

GNFAC Avalanche Forecast for Fri Feb 26, 2010

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, February 26, at 7:30 a.m. **Bridger Bowl**, in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

In the past 24 hours the northern Gallatin Range and the mountains around Cooke City received one inch of snow while all other areas received a trace or remained dry. Under clear skies this morning temperatures dropped to the low teens F and westerly ridgetop winds were blowing 10-20 mph. Today will have a mix of sun and clouds but no precipitation. With winds blowing 10-15 mph from the southwest, temperatures should gradually rise and reach the hi 20s F by this afternoon. Some precipitation may come this weekend, but it doesn't look like much as most of the moisture hitting the west coast will travel well south of Montana.

Snowpack and Avalanche Discussion

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

Yesterday Doug, Eric and I skied on Mt Ellis in the northern Gallatin Range where the thin snowpack resembled one from December not late February. Facets near the ground remain unsupportable and we sank to the ground as soon as we stepped out of our skis; however, we were mostly concerned with a layer buried surface hoar. In our snowpits it was an obvious stripe about 10 inches deep and was mostly unreactive in stability tests. Knowing that surface hoar can surprise us, we performed many quick stability tests in different locations. Doug and Eric also found surface hoar in the northern Bridger Range last Sunday. This surface hoar layer is generally buried about 1.5 ft deep and is not widespread; however, a thin layer of near surface facets can be found at the same depth in places where the surface hoar does not exist. Near Cooke City we received a report of a human triggered avalanche on Henderson Mtn. on a wind loaded slope that broke 1.5 ft deep and 100 ft wide. Remember a few things:

1. Without much new snow these weak layers are relatively dormant but you can find pockets where they are more sensitive like areas with wind deposited snow.
2. Triggering one of these pockets can sometimes trigger a larger avalanche.
3. Because these weak layers are not buried deeply, they are easy to evaluate quickly and often.

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:

The southern part of the advisory area also contains a generally thin snowpack with surface hoar and near surface facets buried about 1.5 ft deep. Skiers in the Beaver Creek drainage in the southern Madison Range found this layer on northerly aspects where it fractured cleanly in stability tests. Early this week I helped Karl conduct numerous stability tests on this layer on Lionhead where it fractured cleanly and propagated fractures, both necessary ingredients for an avalanche. The missing ingredient is enough stress from new snow to help initiate fractures. On some slopes it may be weaker, thus easier to initiate a fracture and trigger an avalanche. Like the northern areas, this layer is not buried deeply and can be evaluated quickly on many slopes. Additionally, facets near the ground persist and should not be forgotten. Today human triggered avalanches are

possible and 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.

3. Moonlight Basin

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

events@moonlight.com or 406-993-6026