Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, February 6 at 7:30 a.m. **Montana Import Group** in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

# Mountain Weather

A fast moving cold front is pushing into southwest Montana from the north. Very little moisture is associated with this front keeping the chance of measurable precipitation low. However, our area will see increasing clouds and cooler temperatures through the day. Currently, skies are clear, winds are light out the NNE and temperatures are ranging from the single digits to low teens. Mountain temperatures will climb into the high teens to low twenties today and winds will gradually shift to the SSE.

# Snowpack and Avalanche Discussion

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

Yesterday, Doug investigated a large natural side that occurred in the Lionhead area on Friday (video). He found an avalanche that broke up to 3 feet deep, three hundred feet across and ran nearly 800 vertical. It was a hard slab that failed on facets near the ground. What was surprising about this avalanche is that it naturally released after the area received only a few inches of new snow. This illustrates the weak and fragile nature of the snowpack in the mountains near West Yellowstone.

The snowpack in the mountains around Cooke City is spatially variable. Some slopes have a deeper, stronger snowpack while others have a layer of facets buried 3-4 deep that is still causing avalanches. Slopes with a southerly aspect have the widest distribution of this layer. On Thursday I remotely triggered a large slide on the south face of Mt Abundance (**photo**) and on Saturday riders observed a natural avalanche in the same area (**photo**).

A calm weather pattern over the past few days is making it more difficult to trigger avalanches. However, it is still very possible to trigger a slide on slopes steeper than 35 degrees. Avalanches will be easier to trigger in areas where the snowpack is thinner, such as rock outcroppings or thin scoured areas.

Today, the avalanche danger is **CONSIDERABLE** on slopes steeper than 35 degrees. Less steep slopes have a **MODERATE** avalanche danger.

# The Bridger Range and northern Madison Range:

Mild temperatures, light winds and the lack of measurable precipitation have allowed the snowpack to become well adjusted. Although it is becoming increasingly difficult to trigger a slide, it is not entirely out of the question. Steep, upper elevation slopes, specifically those that have been previously affected by the wind hold the greatest potential for producing an avalanche. Triggering a slide today will require finding the right spot on the right slope, also known as the sweet spot or trigger point. Places where the snowpack is thinner, mainly around rock outcroppings and shallow scoured areas will be likely trigger points.

Although the avalanche danger is trending down, human triggered avalanches remain possible and the danger is rated **MODERATE**.

### The northern Gallatin Range:

The northern Gallatin Range, especially the Hyalite Canyon area has the strongest snowpack in our forecast area. Limited distribution of buried persistent weak layers and minimal snowfall has allowed the snowpack to find a stable balance. It has been weeks since any natural or human triggered avalanches have been reported. This does not mean that avalanches should be entirely written off. Steep slopes, specifically those in tight gullies or in upper elevation terrain continue to hold the possibility of producing a slide. When traveling in steep terrain, safe backcountry protocol applies and always be thinking about the consequences of a slide.

Today, slopes steeper than 35 degrees have a **MODERATE** avalanche danger. Less steep slopes have a **LOW** avalanche danger.

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 <u>mtavalanche@gmail.com</u> or call us at 587-6984.

# **FUNDRAISING**

# February 11: 10th Annual King and Queen of the Ridge

The 10th Annual King and Queen of the Ridge Hike/Ski-a-thon fundraiser is Saturday, Feb 11th. The event supports avalanche education in southwest Montana. Collect pledges for one, two or the most Ridge hikes you can do in the five hours of competition. 100% of the proceeds go to the Friends of Gallatin National Forest Avalanche Center. Kids and families are encouraged to hike too! More Information / Registration Form

# **EDUCATION**

#### Bozeman

FREE 1-hour Avalanche Awareness at REI on Thursday, February 16 at 6:30 p.m. For more information call REI at 406-587-1938