

# GNFAC Avalanche Forecast for Wed Dec 7, 2011

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Wednesday, December 7 at 7:30 a.m. This advisory is sponsored by On Site Management and Planet Natural 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.

Today is the official start of our daily avalanche advisories.

## Mountain Weather

Since our last forecast on Monday morning no new snow has fallen in southwest Montana. Mountain temperatures were near or below zero early in the week, but have warmed substantially. This morning they read in the low 20s around Bozeman, in the teens near Big Sky and the single digits in West Yellowstone and Cooke City. Winds have been westerly at 15-30 mph. A small disturbance will drop in from Canada tonight. The winds will shift to the northwest as temperatures drop into the single digits with a trace to one inch of snow falling. It's not very exciting and I'm unhappy to report that dry weather is forecasted through the weekend.

## Snowpack and Avalanche Discussion

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

Weak, faceted snow is found throughout southwest Montana. Cold air temperatures were the driving force behind changes in the snowpack during the last few weeks and slopes are growing facets like weeds. In areas where snow depth is thinner than two feet the facets have grown quickly throughout the entire snowpack. In mountains with deeper snows, like Cooke City and the northern Gallatins, there are only a few inches of facets at the ground, but this unbonded snow is a problem no matter its thickness. On [Sheep Mountain](#) outside Cooke City a skier saw a large natural slide on Monday ([photo](#)) and yesterday on [Mt. Republic](#) a skier had slopes crack 30+ feet ([photo](#)); both are clear signs of instability.

Our stability assessments show 2 things:

1. In areas that have thin snow cover, the weak, faceted grains will quickly become unstable with snowfall. In [our video of the Lionhead area](#) Eric explains this.
2. In mountain ranges that have a dense slab of snow overlying the facets we are still getting our test columns to break cleanly. This result indicates that once the weak layer collapses it can propagate and possibly avalanche. Our snowpit in Flanders Creek in the northern Gallatins yesterday demonstrated this well ([photo](#), [video](#)).

At the end of yesterday's video clip, Mark summed up our thoughts on the unstable snowpack structure with, "We don't trust it." For today, given the bull's-eye data of natural avalanche activity earlier in the week and Tuesday's shooting cracks I'm rating the avalanche danger [CONSIDERABLE](#) on all slopes that have been recently wind-loaded. Slopes without a wind-load are 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](mailto:mtavalanche@gmail.com) or call us at 587-6984.

## EVENTS/EDUCATION

For more information and to sign up for the multi-day courses in Bozeman, Livingston and West Yellowstone, go to: <http://www.mtavalanche.com/education/classes/workshops>

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

### LIVINGSTON: TONIGHT

Snowmobiler Introduction to Avalanches with Field Course. Wednesday, December 7, and Thursday, December 8 evening lectures with a field course on Sunday, December 11. Advanced registration IS REQUIRED.

### BOZEMAN

TONIGHT: Avalanche Awareness Lecture, Wednesday, December 7, REI.

Avalanche Awareness Lecture, Thursday, December 8, 406 Brewery.

### 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.