GNFAC Avalanche Forecast for Sun Mar 13, 2016

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Sunday, March 13, at 7:30 AM. Today's advisory is sponsored by <u>Cooke City Super 8/Bearclaw</u> and <u>Gallatin County Search and Rescue</u>. This advisory does not apply to operating ski areas.

Mountain Weather

Overnight the mountains around Cooke City picked up three inches of new snow. The rest of the advisory are picked up a trace to one inch. This morning, skies are partly to mostly cloudy and temperatures are in the 20s F. Winds are blowing 15-30 mph out of the W-SW with ridgetop gusts pushing 40 mph. Today, temps will warm to into the upper 20s to low 30s F and winds will remain moderate to strong out of the W-SW. A storm system moves into the area this afternoon producing a good chance of mountain snow. By tomorrow morning the mountains around Big Sky, West Yellowstone and Cooke City should receive 4-6 inches of new snow while the mountains around Bozeman will see 2-4 inches. Snow will likely continue through the day Monday.

Snowpack and Avalanche Discussion

Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

The snowpack is finally getting a well needed break from the relentless warm temps that have plagued the area over the past week. This drop in temperature will decrease the potential for wet snow avalanches today.

The primary avalanche concern now will be wind loaded slopes. In the mountains around Cooke City, three inches of new snow combined with strong winds out of the W-SW will be forming a fresh batch of wind slabs. These shouldn't be large in size, but will likely be sensitive to human triggers.

Although the mountains around Big Sky and West Yellowstone got missed last night, there's still plenty of fresh snow available for transport. Yesterday, the Big Sky Ski Patrol experienced strong winds and moving snow during much of the day and triggered small wind slabs just below treeline. Today, continued strong winds and the potential for new snow will keep the avalanche danger elevated on wind loaded slopes.

Wind deposited snow will also be adding stress to weak layers buried 1-3 feet deep (**video**). A few days ago, a large side occurred in the Lionhead area near West Yellowstone (**photo**). It's unknown how this slide was triggered, but it was likely caused by snowmobilers. The slide occurred on a wind loaded slope and appears to have failed on a weak layer buried 1-2 feet deep. Skiers also triggered a small slab avalanche on a wind loaded slope in the northern Gallatin Range yesterday. This slide failed on facets 1-2 feet below the surface (**photo**).

Today – human triggered avalanches are likely on wind loaded slopes steeper than 35 degrees which have a **CONSIDERABLE** avalanche danger. All other slops have a **MODERATE** avalanche danger.

Bridger Range

The main problem in the Bridgers has been wet snow avalanches. Yesterday, the Bridger Bowl Ski Patrol closed the Ridge at 10 a.m. due to warm temps. Today, there continues to be a wet snow avalanche hazard in mid to low elevation terrain where the snowpack is near isothermal. In upper elevation terrain, below freezing temps will

eliminate this problem today. Without fresh snow, wind slabs and new snow instabilities are not much of an issue. This could change if today's storm arrives earlier and stronger than expected.

Today, the avalanche danger in the Bridger Range will start out <u>LOW</u>, but could rise to <u>MODERATE</u> by this afternoon.

I will issue the next advisory tomorrow morning by 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found **HERE**.