GNFAC Avalanche Advisory for Sat Dec 28, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, December 28 at 7:30 a.m. <u>Cooke City Motorsports and Yamaha</u> in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

The weather will change drastically today. A cold front dropping from the north will arrive by late morning/early afternoon, producing light snow and colder temperatures. Winds will also spike during the frontal passage.

Currently, warm and windy conditions exist. Temperatures are in the mid to high 20's F and winds are blowing 15-25 mph out of the WSW with higher gusts along the ridgelines. As the front approaches, winds will continue to increase out of the WSW. Gusts near 50 mph are likely with the frontal passage. Cold air and light snow will arrive behind the front. Temperatures will be in the teens F by this afternoon and the mountains should see 1-2 inches of new snow.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone

It's not rocket science - the backcountry is dangerous right now. From the Bridger Range to the mountains around West Yellowstone, there has been widespread avalanche activity (**photos**).

Yesterday, Mark investigated numerous avalanches in Beehive Basin near Big Sky. The story in this area is simple – lots of new snow sitting on top of weak facets near the ground is producing unstable conditions (**photo**, **video**). Mark and his partner experienced widespread cracking/collapsing and ultimately skied the skin track back to the car. More avalanche activity was observed on Yellow Mountain in the same area.

A similar situation exists in the northern Gallatin Range. On Christmas Day, a skier triggered a large slide on Mt. Ellis. The slide propagated hundreds of feet wide and broke on facets near the ground. Fortunately the skier rode off the slab and avoided taking a nasty ride (video1, video2, photo). Recent avalanche activity has also been reported throughout Hyalite Canyon (photo).

The snowpack in the Bridger Range and Mountains around West Yellowstone suffers from a similar problem. Weak facets near the ground continue to feel the stress from the heavy snow that fell before Christmas. It will be easiest to trigger avalanches on wind loaded slopes, however; non-wind loaded slopes will also produce slides. At this point – all slopes steeper than 30 degrees should be considered suspect.

Today, dangerous avalanche conditions exist. Human triggered avalanches are likely and the avalanche danger is rated **CONSIDERABLE**.

Cooke City

The snowpack around Cooke City is good but not great. Faceted layers buried 1-2 feet above the ground are still producing unstable results in stability tests, and in some cases, still producing avalanches (**photo**, **video**). There

are positives and negatives to this scenario.

On the positive side, it is becoming harder to trigger avalanches.

On the negative side, if you do imitate a fracture on these buried weak layers, the side will likely be large and dangerous.

Triggering a slide will require finding the right spot on the right slope. Slopes that have received a recent wind load, specifically those in steep-rocky terrain will be the most susceptible to producing avalanches.

For today the danger remains **CONSIDERABLE** on any slope steeper than 35 degrees OR any wind loaded slope. Slopes less than 35 degrees and lacking wind drifted snow have a **MODERATE** danger.

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.

In other news: There were two avalanche fatalities near Jackson Hole on the 26th of December. One occurred outside the ski area and the other occurred in Idaho south of Jackson. See more details here - http://www.jhavalanche.org/eventmap/index.php.

EVENTS/EDUCATION

January 4, BOZEMAN: Saturday, 10:30 a.m. at Bridger Bowl, **Free Avalanche Transceiver Workshop**, next to rental shop at Jim Bridger Lodge.

January 7, BILLINGS: Tuesday, 6:30-8:30 p.m. at High Mountain Recreation, **90-Minute Rescue Presentation**.

January 8, BOZEMAN: Wednesday, 6:30-8 p.m. at REI, Sidecountry IS Backcountry lecture.

January 9, BOZEMAN: Thursday, 6-7 p.m. at Mystery Ranch, 1-hour Avalanche Awareness lecture.

January 9, HELENA: Thursday, 6:30-7:30 p.m. at Exploration Works, 1-hour Avalanche Awareness lecture.

January 11, COOKE CITY: Saturday, 10 a.m. to 4 p.m., **Companion Rescue Clinic for Snowmobilers**, Pre-Registration is required. https://www.ticketriver.com/event/9445

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