

GNFAC Avalanche Advisory for Fri Dec 9, 2011

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, December 9 at 7:30 a.m. This advisory is sponsored by Northern Lights Trading Company and the Big Sky Ski Patrol and does not apply to operating ski areas. Please remember that uphill traffic is not allowed at Moonlight Basin, and Bridger Bowl will prohibit uphill travel when they open on Friday.

Mountain Weather

No snow fell since yesterday and skies were clear overnight. Temperatures this morning were near 10 degrees F and westerly winds were blowing 15-30 mph. In some places they blew from the SW while in other places they blew from the NW. Today will have clear skies and sunshine. Temperatures should reach the mid 20s F and winds should continue blowing westerly at 15-30 mph.

Snowpack and Avalanche Discussion

The Bridger, Gallatin and Madison Ranges, the Lionhead area near West Yellowstone and mountains around Cooke City:

Avalanches require a slab sitting on top of a weak layer. Unfortunately all areas have a weak layer of faceted snow at or near the ground. Nearly all recent avalanches have fractured on this layer and all have occurred on wind loaded slopes. Wind makes good slabs. Yesterday Eric and I joined the Moonlight Basin Ski Patrol to investigate avalanches they triggered two days ago. We found big, weak facets sitting under wind slabs ([video](#), [photo1](#), [photo2](#), [snowpit](#)). We pay very close attention to avalanche activity at ski areas right now because the snowpack mirrors conditions in the backcountry.

Yesterday the Yellowstone Club Ski Patrol triggered many avalanches breaking at or near the ground and fracturing across entire slopes leaving no snow behind. The Big Sky Ski Patrol had equally good success triggering avalanches early this week and in previous weeks. Further north, at Bridger Bowl, there is less snow but it is just as weak. This lack of snow means fewer slabs exist, but where they do, the ski patrol triggered avalanches.

Additionally, a skier near Cooke City observed a recent natural avalanche on a wind loaded slope ([photo](#)). When avalanches occur naturally, they can certainly be triggered by a skier or rider. For today wind loaded slopes have a **CONSIDERABLE** avalanche danger. Human triggered avalanches are possible on non wind loaded slopes which have a **MODERATE** avalanche danger.

Special note on avalanches and explosives: The explosives used at ski areas are not very big or powerful, and they provide a good indication of how sensitive the snowpack is to a human trigger like a skier or rider. It might seem like avalanches are easily triggered by explosives, but this is not the case. Ski patrollers have to know precisely where and when to put explosives on slopes in order to trigger avalanches.

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

To check out all our education programs: <http://www.mtavalanche.com/workshops/calendar>

WEST YELLOWSTONE

[Snowmobiler Introduction to Avalanches with Field Course](#). Lectures on Thursday, December 15 with an all day field course on Friday, December 16. Advanced registration is NOT required, but encouraged.

BOZEMAN

[Snowmobiler Introduction to Avalanches with Field Course](#). Lectures on Saturday, January 7, with an all day field session Sunday, January 8. Advanced registration IS REQUIRED.

CODY, WYOMING

[Snowmobiler Introduction to Avalanches with Field Course](#). Lectures on Saturday, January 14 at Mountain Valley Motorsports with an all day field session near Cooke City on Sunday, January 15. Advanced registration IS REQUIRED.