

GNFAC Avalanche Advisory for Fri Jan 20, 2012

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, January 20 at 7:30 a.m. The **Montana FWP Recreation Trails Grant** sponsors today's advisory which is dedicated to **Tyler Stetson** who was killed in an avalanche while skiing in Beehive Basin this day in 2008. This advisory does not apply to operating ski areas.

The Gallatin National Forest Avalanche Center continues a **Backcountry Avalanche Warning for the Lionhead area near West Yellowstone and the mountains around Cooke City**. Heavy snow continues to fall on an extremely weak snowpack causing unstable conditions. Avalanches were triggered yesterday and more will occur. **Today the avalanche danger is HIGH on all slopes**. Areas of unstable snow exist. Natural and human triggered avalanches are likely. **Avalanche terrain including avalanche run out zones should be avoided.**

Mountain Weather

Since yesterday morning the Lionhead area near West Yellowstone and the mountains near Cooke City received 11-15 inches of new snow. The southern Madison Range received 6 inches, northern Madison Range near Big Sky received 3-5 inches, and the mountains near Bozeman received 1-2 inches. This morning temperatures at 9000ft were in the low 20s F. Ridgetop wind were averaging 10-20 mph from the W and SW with gusts of 35 mph. Hyalite is the exception with winds averaging 30 mph and gusting to 50 mph.

Another few inches of snow may fall this morning, but snowfall will end today. More snow should return late tonight mostly in the southern areas which will have another inch or two by tomorrow morning. Winds today will be relatively calm blowing 15-30 mph from the W and SW but increase again this evening. Temperatures will remain in the low 20s F at higher elevations but warm to the low 30s in the valleys.

Snowpack and Avalanche Discussion

The Lionhead area near West Yellowstone and the mountains around Cooke City:

Near West Yellowstone and Cooke City, the story is simple. Heavy snowfall and high winds have created very dangerous avalanche conditions.

- In the last 24 hours these areas received 1.1-1.5 inches of snow water equivalent (SWE) which is about 11-15 inches of snow.
- In the last 3 days, the mountains near Cooke City received 3.3 inches of SWE, and the Lionhead area near West Yellowstone received 2.3 inches of SWE.

Yesterday Doug and his partner triggered several avalanches along Lionhead ridge some with cornice drops and another remotely ([photo](#)). Further north near Hebgen Lake, Eric and his partners also triggered an avalanche remotely ([photo](#), [video](#)). Remotely triggered avalanches ([definition](#)) are a clear indication of very unstable conditions. A skier near Cooke City triggered an avalanche in wind loaded gully while skiing the adjacent low angle slope ([photo](#)). He also observed another one triggered by a falling cornice. Those avalanches occurred yesterday. Since then, more snow has fallen and more avalanches will occur today.

Avoid avalanche terrain but also avoid avalanche run out zones where you can trigger and be caught in an avalanche. Many avalanche fatalities have occurred near West Yellowstone and Cooke City by people in run out zones. Today the avalanche danger is **HIGH**.

The Bridger, Madison and Gallatin Ranges:

The Bridger, Madison, and Gallatin Ranges have received less snow but plenty of strong wind which has formed many hard wind slabs. Triggering one of these wind slabs can easily cause an avalanche to break deeper in the snowpack or even at the ground. Avoiding these wind slabs is the key to avoiding avalanches, but this will be hard to do. Many of these wind slabs have been covered by last night's snowfall and might be difficult to find visually.

Don't let your guard down on non wind loaded slopes especially in the Madison Range which received about 0.4-0.6 inches of **SWE**. While this snowfall may not seem like much, the snowpack is very weak on many slopes and may struggle to support even this small load. Today all wind loaded slopes have a **CONSIDERABLE** avalanche danger. Non wind loaded slopes have a **MODERATE** avalanche danger.

Eric 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

[Introduction to Avalanches with Field Course](#). MSU, SUB Ballroom C, 7-9:30 p.m. Jan 25 and 26 with a field day Jan 28.

West Yellowstone

[1-hr Avalanche Awareness Lecture](#) TOMORROW, Saturday, January 21, 7-8 p.m. at West Yellowstone Holiday Inn

Billings

[Snowmobiler Introduction to Avalanches with Field Course](#). Lectures on Tuesday, January 24 from 6-9 p.m. at Hi-Tech Motor Sports with an all day field session in Cooke City on Sunday, Jan 29. PRE-REGISTER BY JAN 23 at Hi-Tech!! Register with Sue at 406-652-0090; hitech@hi-techmotorsports.com.