

GNFAC Avalanche Forecast for Fri Jan 10, 2014

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, January 10 at 7:30 a.m. A **Montana FWP Recreation Trails Grant** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

More snow is falling this morning. From yesterday at 6 a.m. to this morning at 6 a.m. 7 inches of snow fell in the Bridger Range, 10 inches near Big Sky and West Yellowstone, and closer to 12 inches near Cooke City. Temperatures were in the teens F and winds had increased some since yesterday blowing 10-20 mph gusting to 40 mph from the SW. Winds should shift to the W today and increase especially near Bozeman and Big Sky. High temperatures will be near 20 degrees F. This morning an additional 3-5 inches of snow should accumulate and snowfall should end early this afternoon. More snow should come early Saturday with even stronger winds.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone

New snow and winds from the SW and W mean fresh wind slabs can be triggered near ridgelines. A bigger problem is a layer of very weak, faceted snow lurking on all slopes about a foot above the ground (examples from [Mt. Ellis](#), [Saddle Peak](#), [Beehive Basin](#)). New snow has added stress to these facets which are like a layer of dominoes. This added stress will make it easier for a skier or rider to tip the first domino and cause the rest to collapse. When this happens the result will be an avalanche 2-4 feet deep. Triggering avalanches from run out zones below steep slopes remains a definite possibility.

In the Bridger Range, this weak layer has gained strength on some slopes but remains ready to fracture on others. Yesterday the Bridger Bowl Ski Patrol triggered a slide in the new snow that then stepped down another 2-3 feet deep breaking on this layer. This slide occurred in a place without skier compaction and is representative of steep, avalanche starting zones in the backcountry.

New snow has been steadily trickling in and the powder is getting deep. This new snow hasn't come too quickly to spike the avalanche danger, but the cumulative loading has made human triggered avalanches more likely. For this reason today the avalanche danger is rated **CONSIDERABLE** on all slopes.

HEADS UP: As of 7 a.m. near West Yellowstone at Madison Plateau, the water content of 48 hour snowfall was 0.8 inches. This snowfall is one of the larger loading events for this area yet. The snowpack is very weak and I am unsure how it will react. With increased winds and more snow, the danger could easily rise to **HIGH** on steep wind loaded slopes today depending on how much additional snow falls.

Cooke City

The main avalanche problem near Cooke City will be new snow and wind-blown snow. Deeper layers in the snowpack are strong on most slopes and should support the load of new snow ([video](#)). During the last two days the weakest layer Doug and his partner found was about 1-1.5 feet deep in the newer snow. Isolated slopes with a snowpack 3-4 feet deep or less have weak facets near the ground where avalanches could break deeper. It will

take a keen eye to identify these slopes which are not obvious.

To be safe, treat all slopes like they could break deep and produce far running avalanches. Watch your partners from safe locations, not avalanche run out zones. With more snow and more wind in the forecast, the avalanche danger is rated **CONSIDERABLE** on all wind loaded slope and all slopes steeper than 35 degrees. On slopes less than 35 degrees lacking wind drifted snow, the avalanche danger is **MODERATE**.

Eric 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.

ANDROID APP

If you have an android phone or tablet, you can download our new free app. It's a slick way to get the advisory. [Search Google Play for GNFAC](#). An iOS version is coming soon. Stay tuned.

MONTANA ALE WORKS FUNDRAISER DINNER

Montana Ale Works is hosting the 6th Annual Fundraiser Dinner for the Friends of the Avalanche Center. Chef Roth is creating an elegant, multiple course menu. His culinary creation will be paired with wines from the Ale Works cellar. Seating is limited to 40. Get your tickets early. <https://www.ticketriver.com/event/9572>

EVENTS/EDUCATION

TOMORROW, January 11, WEST YELLOWSTONE: Saturday, 7-8 p.m. at Holiday Inn, 1-hour Avalanche Awareness lecture.

January 13, DILLON: Monday, 7-8 p.m., School of Outreach, 1-hour Avalanche Awareness lecture.

January 15, BOZEMAN: Wednesday, 6:30-7:30 p.m., MSU Procrastinator Theater, Sidecountry IS Backcountry lecture.

January 16, BOZEMAN: Thursday, 6-8 p.m., Beall Park, 1-hour Avalanche Awareness and Transceiver Practice.

January 18 & 19, BOZEMAN: Saturday, 12-4:30 p.m Bozeman Public Library; Sunday, all day in the field, Snowmobiler Introduction to Avalanches with Field Course. Pre-registration is required: <https://www.ticketriver.com/event/8565-bozeman--snowmo-intro-to-avalanches-w-field>

January 22,23 & 25, BOZEMAN: Wednesday and Thursday 7-9:30 p.m.; all day Saturday in field, Introduction to Avalanches with Field Course. Pre-registration is required: <https://www.ticketriver.com/event/7113>

January 22 & 23 &26, BILLINGS and COOKE CITY: Wednesday and Thursday 6-9 p.m.; all day Sunday in field, Snowmobiler Introduction to Avalanches with Field Course. Pre-registration is required: <https://www.ticketriver.com/event/9380>

January 25, WEST YELLOWSTONE: Saturday, 7-8 p.m. at Holiday Inn, 1-hour Avalanche Awareness lecture.

More information our complete calendar of events can be found [HERE](#).