

GNFAC Avalanche Forecast for Thu Feb 25, 2010

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, February 25, at 7:30 a.m. The **Bountiful Table**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday the northern Gallatin and northern Madison Ranges received 4 inches of snow while all other areas received about 2 inches. This morning snowfall ended with temperatures in the mid to upper teens F and ridgetop winds blowing 10-20 mph from the west. Today mostly cloudy skies will produce scattered snow showers, but only a trace to 1 inch of snow will accumulate. Highs will reach the upper 20s, and winds should decrease and blow 10-15 mph from the west.

Snowpack and Avalanche Discussion

The Bridger Range, northern Madison and northern Gallatin Ranges, the mountains around Cooke City and the Washburn Range:

In most areas the snowpack contains plenty of weak snow, but stability has improved with a lack of loading. We sometimes compare the snowpack to a rubber band. When new snow adds stress to the snowpack, it's like stretching a rubber band that is easily cut with the slightest touch with a sharp edge. As the rubber band loses its tension, it gets harder to cut. In a similar fashion, triggering an avalanche is getting harder, but this season's snowpack is like a flimsy little rubber band. It doesn't take much to cut it even if it isn't stretched much. The snowpack doesn't have much stress, but it doesn't need much to fracture and produce avalanches. Facets near the ground remain a concern, but a thin layer of facets 1.5 ft deep buried 2 weeks ago also fractures cleanly in stability test ([video](#)). On some sheltered slopes this thin layer is surface hoar, and on other slopes it is a layer of near-surface facets.

Skiers on the west side of the Bridger Range found similar conditions. Plenty of weak snow exists but it has minimal stress on most slopes except on isolated terrain features with recently formed wind slabs. For today, human triggered avalanches are possible and the avalanche danger is rated **MODERATE**.

The southern Madison, southern Gallatin Ranges and the Lionhead area near West Yellowstone:

A lack of snow in the southern areas is both a blessing and a curse. The snowpack remains thin and weak but lacks the stress of much new snow. Similar to northern areas, the snowpack contains weak layers near the ground and about 1.5 ft deep. On Tuesday I helped Karl conduct numerous stability tests on Lionhead near West Yellowstone where we tested a layer of surface hoar buried 1.5 ft deep. I was amazed at the persistence of this weak layer and its ability to propagate fractures across an isolated column almost 10 ft wide. As in northern areas, the snowpack has not gained much strength. Instead it remains weak and lies waiting for the stress of new snow. For this reason human triggered avalanches remain possible. Today the avalanche danger is rated **MODERATE**.

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.

Avalanche Education & Events

1. Bozeman

Join us to discuss the snowpack, weather, and circumstances leading up to the avalanche on Saddle Peak. We will show videos, pictures, and share stories about this popular sidecountry destination. Cost: Free, When: Thursday, March 4 from 6:30-7:30 p.m., Where: Bozeman Public Library meeting room.

2. Bridger Bowl

29th Annual Pinhead Classic on Saturday, March, 6th. "Carnival" is this year's costume theme, so come dressed up to race, socialize and win great prizes. Registration fee is \$30 but gets you all sorts of cool stuff. Check out the website <http://pinheadclassic.com> for details.

2. Moonlight Basin

Comprehensive avalanche awareness class - Thursday, March 4th to Saturday, March 6th

events@moonlight.com or 406-993-6026