Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on, Friday, March 2 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

Since yesterday morning most areas received 2-3 inches of snow, except Lionhead which received 4 inches of new snow, and Bridger Bowl which had received 8 inches of very low density snow by 7 a.m. Temperatures this morning were near 0 degrees F and winds were blowing 10-20 mph from the W and NW with gusts of 30 mph. Today temperatures will struggle to reach the low teens F. Winds will continue from the W and NW averaging 15 mph and gusting 25-30 mph.

Snow should end this morning allowing some sunshine today but snowfall will return late this afternoon or this evening and be snowing tomorrow morning. By tomorrow morning the mountains near Bozeman will get another 4 inches of new snow, the mountains near Big Sky and Cooke City will get 2-4 inches, and the mountains near West Yellowstone will get 1-3 inches. Saturday will be warmer and windier.

### Snowpack and Avalanche Discussion

### The Lionhead area near West Yellowstone:

The Lionhead area near West Yellowstone received just over 1 inch of <u>snow water equivalent</u> (about 1 foot of snow) in the last 48 hours. On Monday just south of Hebgen Lake, Doug and Eric experienced collapsing and shooting cracks, clear signs of unstable conditions (<u>photo</u>). They found a weak layer of near surface facets that is now buried 2.5 feet deep. Recent snow added significant stress to this weak layer making conditions more unstable. On Wednesday strong winds blew from the SW, and this morning strong winds were blowing from the NW. Today, a **FIGH** avalanche danger exists on wind loaded slopes steeper than 35 degrees. All other slopes have a **CONSIDERABLE** danger. Under these conditions it is very possible to trigger an avalanche from flat terrain underneath steeper slopes.

### The Bridger Range:

Last weekend avalanches occurred throughout the Bridger Range. Some broke at the ground like ones on Saddle Peak and Wolverine Bowl (**photos**). Others broke on a layer of near surface facets in the middle of the snowpack. With only 0.5 inches of <u>snow water equivalent</u> in the last 48 hours, the most likely avalanches to occur today will be ones involving fresh wind slabs. However, avalanches breaking deeper in the snowpack are entirely possible especially with snow falling this morning. I do not trust these deeper layers and would not be riding on any slope steeper than 30 degrees. Today the avalanche danger is rated **CONSIDERABLE**.

# The Madison and Gallatin Ranges and the mountains around Cooke City:

In the Madison and Gallatin Ranges and the mountains around Cooke City fresh wind slabs will easily make small avalanches today. The Big Sky Ski Patrol found these wind slabs to be very reactive above 9500 ft yesterday. I skied in Beehive and Middle Basins yesterday where I still had some concerns with depth hoar near the ground but only on isolated slopes with a thin snowpack; otherwise, my main concern was a layer of near surface facets buried 1.5 to 3 feet deep.

This layer is tricky. On many slopes yesterday I found this layer to be strong, but nearby on Buck Ridge a snowmobiler triggered an avalanche on this layer (**photo**). This avalanche broke over a very wide area showing the potential for this weak layer to propagate fractures over long distances. Near Cooke City yesterday, Doug found this layer buried 3 feet deep (**photo**), and it appeared to be gaining strength. On Tuesday I found this layer in the southern Madison Range near Cabin Creek. It also seemed to be gaining strength, but we also spotted a recent natural avalanche on this layer on a low elevation E-facing slope. On some slopes this layer is gaining strength while on others it is very weak and will make large avalanches.

For today the avalanche danger is **CONSIDERABLE** on all wind loaded slopes and all slopes steeper than 35 degrees. All other slopes have a **MODERATE** avalanche danger.

Eric 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.

## **Avalanche Accidents**

<u>The accident reports</u> for the avalanche fatality near Cooke City on February 22 and Friday's avalanche on Saddle Peak are available on our website.

Last Saturday Francis Skierka from Cut Bank, Montana died in an <u>avalanche</u> in northwestern Montana near Marias Pass. Sadly his wife, Andrea, is pregnant and due in two months. A memorial fund to help Andrea and her baby has been established. The Francis Skierka Family Memorial, Stockman Bank, 125 W Main, Cut Bank MT 59427, 406-873-9400

## **Events/Education**

**FREE 1-hr** Avalanche Awareness Lecture, TONIGHT, March 2, 7-8 p.m. at the West Yellowstone Holiday Inn in the room next to the bar.

### 31st Annual Pinhead Classic

Come to Bridger Bowl on Saturday, March 17<sup>th</sup> (St. Patrick's Day) with telemark skis, AT skis, alpine skis, snowboards, split boards, or even snow blades. The theme is Snowpocalypse based on the wildly popular Mayan 2012 apocalypse. \$30 gets you into the races, a pint glass, t-shirt, a good time, a raffle ticket, and food by Cafe Fresco. Pre-register at Mystery Ranch or Grizzly Ridge March 11-16. Visit <u>http://pinheadclassic.com/</u> or the Pinhead <u>Facebook</u> page for more info.