GNFAC Avalanche Advisory for Sat Mar 23, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, March 23 at 7:30 a.m. **Gallatin Valley Snowmobile Association (GVSA)** in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Overnight three inches of low density snow fell in the Bridger Range. A trace to one inch fell elsewhere. At 4 a.m. temperatures are in the single digits above or below zero F and winds are blowing 5-10 mph out of the WNW. Today, temperatures will stay well below average with highs warming into the teens F and winds will stay light out of the WNW blowing 5-10 mph. Skies will start out partly to mostly cloudy this morning, but will become obscured by this afternoon as another round of moisture arrives from the north. 1-3 inches is possible by tomorrow morning in the mountains around Bozeman and Big Sky. The southern mountains will see a trace on one inch.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Yesterday, Mark rode in the Lionhead area near West Yellowstone and found generally stable conditions. He found recently formed wind drifts to be well bonded to the underlying snow surface. This is consistent with the conditions I found in McAtee Basin on Thursday.

Although recently formed wind drifts are settling out and stabilizing, it will remain possible for a skier or rider to trigger a pocket of wind deposited snow. Wind slabs will be most widespread on upper elevation slopes leeward to westerly winds (**photo**). Wind drifts may also be encountered around cross-loaded sub-ridges and gullies on lower elevation slopes. The problem with isolated wind slabs isn't so much their size, but their ability to push skiers or riders into trees, rocks, gullies or over cliffs. Continuously evaluate the terrain you are riding and always be thinking about the consequence of an avalanche.

On non-wind-loaded slopes, the 6-12 inches of snow that has fallen over the past few days has bonded well to the underlying melt-freeze crust that formed last week. This stout crust can be found on all slopes with the exception of those that are upper elevation and north facing. In areas where this crust does not exist, there remains a slight possibility for a skier or rider to trigger a slide on a layer of facets now buried 2-3 feet deep (**video**). This scenario is unlikely, but should be considered if skiing or riding in extreme terrain.

<u>Another Problem</u>: Cornices have grown very large and can break farther back than one might expect (**photo**). Steering clear of these beasts both above and below ridgelines is a good way to avoid being steam rolled by a bus size chunk of snow. Read the <u>accident report</u> for the most recent avalanche fatality in Haines Alaska that was caused by a cornice break.

Today, heightened avalanche conditions exist on wind loaded slopes which have a <u>MODERATE</u> avalanche danger. 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.