

GNFAC Avalanche Advisory for Fri Mar 15, 2013

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, March 15 at 7:30 a.m. **Cooke City Motorsports** in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

This morning mountain temperatures were near freezing at ridgetops and near 40 degrees F at lower elevations. Winds were blowing 15-20 mph from the WSW and gusting to 35 mph. Today's exact temperatures will be a factor of cold air pushing south at 10K feet, warm air in places at 5K feet, and a mix of sun and clouds. Overall high temperatures will be in the 40s F. There will be a small chance for some snow or rain. Fortunately cold air will arrive tomorrow followed by snow and even colder air on Sunday.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Wet snow avalanches are the problem today.

1. Wet avalanches were observed near Cooke City and near West Yellowstone by Hebgen and Quake Lakes *even on north facing terrain.*
2. Many places have not seen below freezing air temperatures for 24-48 hours.
3. Cloudy skies prevented nighttime radiation cooling of the snow.
4. Ski patrollers at Big Sky and Moonlight Basin reported areas with isothermal conditions which mean the temperature is 32 degrees F throughout the snowpack. Snow begins to melt and lose strength at this temperature.

Some of the weakest and most faceted snow exists at mid-low elevations where temperatures have been the warmest. When liquid water percolates through the snowpack to buried layers of facets and depth hoar, the result is wet avalanches breaking near the ground. At higher elevations where the snowpack is deeper, wet avalanches may be smaller and confined to surface layers of snow.

Either way, be especially watchful of slopes that receive any amount of rain or direct sunshine. Also, watch out for big cornices which tend to break on their own during warm weather.

Because this is the first major warm-up of the season, the snowpack is experiencing rapid change and dangerous avalanche conditions exist. For this reason the avalanche danger is rated **CONSIDERABLE**. Wet snow avalanches are especially scary because they act like fast moving slugs of cement.

Ice Climbers: It has been a while since most ice climbs have had any avalanche concerns. This will change today. Even very small wet avalanches have a lot of mass and can easily push you off the ice.

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 or call us at 587-6984.