GNFAC Avalanche Advisory for Sat Dec 14, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued Saturday, December 14 at 7:30 a.m. <u>Alpine Orthopedics</u> and <u>World Boards</u> sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours the Bridger Range picked up four inches of new snow while all other areas received 1-2 inches. Temperatures this morning were mostly in the mid to high teens F with the exception of the West Yellowstone area where temperatures are in the single digits F. Winds are blowing 10-25 mph out of the WNW except in the Bridger Range where ridgetop gusts are reaching into the 40's. Today, temperatures will warm into the mid to upper 30's F under partly cloudy skies. Winds will continue to blow 10-25 mph out of the WNW. Little to no precipitation is expected over the next 24 hours.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range Lionhead area near West Yellowstone Cooke City

The snowpack is not uniform. It changes drastically from mountain range to mountain range, slope to slope, and in some cases, the snowpack structure can change significantly over an individual slope. This is known as spatial variability, which can make riding in avalanche terrain a tricky proposition.

Yesterday, an experienced backcountry skier was caught and partially buried on the Throne in the northern Bridgers. The slide occurred on a northeast aspect and broke on a layer of facets close to a foot off the ground. The slope angle was 39 degrees and the crown ranged between 1 to 4 feet deep. Fortunately, the skier who triggered the slide escaped uninjured (**photo**, **photo**).

This is a classic example of what happens when you combine a variable snowpack with the 'human factor'. It was the third day in a row that this skier had been riding in the Throne area. After skiing numerous runs without incident - their comfort and confidence level drew them into an area where the snowpack was unstable.

This slide falls on the heels of numerous human triggered avalanches which occurred earlier in the week (**photo**, **video**). See more photos **here**. The combination of new snow, wind and buried weak layers has created the perfect recipe for avalanches. The difficultly with this scenario is – not all slopes carry this unstable combination.

It's critical to collect as much information as possible before committing to avalanche terrain. Dig snowpits, look and listen for obvious signs of instability, and always be thinking about the consequences of an avalanche.

Ice Climbers: Stability in the Hyalite and East Fork drainages is improving. The likelihood of natural avalanches is decreasing, however; wind slabs resting over weak faceted snow continues to make human triggered avalanches likely, specifically in steep-wind loaded gullies (<u>video</u>).

Today the avalanche danger is <u>CONSIDERABLE</u> on all wind loaded slopes where human triggered avalanches are likely. Slopes without a wind load have a <u>MODERATE</u> danger but should still be approached with caution.

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

BOZEMAN: Saturday, December 14, 10:30-11:30 a.m. **FREE Avalanche Transceiver Workshop**, Bridger Bowl, next to the rental shop at Jim Bridger Lodge. NO registration required. Just show up.

GARDINER: Thursday, December 19, 7-8 p.m. **Avalanche Awareness**, at the Yellowstone Association in Gardiner. Call Zachary for more info at: 406-848-2850.

WEST YELLOWSTONE: **Snowmobiler Intro to Avalanches w/ Field Course**; 19 and 20 December. Info and registration: https://www.ticketriver.com/event/7116