GNFAC Avalanche Forecast for Mon Jan 9, 2012

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, January 9 at 7:30 a.m. This advisory is sponsored by **Bridger Bowl** in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours a cold northwest flow dropped a trace to one inch of snow in the northern Gallatin and Madison Ranges. This weak system has been pushed to the east by a building ridge of high pressure, which is producing clear skies and relatively calm conditions.

Currently, mountain temperatures are ranging from the high teens to mid twenties and winds are blowing out of the WNW at 5-15 mph, with the exception of the Bridger Range where ridgetop winds are blowing 25-35 mph. Today, skies will remain clear and temperatures will climb into the low 30s F. Winds will gradually increase through the day, blowing 20-30 mph out of W. Skies will become partly to mostly cloudy by this evening as the next weather system approaches from the west.

Snowpack and Avalanche Discussion

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

As the weather changes so does the layering and structure of the snowpack. Without any snow events over the past week, the snowpack is slowly adjusting to last week's storm, helping improve stability. However the pack still resembles a house of cards; one wrong move and it could all come crashing down. A near miss in Cabin Creek outside of West Yellowstone on Saturday was a poignant reminder of just how unstable conditions are.

Yesterday, three of us toured into Bacon Rind in the southern Madison Range and found a snowpack comprised mainly of weak surgery facets (**snowpit**). Our stability tests indicated the weak structure was gaining strength, but we did not trust it. We all agreed that slopes steeper than 35 degrees would likely produce avalanches under the weight of a skier or rider.

A growing problem is a layer of near surface facets, which has developed over the past week. This layer has the potential of becoming a nuisance once buried by subsequent storms.

The bottom line is the snowpack structure remains weak. A cohesive slab 1-3 feet thick resting over a well developed layer of facets can be found throughout much of advisory area (**photo**). If you want to make it simple, today it is best to stay away from slopes steeper than 35 degrees, especially those located in high consequence terrain.

Today, human triggered avalanches are likely on slopes steeper than 35 degrees where the avalanche danger is rated **CONSIDERABLE**. Less steep slopes have **MODERATE** avalanche danger.

The northern Gallatin Range:

The northern Gallatin Range is set up better than most areas. A deeper and more stable snowpack has kept both natural and human triggered avalanches to a minimum. A weak layer of facets can be found near the ground, but it would take a heavy load or finding just the right trigger point to make this layer reactive.

Steep, upper elevation slopes, specifically those on the north and east half of the compass will be the most suseptable to human triggered avalanches.

Today, in the northern Gallatin Range, the avalanche danger is rated **MODERATE**.

Doug 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 mtavalanche@gmail.com or call us at 587-6984.

EVENTS/EDUCATION

To check out all our education programs: http://www.mtavalanche.com/workshops/calendar

BOZEMAN

1-hr Avalanche Awareness Lecture. Wednesday, January 11, 6:30-7:30 p.m. at REI.

<u>20/20 Hindsight - Lessons from recent accidents</u>. Tuesday, January 17th, 6:30-7:30 p.m. at Montana Import Group

BIG TIMBER

1-hr Avalanche Awareness Lecture. Tuesday, January 10, 7-8 p.m. at Big Timber High School.

HELENA

<u>1-hr Avalanche Awareness Lecture</u>. This class has been rescheduled for Tuesday, January 31st.

COOKE CITY

1-hr Avalanche Awareness Lecture. Saturday, January 14, 5-6:00 p.m. at Cooke City Community Center.

CODY, WYOMING

<u>Snowmobiler Introduction to Avalanches with Field Course</u>. Lectures on Saturday, January 14 at Mountain Valley Motorsports with an all day field session near Cooke City on Sunday, January 15. Advanced registration IS REQUIRED.

BILLINGS

<u>Snowmobiler Introduction to Avalanches with Field Course.</u> Lectures on Tuesday, January 24 from 6-9 p.m. at Hi-Tech Motor Sports with an all day field session in Cooke City on Sunday, Jan 29. PRE-REGISTER BY JAN 23 at Hi-Tech!! Register with Sharon at 406-652-0090; hitech@hi-techmotorsports.com.

Great Falls

1-hr Avalanche Awareness Lecture Thursday, January 19th, 7-8 pm at Greenup Performance