

GNFAC Avalanche Advisory for Sun Mar 21, 2010

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, March 21, at 7:30 a.m. **Bountiful Table**, 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 ridge of high pressure has stalled over southwest Montana producing clear skies and spring like conditions. Currently mountain temperatures are in the upper teens to low twenties and winds are blowing out of the west at 10-20 mph. Today, skies will remain mostly clear and mountain temperatures will rise into the mid to upper forties by this afternoon. Winds will continue to blow out of the west at 10-15 mph.

Snowpack and Avalanche Discussion

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

I'm sure happy spring has finally arrived. I was really getting tired of all the winter we have had here in southwest Montana. As I'm sure you can tell I'm being facetious and after assessing the snowpack in Beehive Basin yesterday, it is more than obvious we need a few more shots of winter before this season is over. With the snowpack hovering around 60-70% of average throughout most of our advisory area, the durability of the pack is struggling to defend itself against the lack of snow and rapidly increasing temperatures ([video](#)).

Yesterday, a few high clouds and a light breeze kept temperatures cool enough so that we didn't see widespread wet snow avalanche activity. Although the snowpack remained fairly quiet yesterday, it could be a different story today. As the mercury rises close to 50 degrees and the snowpack absorbs large amounts of radiant heat, the surface crusts will begin to break down and the snowpack will rapidly lose cohesion and strength. This could result in a wet snow avalanche cycle, predominately on slopes with south and west facing aspects. These avalanches will mainly start as point releases, but could potentially step down into deeper layers creating larger and more destructive wet slab avalanches. Alternately, point releases or wet loose avalanches on their own have the ability to encompass large amounts of snow, creating substantial debris flows with a lot of power ([photo](#)).

Current conditions are the deciding factor when it comes to wet snow avalanches and if today remains bluebird and calm, it will be likely that we will see wet snow avalanches on a variety of aspects. However, if the wind picks up and/or the clouds move in, the snow surface could remain cool enough to keep wet snow avalanches at bay.

While south, east and west aspects should get a healthy dose of sun today, north facing aspects will not. In areas where the snow has remained dry and protected from the sun, we are still worried about buried weak layers. Near surface facets six to ten inches below the surface will be the most likely to fail under the stress of a skier or rider and should be looked for and assessed before dropping into north facing slopes. Also, buried surface hoar 1.5-2 feet below the surface and weak facets near the ground should not be forgotten. Although these weak layers seem to be fairly latent, triggering an avalanche on these buried layers is possible, especially in areas where the snowpack is shallow. Isolate wind slabs also need to be considered if you are traveling in upper elevation terrain or areas close to ridgelines. Yesterday, the Bridger Bowl Ski Patrol triggered numerous wind slabs along the ridge that propagated 50-100 feet across and broke 10-14 inches deep.

DRY SNOW AVALNACHE DANGER

Today, buried weak layers on shady aspects and isolated wind slabs in the upper elevations make human triggered avalanches possible and the dry snow avalanche danger is rated [MODERATE](#).

WET SNOW AVALANACHE DANGER

The wet snow avalanche danger will start out [LOW](#) this morning, but will quickly rise to [CONSIDERABLE](#) on all slopes with direct exposure to the sun.

New Beacon Park

The Friends of the Avalanche Center used a donation from **Yellowstone Adventures** to purchase an avalanche beacon training park in West Yellowstone. You can search for pre-placed beacons switched on/off by a control panel. Look for it by the orange snow fence just south of the old airport ([photo](#)).

I 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.