GNFAC Avalanche Advisory for Sun Jan 8, 2012

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, January 8 at 7:30 a.m. This advisory is sponsored by **Yellowstone Club Community Foundation** in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

Mountain Weather

Montana is currently positioned on the leeward side of a ridge of high pressure sitting off the coast of California. This is generating a northwest flow over our area, producing mostly cloudy skies and cool temperatures. At 4 am this morning, mountain temperatures are ranging between 10 and 15? F with Cooke City weather station being the coldest at 3? F. Winds are averaging 10-20 mph out of the WNW with the exception of the Bridger Range where ridgetop winds are blowing 30-40 mph out of WNW. Today, temperatures will climb into the mid to high twenties under partly cloudy skies and winds will continue to blow 15-30 out of the WNW.

Snowpack and Avalanche Discussion

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

Snow conditions are becoming more variable with every passing day. Aspects affected by the sun are becoming thin and firm with nearly supportable crusts being found on many slopes. Thanks to the sun's low angle this time of year, slopes on the north and east half of the compass continue to shelter dense dry powder. These slopes hold some of the best riding conditions with a caveat - they also hold the most unstable snow conditions.

Yesterday, a snowmobiler in Cabin Creek outside of West Yellowstone narrowly missed getting caught in a slide triggered by his partner. The slide was triggered on a NE facing slope that had been wind loaded during last week's storm. The slide consisted of a dense slab that ran on weak surgery facets formed during December. A skier outside of Cooke City found a similar snowpack structure that produced natural avalanches earlier in the week (photo).

For the time being the snowpack in most areas remains weak and unstable. A cohesive slab 1-3 feet thick rests over very weak faceted snow which is still struggling to support the load delivered by last week's storm (**photo**). As demonstrated by the near miss in Cabin Creek yesterday, slopes continue to be sensitive to the weight of a skier or rider.

For this reason the avalanche danger remains **CONSIDERABLE**.

The northern Madison Range:

The avalanche danger in the northern Madison range is trending towards increasing stability, but persistent weak layers found mid pack and near the ground continue to warrant caution (**photo**). Steep slopes, specifically those with thin or rocky margins, are of particular concern. Today, any slope steeper than 35 degrees has a **CONSIDERABLE** avalanche danger. Less steep slopes have a **MODERATE** avalanche danger.

The northern Gallatin Range:

The northern Gallatin Range has received more snow this winter than any other range in our forecast area outside of Cooke City. Fairly consistent storms have helped reduce the development of faceted layers, primarily near the ground, which is making the snowpack more stable. However, buried facets do exist and the possibility of a skier or rider triggering a slide remains.

Slopes that have a thinner snowpack, specifically those in steep rocky terrain will be the most likely to produce human triggered avalanches.

Today, heightened avalanche conditions exist on specific terrain features and the avalanche danger is rated **MODERATE**.

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 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

<u>Snowmobiler Introduction to Avalanches with Field Course</u>. Lectures on Saturday, January 7, with an all day field session Sunday, January 8. Advanced registration IS REQUIRED.

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

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