

## **GNFAC Avalanche Forecast for Tue Apr 2, 2013**

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Tuesday, April 2 at 7:30 a.m. A **Montana Fish, Wildlife & Parks Recreation Trails Grant** sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

Yesterday high temperatures reached the 50s F in some places with very little wind. This morning temperatures were in the high 20s to low 30s F. Winds averaged 5-10 mph from the W and NW with gusts of 15 mph. Today will have sunshine, above average temperatures, and very light winds. High temperatures today will be in the 40s F and possibly 50s F in some areas.

### Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Yesterday the Big Sky Ski Patrol reported several large wet loose and wet slab avalanches. Strong sunshine and a lack of cooling winds allowed the snowpack to heat up and become unstable as liquid water percolated through it. Other wet slabs and wet loose avalanches were observed in the mountains surrounding Big Sky. At Lionhead near West Yellowstone, several wet avalanches were observed as well.

Today should be a repeat of yesterday in terms of weather and stability. Above average temperatures, strong sunshine, and minimal cooling winds will allow the snow surface to quickly melt. The snow is likely wet below the surface, and conditions could quickly become unstable as soon as the surface crusts melt.

What is scary is the possibility for wet slab avalanches. Wet loose avalanches or point releases are rarely a problem by themselves, but they can act as triggers for wet slabs which contain a lot more snow and move fast. Avoid run out zones as soon as you start seeing pinwheels and small point releases.

The avalanche danger today will start **LOW** and should quickly rise to **CONSIDERABLE**.

### Notes about wet snow avalanches:

- Avalanches depend on a balance of stress vs. strength in the snowpack. When stress exceeds strength we get avalanches; therefore, to get an avalanche either increase the stress or decrease the strength.
- Dry snow avalanches occur when stress increases with the additional weight of new snow or wind-blown snow.
- Wet snow avalanches occur when the strength decreases with the addition of liquid water from warm air temperatures, sunshine, or rain.



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.

**Take Note:**

Our 136<sup>th</sup> and last avalanche advisory will be on Sunday, April 7<sup>th</sup>.