

## **GNFAC Avalanche Forecast for Mon Mar 15, 2010**

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, March 15, at 7:30 a.m. **Northern Lights Trading Company**, in cooperation with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

### Mountain Weather

A dominating ridge of high pressure has once again parked it over southwest Montana producing cool nighttime lows and warm daytime highs. Yesterday, skies were mostly clear but mountain temperatures struggled to break 30 degrees and winds were light out of the S-SW at 10-15 mph. Currently mountain temperatures are in the low to mid twenties but will climb steadily into the mid to upper 40's F by this afternoon and winds will stay light out of S-SW at 5-10 mph.

### Snowpack and Avalanche Discussion

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

Riding yesterday's fresh snow was like eating a cold ice cream sandwich on a hot sunny day...enjoy it quickly before it melts. Today's rising thermometer will rapidly turn yesterdays fresh snow into heavy, wet mash potatoes on all virtually all aspects, sparing only the due north facing slopes. While some heating occurred yesterday, sporadic cloud cover and a light breeze kept the snowpack just cool enough to keep conditions good throughout the day. Yesterday my partners and I toured up Mt Blackmore in the northern Gallatin Range and found good stable skiing on north and east aspects. Very little wind loading and heating were present throughout our tour.

A variety of weak layers lingering in the snowpack coupled with rising temperatures will make riding conditions and backcountry travel more tricky today. Our primary avalanche concerns are wet loose avalanching of the new snow and two distinct weak layers which are now buried six inches to a foot below the surface. These layers consist of surface hoar or near surface facets, both of which have been reactive in stability tests ([video](#)). These layers will be most active on recently wind loaded slopes that are off exposure from the sun. Yesterday, a skier in the northern Bridger Range near the Flatirons triggered a small, but concentrated wind slab that swept him off his feet and ripped all his gear but one ski from his body ([photo1](#) [photo2](#) [photo 3](#)). This N-NE facing slope was loaded by strong S-SW winds that blew during and after the storm depositing a fresh load over a weak layer of near surface facets. Similar conditions were found near Cooke City this past Thursday where a skier triggered a pocket of windblown snow, also on a north facing slope ([photo](#)). Warmer weather will help strengthen these isolated wind slabs, but finding one that will fail under the stress of a skier or rider remains a possibility.

If we look deeper into the snowpack it is still possible to find a weak layer of buried surface hoar 1.5-2 feet below the surface and also a weak layer of facets near the ground. The buried surface hoar layer is a tricky one because of its sporadic distribution and various levels of sensitivity. This layer will most likely be found on north facing slopes, but multiple snowpits and stability tests are the only real way to determine the distribution and danger level of this intermittent weak layer ([video](#)). Weak facets near the ground are finally showing signs of improvement, but still need to be treated with respect.

Slopes that have direct exposure to the sun will become susceptible to wet snow avalanches. The first time fresh snow gets hit with sun and above freezing temperatures is when it is most vulnerable to avalanching. With new snow and rapidly warming temperatures today we can expect to see point releases or wet snow avalanches by this afternoon.

With the presence of multiple weak layers in the snowpack, fresh snow and isolated wind slabs the dry snow avalanche danger for today is rated **MODERATE**. The wet snow avalanche danger could rise to **CONSIDERABLE** if slopes get direct sun since this new snow will easily avalanche, mostly as point release slides.

**New Beacon Park:** Skiing or riding near West Yellowstone? Test your beacon skills at a new beacon park near the old airport where you can search for pre-placed beacons switched on/off by a control panel. Look for it by orange snow fence and signage just south of the snow cross track. For more information on beacon parks, visit: <http://bit.ly/dqXrFM>

Doug will issue the next advisory tomorrow morning at 7:30 a.m. If you get out in the backcountry let us know what you find. You can reach us at 587-6984 or email us at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com).