GNFAC Avalanche Advisory for Sun Apr 1, 2012

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, April 1 at 7:30 a.m. Indulgence and Outlaw Partners sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Unbelievable! Last night a cold winter storm dropped over two feet of cold smoke powder in the mountains around Bozeman and Big Sky. The riding conditions should be some of the best of the year. April Fools! In fact a warm spring storm dropped nearly an inch of rain in the northern Gallatin Range. Most other areas picked up .2-.3 inches of rain. Currently, mountain temperatures are in the upper 20s to low 30s and winds are blowing 20-30 mph out of the WSW with gust reaching into the 40s. Today, temperatures will only warm a few degrees as a cold front moves over the region. Valley rain and mountain snow will be likely through the day. The southern mountains including Big Sky should pick up 3-5 inches of snow by this afternoon. The mountains near Bozeman will pick up 2-4 inches.

Snowpack and Avalanche Discussion

The Bridger Range, Gallatin Range, Madison Range and Lionhead area near West Yellowstone:

Today, a cold front will drop temperatures below freezing for the first time in days. This will create a tricky situation. Although the snowpack surface may become firm with falling temperatures, the underlying layers will remain warm, moist and weak.

To further complicate matters, new snow and strong winds will increase new snow instabilities throughout the day. The new snow should bond well to the old snow surface, but it will continue to add stress to buried weak layers. Slides that do initiate within the new snow have the potential to step down to deeper layers, producing larger and more dangerous avalanches (photos, video).

The biggest concern today will be slides failing on depth hoar near the ground. This will be most likely in steep, rocky terrain where the snowpack is thinner. Yesterday, the Moonlight Basin Ski Patrol observed a recent slab avalanche around 9500 feet on a SE facing slope on Fan Mountain.

Today, a poor snowpack structure combined with 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.

The mountains around Cooke City:

The mountains around Cooke City have the deepest and most stable snowpack in our forecast area. Currently, the Fisher Creek Snotel site is recording 102" of snow on the ground. Fortunately, the snowpack in this area lacks a widespread weak layer, keeping avalanches confined to new snow instabilites.

The primary avalanche concern for the mountains around Cooke City is fresh wind slabs. Moderate to strong west/southwest winds and new snow have created dense slabs and drifts along ridgelines and in upper elevation starting zones. These drifts should be well bonded to the old snow surface, but could be triggered by a skier or rider.

Aside from new snow instabilities, the snowpack is generally stable (video).

Today, the avalanche danger is rated MODERATE on wind load slopes. Non-wind loaded slopes have a LOW avalanche 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.

Avalanches: Decision-making and Psychology

On March 28 the GNFAC and Friends hosted a Professional Development Workshop on "Decision-making and Psychology". All six lectures are uploaded to YouTube. Making high consequence decisions in dynamic, dangerous environments is tricky stuff. These lectures are by an avalanche worker, forecaster, SEAL, airline pilot, and psychologist. Watch, listen and learn. You can view the lectures here: http://www.youtube.com/playlist?list=PLEFAE2148A0027DF6&feature=view_all

Events

Big Sky

Free avalanche beacon instruction. Grizzly Outfitters, Today, March 31st, 3-5 p.m.