## **GNFAC** Avalanche Forecast for Fri Feb 11, 2011

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, February 11, at 7:30 a.m. The **Montana Fish, Wildlife & Parks Snowmobile Program**, in cooperation with the **Friends of the Avalanche Center,** sponsors today's advisory. This advisory does not apply to operating ski areas.

## Mountain Weather

Yesterday most places received an inch or two of new snow. This morning temperatures were in the mid teens F and winds continue to blow strongly from the W at 20-40 mph. Today should have fewer clouds than yesterday and a little more sunshine. Temperatures should reach the mid 20s F and winds will continue from the W blowing 15-30 mph.

Snowpack and Avalanche Discussion

## The Bridger and northern Gallatin Ranges:

The Bridger and northern Gallatin Ranges received about 30 inches of new snow from last weekend's storm. Unfortunately this snow did not get much time to relax before strong E winds blew on Tuesday. For the past 2 days strong winds have blown from the W. This combination alone makes human triggered avalanches likely on wind loaded slopes.

Unfortunately many slopes also have a layer of small facets under the new snow (**photo**) that formed during dry cold weather last week. A skier in Hyalite Canyon on Wednesday spotted several recent avalanches that likely slid on this layer (**photo**). For today the combination of plentiful powder, strong winds, and a widespread weak layer means human triggered avalanches are likely on wind loaded slopes where the avalanche danger is rated **CONSIDERABLE**. Non wind loaded slopes require a quick snowpit about 2 ft deep to determine if this weak layer is present because human triggered avalanches are definitely possible, and the avalanche danger is rated **MODERATE**.

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

The rest of the advisory area has small facets under the new snow but there's a difference.

- Near West Yellowstone and Lionhead this layer exist on many slopes, but this area did not receive as much new snow from the last storm as other areas did.
- Near Cooke City and Big Sky more snow fell but this layer only exists on specific terrain features.

Eric and his partner skied and snowmobiled near Cooke City yesterday and found this layer most prevalent on slopes with a southerly aspect. They found one avalanche several days old on a heavily wind loaded slope ( <a href="mailto:photo">photo</a>, <a href="mailto:video">video</a>) and spoke with skiers that had triggered a similar slide recently. Yesterday I skied near Big Sky on Yellow Mountain where I found a similar layer of facets near an ice crust on a SSE aspect without a wind load, but it was unreactive in stability tests and not a concern. Two days ago along Buck Ridge, Doug and I couldn't find this layer and felt comfortable riding on steep slopes.

Unfortunately strong W winds continue blowing and loading the lee sides of ridge and gullies where a skier or rider will trigger fresh wind slabs in steep terrain. Today human triggered avalanches are likely on wind loaded slopes steeper than 35 degrees especially if this weak layer is present where the avalanche danger is rated **CONSIDERABLE**. All other slopes have a **MODERATE** avalanche 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 <a href="mailto:mtavalanche@gmail.com">mtavalanche@gmail.com</a> or call us at 587-6984.

## 9th ANNUAL KING AND QUEEN OF THE RIDGE

The 9th Annual King and Queen of the Ridge will be held at Bridger Bowl this Saturday, February 12. ALL proceeds go to the Friends of the Avalanche Center who use the money to promote avalanche education in southwest Montana. You can help raise money to continue this education in two ways: 1). Get pledges and hike the ridge. You don't have to do 20 laps – you can get flat pledges and hike just once! 2). Sponsor someone. If you don't have someone to sponsor, consider sponsoring the GNFAC since we'll be hiking for dollars. *Go to http://bridgerbowl.com/events/view\_event/81/for more information and registration forms*.