

## **GNFAC Avalanche Advisory for Tue Jan 6, 2015**

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, January 6, at 7:30 a.m. Today's advisory is sponsored by [Cooke City Bearclaw/Super 8](#) in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

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### **AVALANCHE WARNING**

We are continuing a Backcountry Avalanche Warning for the mountains around **Cooke City**. Over three feet of dense snow has fallen in the last 48 hours creating widespread instability. The avalanche danger is rated **HIGH** on all slopes. Very dangerous avalanche conditions exist and both natural and human triggered avalanches will be likely. Travel in avalanche terrain and avalanche runout zones should be avoided.

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### Mountain Weather

The mountains around Cooke City are in a solar system of their own. Another 12-16 inches of dense snow has fallen in the last 24 hours and it's still snowing. The Bridger Range only picked up another inch and the other ranges got 3-5", but the amounts are misleading since the snow was very wet and it rained to 7,000 feet. Currently mountain temperatures are near freezing with lower 20s being recorded around West Yellowstone and Cooke City. West to southwest winds are averaging 20-30 mph with gusts of 40, except up Hyalite where the gusts have hit 60 mph. Today will be cloudy, winds will decrease and another 2-4 inches will fall around Cooke City.

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### Snowpack and Avalanche Discussion

#### Cooke City

The avalanche warning continues for Cooke City because they've gotten lot of snow and it's still falling. In the last 48 hours 3.2 inches of Snow Water Equivalency (**SWE**) measuring three feet of snow. This storm came in wet and heavy and fell onto less dense, powdery snow creating an unstable density inversion which we call "upside down". Additionally, this new snow buried a layer of surface hoar that formed on New Year's Day which will also naturally avalanche. Yesterday a skier triggered a small slide near Lulu Pass. With more snow overnight all slopes are unstable and triggering avalanches from low on a hill is likely. Don't mess with avalanche terrain today. Give runout zones a wide berth. For today the avalanche danger remains **HIGH** on all slopes.

#### Bridger Range Gallatin Range Madison Range

#### Lionhead area near West Yellowstone

Yesterday was a day of weird weather. It snowed hard south of Bozeman but the freezing level kept rising and it rained to 7,000 feet. Rain on January 5<sup>th</sup> is not welcome. Snowfall has tapered off and the mountains have gotten two inches of SWE in the last 48 hours with the Bridger Range pulling in 2.7 inches, most of it falling earlier in the storm. The snow was warm, wet and dense. It too was an upside down storm and overburdened powder snow, a weakness which will be short-lived. In many areas we buried a layer of surface hoar which

unfortunately, is a longer lasting instability. Although we have not found this layer in the Bridger Range ([video](#)), we have confirmation of surface hoar forming on New Year's Day in every other mountain range ([video](#)).

Lots of heavy snow falling on a weak layer is bad news and wind-loading will make it worse. You can trigger avalanches today. There might not be natural avalanches popping out, but a freshly buried layer of surface hoar is scary. I expect cracking and collapsing from the weight of a rider or skier and I do not recommend getting on or underneath avalanche terrain. For today, the avalanche danger is **HIGH** on any slope wind-loaded or any terrain steeper than 35 degrees. All other slopes have a **CONSIDERABLE** danger.

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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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

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## **AVALANCHE EDUCATION and EVENTS**

Take a look at our [Education Calendar](#) for all our classes being offered.

**1-hour Avalanche Awareness for Snowmobilers**, Billings, 6:30-8 p.m., Wednesday, January 7 at Hi-Tech Motor Sports.

**Companion Rescue Clinic**, Bozeman, Friday eve and Saturday field, January 9 and 10, REI. Register for the class here: [www.rei.com/stores/bozeman.html](http://www.rei.com/stores/bozeman.html)

**1-hour Avalanche Awareness for Snowmobilers**, West Yellowstone, 7 p.m., Saturday, January 10, Holiday Inn.

**1-hour Avalanche Awareness**, Three Forks, 7 p.m., Monday, January 12, Methodist Church Annex.

**Women's Avalanche Awareness w/ Beacon Practice**, Bozeman, 6:30- 8 p.m., Tuesday, January 13, Beal Park.

**1-hour Avalanche Awareness**, 4 Corners, 6:30 p.m., Wednesday, January 14, GVSA Groomer Shed.

**1- hour Sidecountry Avalanche Awareness**, Bozeman, 6:30-8 p.m., Wednesday, January 14, REI.

**Companion Rescue Clinic**, Cooke City, 9 a.m.-3 p.m. on Sunday, January 18. More details and registration: <https://www.ticketriver.com/event/13990>

**Introduction to Avalanches with Field Course**, MSU Bozeman, evening lectures 7-9:30 p.m. Wednesday and Thursday, January 21 and 22, with an all-day field session on Saturday or Sunday (your choice). Get more information and register here: <https://www.ticketriver.com/event/13090>

**Advanced Avalanche Workshop with Field Course**, MSU Bozeman, evening lectures 7-9:30 p.m. Wednesday and Thursday, January 28 and 29, with an all-day field session on Saturday. Get more information and register here: <https://www.ticketriver.com/event/12445>