found on Bridger Peak over the weekend and also what Mark and Eric saw on Saddle Peak last Thursday. Because we've been spending so much time looking at really bad, weak, unstable snow, we have to be careful that our judgment regarding these seemingly stable slopes aren't skewed. Voices in my head say, "The Bridgers are sooooo much better than the Beehive area." But is it really that stable? Stability is relative. It's like saying a kooky family member is really sane compared to someone committed to an

institution. The Bridgers, northern Gallatins and mountains around Cooke City are the kooky relative. So have fun, but be careful since it's still possible to get into trouble. Today, the avalanche danger continues to be rated **MODERATE**.

Mark will issue the next advisory tomorrow morning at 7:30 a.m. If you get out in the backcountry give us a call or email with your observations. You can reach us at 587-6984 or email us at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com).

## **Avalanche Education**

### **Education Calendar**

#### **1. Bozeman**

MMA Teen Avalanche Class: Lecture Thursday, January 21<sup>st</sup> & Field Session Saturday, January 23<sup>rd</sup>. More info: <http://www.montanamountaineering.org/TeenAvalancheCourse.shtml>

#### **2. Bridger Bowl**

AAI Level 1 Avalanche Course - Friday, January 22<sup>nd</sup> to Sunday, January 24<sup>th</sup>

[www.americanavalancheinstitute.com](http://www.americanavalancheinstitute.com)

#### **3. Four Corners Groomer Shack**

RESCUE LECTURE: Tuesday, January 26<sup>th</sup> 7pm. The Gallatin Valley Snowmobile Association is having it annual Chili Feed at 6:30pm in the Groomer Shack at 4 corners.

#### **4. Billings**

Avalanche Awareness and Rescue Class-Wednesday, January 27<sup>th</sup>, 6-9 pm at Beartooth Harley.

#### **5. Big Sky**

Moonlight Basin Avalanche Course: Join Moonlight Basin for a comprehensive, two-day and one evening avalanche awareness class. Thursday, Jan 28<sup>th</sup> 5-9:30pm and Friday and Saturday, Jan 29&30 8am-4pm. Contact: [events@moonlightbasin.com](mailto:events@moonlightbasin.com) or 406-993-6026

#### **6. Bozeman**

BASIC AVALANCHE WORKSHOP: The Friends of the Avalanche Center and ASMSU Outdoor Rec are offering a Basic Avalanche Awareness Class the evenings Wed, Thur, 27 & 28 January with a field day on Saturday, 30 January. \$25 donation. No sign up required. <http://www.mtavalanche.com/education/classes/basic>

#### **7. West Yellowstone, Holiday Inn**

One-hour Avalanche Awareness Class - Saturday, January 30<sup>th</sup> - 7pm to 8pm