GNFAC Avalanche Advisory for Sun Feb 16, 2014

AVALANCHE WARNING

UPDATED ON February 16 2014 AT 11:00 a.m.

The Gallatin National Forest Avalanche Center is re-issuing a **Backcountry Avalanche Warning for the mountains around Cooke City.** Relentless snowfall and strong winds have created highly unstable conditions. Natural avalanche activity is being reported this morning and human triggered avalanches are very likely. **The avalanche danger is rated HIGH in the mountains around Cooke City.** Very dangerous avalanche conditions exist. Travel in avalanche terrain is not recommended and avalanche runout zones should be avoided.

Go to www.mtavalanche.com/current for the most current avalanche information.

This warning will either be terminated or updated by 6:30 a.m. on Monday, February 17.

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 16 at 7:30 a.m. **Gallatin River Lodge** and **Pinhead Classic Telemark Festival**, sponsors today's advisory. This advisory does not apply to operating ski areas.

The GNFAC would like to extend a huge thanks to all the participants who showed up and worked their tails off yesterday during the King and Queen of the Ridge. The event was a huge success with more than 40 hikers throwing down in the name of avalanche education. The King finished with an impressive 29 hikes. The Queen was not far behind with a very respectable 25 hikes.

Mountain Weather

Since yesterday morning another 6-8 inches of dense snow fell near Cooke City. The mountains around West Yellowstone received 2-3 inches while the mountains around Bozeman and Big Sky picked up 1-2 inches. At 4 a.m. mountain temperatures are in the upper 20s F to low 30s F and winds are strong out of the WSW blowing 15-25 mph with gusts over 40 mph being recorded in most locations. Today, temperatures will only warm a few degrees as a weak cold front moves over the area. Winds will remain strong out of WSW blowing 15-25 mph with gust reaching upwards of 50 mph. Moisture pushing in from the southwest will continue to produce a chance of mountain snow, mainly for the mountains around West Yellowstone and Cooke City where an additional 2-3 inches is possible. Snow will taper off this evening but another round of moisture is forecasted to impact the area tomorrow night into Tuesday.

Snowpack and Avalanche Discussion

Cooke City

Avalanche Warning 11:00 a.m. UPDATE

We have re-issued the avalanche warning for Cooke City. Natural avalanches have been seen on lower elevation hills near town. Another 1/2 an inch of water was added to the snowpack since the advisory was issued this morning. Over 4" of water has been added this week, totaling over 4 feet of snow, much more at the higfher elevations. Natural and human triggered avalanches are very likely. The snow is failing and avalanching. Too much weight has been added too quickly.

The avalanche danger is rated **HIGH** on all slopes.

Madison Range Gallatin Range

Lionhead area near West Yellowstone

Now is a tricky time in the mountains near Big Sky and West Yellowstone. Periodic snowfall and warmer temperatures have allowed the snowpack to gradually gain strength (**video**). This has made avalanches harder to trigger.

Although the snowpack is slowly getting stronger, there are still multiple avalanche problems on the radar. The most obvious is wind loaded slopes. Strong winds out of west-southwest have produced meaty wind slabs in upper elevation terrain. Yesterday, the Big Sky Ski Patrol triggered a few large slides of this nature during control work (**photo**). Wind loaded slopes pose the biggest threat in terrain at or above tree line. With more strong winds in the forecast, I expect wind slabs to grow in size and distribution throughout the day.

A less obvious but equally as dangerous problem is a layer of facets buried 1-3 feet deep. This layer is slowly showing signs of improvement, but continues to display its ability to produce avalanches. Yesterday, Doug and his partner remotely triggered a small slide up Lightning Creek in the Taylor Fork of the southern Madison Range (**photo, video**). Further south a group of skiers experienced cracking and collapsing near Hebgen Lake (**photo**). This bull's eye data clearly indicates stability has plenty of room for improvement.

Today, new snow and wind will make human triggered avalanches likely on slopes steeper than 35 degrees which have a CONSIDERABLE avalanche danger. Less steep slopes have a MODERATE avalanche danger.

Bridger Range

The Bridger Range has received consistent snowfall over the past few days, but it has been only a few inches here and there. Without a recent heavy load, the snowpack has not been put under a tremendous amount of stress.

Although the snowpack is stable in most areas, there are few avalanche problems to consider. The primary concern will be wind loaded slopes. This problem will be most evident in upper elevation terrain below ridgelines. Areas such as Fairy Lake and Frazier Basin in the Northern Bridger Range would be likely areas to encounter fresh wind deposited snow.

On non-wind loaded slopes there is the possibility of avalanches being triggered on a layer of facets buried 1-2 feet deep. This layer exists on isolated slopes and should be looked for an assessed before committing to steeper terrain.

Today for the Bridger Range the avalanche danger is rated **MODERATE** on slopes steeper than 35 degrees and **LOW** on less steep slopes.

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

February 20, BOZEMAN: Thursday, 6:30-8:00 p.m., REI, **Women's Specific Avalanche Awareness** lecture. Pre-registration is required: www.rei.com/stores/bozeman.html

February 22, BIG SKY: Saturday, 10 a.m. – 2 p.m., Beehive Basin Trailhead, **Companion Rescue Clinic**. In partnership with Grizzly Outfitters. Space is limited and pre-registration is required. https://ticketriver.com/event/9964

February 22, WEST YELLOWSTONE: Saturday, 7:00-8:00 p.m., Holiday Inn, **1 –hour Avalanche Awareness for Snowmobilers** lecture.

More information our complete calendar of events can be found **HERE**.