GNFAC Avalanche Advisory for Fri Feb 19, 2010

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, February 19, at 7:30 a.m. **Team Bozeman,** in cooperation with the **Friends of the Avalanche Center**, sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Yesterday 1 inch of snow fell in the Bridger, northern Madison, and northern Gallatin Ranges while other areas remained dry. Today will be similar to yesterday with 1-2 inches of snow expected mostly in the northern half of the advisory area. The southern half should get at least a dusting of snow. This morning temperatures were in the single digits F with northerly winds blowing 5-10 mph. Highs today will reach the mid to high teens F as cold air continues descend from the north, and winds will stay light blowing 5-10 mph.

Snowpack and Avalanche Discussion

The Bridger Range:

Last weekend's storm dropped 3 inches of **snow water equivalent** in the Bridger Range. Many avalanches slid over the weekend and early part of this week. Many occurred within the storm snow; however, several notable avalanches broke on much deeper layers. These larger avalanches included one on Saddle Peak, several on Bridger Peak, one just north of Bridger Bowl, and another in the Flatirons area north of Ross Peak. We have documented this activity on our **photo** and **video** pages. Weaknesses in the storm snow should have mostly healed, but deeper instabilities linger 3-5 ft deep. Each day facets near the ground adjust a bit more to recent loading, but it's hard to say how fast this occurs though probably slower than we would like. Patience is the key. Strong winds last blew on Tuesday, and previously wind loaded slopes with more stress will be the most sensitive. For today, previously wind loaded slopes steeper than 35 degrees have a **CONSIDERABLE** avalanche danger. All other slopes have a **MODERATE** avalanche danger.

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

On Wednesday near Big Sky a group of skiers triggered an avalanche on Wilson Peak. It broke about 2ft deep, 400ft wide, and ran nearly 1800ft on a south facing 35 degree slope. They also observed cracking and collapsing on a nearby slope. Another group on a mountain next to Wilson Peak, also observed cracking and collapsing. On steeper slopes cracks were shooting as far as 30ft from them, and stability tests produced failures about a foot deep in the snowpack. A layer of near surface facets as well as surface hoar formed about a week and a half ago and is now buried 1-2 feet deep. Snowfall last weekend and strong winds mid week have stressed this layer producing avalanches and other obvious signs of instability. This layer has also been found near Cooke City mostly on southerly slopes. Facets near the ground also exist and should not be forgotten. For today, previously wind loaded slopes steeper than 35 degrees have a **CONSIDERABLE** avalanche danger. All other slopes have a **MODERATE** avalanche danger. Watch out because recent dustings of snow will make it hard to identify previously wind loaded slopes.

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

Yesterday Eric and I rode with Gallatin Snow Rangers in Teepee Basin in the southern Madison Range. Recent storms have not produced heavy snowfall in this area which has only received an inch or two with each storm. This minimal loading means minimal stress on the snowpack, and our stability tests took more force to produce

failures than they have previously. It is getting harder to trigger an avalanche, and many riders have been testing big slopes. Unfortunately the structure of the snowpack does not inspire confidence. Facets near the ground remain weak and exist on all slopes. A layer of surface hoar 1.5-2 ft deep exists on some slopes and propagates very clean fractures in stability tests. Riders are testing many slopes but not all of them will do so safely as one rider found on Monday when he was buried up to his head near Lionhead. For today, slopes steeper than 35 degrees have a **CONSIDERABLE** avalanche danger. All other slopes have a **MODERATE** avalanche danger

Eric 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

1. Bridger Bowl

AAI Level 2 Avalanche Course - Monday, February 22nd to Thursday, February 25th

www.americanavalancheinstitute.com

2. Moonlight Basin

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

events@moonlight.com or 406-993-6026