GNFAC Avalanche Advisory for Sat Mar 15, 2014

Good Morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Saturday, March 15 at 7:30 a.m. A **Montana FWP Recreation Trails Grant** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Overnight the Bridger Range received an inch of snow and the mountains near Big Sky received 3-4 inches. Many SNOTEL sites stopped reported data yesterday evening, but I think most other places received 2-4 inches. This morning temperatures had dropped into the mid to high teens F. Strong winds were averaging 20-30 mph and gusting to 50 mph mostly from the W. Today the sun should appear by afternoon and temperatures will rise into the high 20s and low 30s F. Winds should ease by afternoon and blow 5-15 mph. Sunday will have strong winds and warm temperatures. Then Monday will have cooler temperatures and more snow. Welcome to spring!

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

The most common problem today will be fresh wind slabs. These formed overnight by the combination of strong westerly winds and a few inches of new snow. Fortunately fresh wind slabs are easy to see and avoid.

A more difficult problem is avalanches that break on deeper layers in the snowpack. The weakest one is the layer of facets that formed in early December during extreme cold weather. Can you believe we're still discussing this layer? Unfortunately it hasn't gone away. Heavy snowfall last Monday night finally pushed this layer closer to its breaking point. On Tuesday there were many large avalanches (**photos**) in the Bridger Range which received the most snow, thus the heaviest load on the snowpack. Also, on Tuesday a fatal avalanche occurred near Cooke City (**accident video**, **snowpack video**, **photos**). This slide broke on a slope with a thin snowpack and very weak facets at the ground. A full report on this accident will be completed soon.

Other avalanches have been seen in Hyalite, and some appear to be breaking in the middle of the snowpack on a layer of January facets (**photo**). Yesterday a skier south of Cooke City near Pilot Peak spotted another avalanche breaking near the ground on the December facets. It broke up to 10 feet deep in a steep rocky area and was 400 feet wide. This one likely occurred mid-week. Two days ago in the southern Madison Range, my partner and I didn't spot any recent slides. It doesn't mean they didn't occur. They probably did because we found several weak layers in the snowpack and were surprised how weak the December facets were (**photo**)

Wind slabs should be easy to trigger today. Big deeper avalanches are much harder to trigger. While the likelihood of triggering a big one is low, the consequences are severe. For these reasons today, the avalanche danger is rated **CONSIDERABLE** on slopes steeper than 35 degrees. All other slopes have a **MODERATE** danger.

CORNICES

Two days ago, a person walking along the ridge north of Bridger Bowl and outside the ski area received minor injuries (luckily) and was rescued and when a cornice broke underneath him and he tumbled about 1200 feet down slope. The falling cornice caused slabs to fracture and carried this person further that they would have fallen otherwise. Nothing fractured in the snowpack lower on the apron and the debris fanned out, thus this person was not buried. Cornices are large now and creep during warm weather. They are unpredictable, deadly, and often break further back than you would expect. Give these monsters a wide berth.

This person commented that he was at least 10 feet from the edge. This strategy doesn't work when it's a 20 foot cornice. Think about where the cornice starts not where it ends. If you have any doubts, hike next to trees and don't go any closer to the edge than where the trees are.

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 mtavalanche@gmail.com or call us at 587-6984.