

## GNFAC Avalanche Forecast for Fri Jan 4, 2013

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, January 4 at 7:30 a.m. Today's advisory is sponsored by a Montana FWP Recreation Trails Grant. This advisory does not apply to operating ski areas.

### Mountain Weather

With another temperature inversion in place this morning, mountain temperatures were in the high 20s F while valley temperatures were mostly in the single digits F except in West Yellowstone where they were -17 F. Winds were blowing 10 mph from the W and SW and gusting 15-20 mph. Today cold air moving into the area will compete with sunshine, and temperatures should remain in the high 20s F. Gustly winds, especially in the mountains near Bozeman, will blow 10-30 mph. A brief ridge of high pressure will come Saturday followed by a trough of low pressure that should bring some precipitation Sunday evening.

### Snowpack and Avalanche Discussion

#### Bridger Range

During the past three days strong winds have blown in the Bridger Range where a skier triggered and was caught in an avalanche yesterday. He and his partner went just north of Bridger Bowl to a chute called the Hourglass where they observed a freshly formed wind slab. The first skier in the chute triggered it on his third turn and was carried about 1000 vertical feet. Fortunately he was only partially buried and sustained cuts, scrapes, and bruises from small trees in the run out zone. See [photo1](#), [photo2](#), and a [video](#) of the avalanche.

During recent periods with cold clear nights and warm sunny days, the snow surface weakened and became faceted. More recently, strong winds formed wind slabs on these facets. This combination is the problem. It is tricky because wind slabs can be found on many slopes, but not all slopes have facets under these wind slabs. For today heightened avalanche conditions exist on wind loaded slopes steeper than 35 degrees where the avalanche danger is rated MODERATE. All other slopes have a LOW avalanche danger.

#### Madison Range Gallatin Range

#### Lionhead area near West Yellowstone Cooke City

Yesterday, the Big Sky Ski Patrol observed a small, wet point release that triggered a thin wind slab resting on small, faceted crystals in their A-Z chutes. Also, two experienced avalanche professionals skied a North facing slope on Fan Mountain where observed a very small slide near rocks on a South facing ridge line. These slides indicate that some slopes have similar conditions to the Bridger Range. Fortunately the combination of wind slabs resting on small facets is not widespread. In Beehive, Middle, and Bear Basins just north of Big Sky yesterday, my partner and I found many slopes above treeline with a wind packed surface. We found weak, faceted crystals near the surface in places, but did not find the combination of wind slabs resting on these facets and felt comfortable skiing steep, exposed terrain.

Similar conditions exist near West Yellowstone and Cooke City. The two slides observed yesterday at Big Sky and on Fan Mountain are great clues from Mother Nature that unstable snow can be found on isolated terrain features but overall human triggered avalanches remain unlikely. For this reason today the avalanche danger is rated LOW. Remember - a low danger does not mean no danger

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.

## EDUCATION

Tuesday, January 8, 7:00 p.m., 1-hour Avalanche Awareness at Big Timber High School.

Wednesday, January 9, 6:30 p.m., 1-hour Avalanche Awareness at REI, Bozeman.

Thursday and Saturday, January 10 and 12, Rescue Clinic. Thursday at 6:00 p.m. at REI, Bozeman and Saturday at 10 a.m. in the field, location TBD. For more info and to register go

<http://www.rei.com/event/47692/session/64126>

Saturday and Sunday, January 12 and 13, Snowmobiler Introduction to Avalanches with Field Course. Currently we only have four people registered and need ten to run the course. We will cancel the course if 6 more do not register by Monday afternoon, January 7<sup>th</sup>. For more information and to sign up:

<https://www.ticketriver.com/event/4979-snowmobiler-introduction-to-avalanches-w-field>