GNFAC Avalanche Advisory for Fri Jan 3, 2014

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, January 3 at 7:30 a.m. <u>Grizzly Outfitters</u>, in partnership with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Yesterday was relatively warm, sunny and calm. Today will be the opposite. This morning the mountains near Bozeman and Big Sky had temperatures in the high 20s F. Winds were averaging 15-30 mph from the SW gusting to 50 mph. Near West Yellowstone and Cooke City, temperatures were in the teens to low 20s F and winds were blowing 15 mph gusting to 30 mph from the SW. Temperatures should slowly drop through the day and be in the mid teens F this afternoon. Winds will remain strong blowing 20-30 mph gusting to 50 mph from the W. By tomorrow morning most areas should have 4-6 inches of new snow.

Snowpack and Avalanche Discussion

Northern Gallatin Range

On New Year's Day a snowmobiler died in an avalanche (video of scene, video of crown, overview, crown, debris, tracks, partial burial) and another was partially buried just east of Big Sky in the northern Gallatin Range. A full accident report will be available tomorrow. They likely triggered the slide while riding on low angle terrain below a steeper slope. The snowpack contained weak facets about a foot off the ground with slab of cohesive snow on top. Eric and I saw many recent avalanches in this area yesterday. This group of snowmobilers also reported seeing some of these slides before the accident.

THE PROBLEM is that avalanches can be triggered from flat terrain adjacent to steeper slopes. Nearby a regular observer in Hyalite Canyon found two more fresh slides (**photo**) in addition to an unbelievable number of slides he has observed in the last week.

Strong winds (**photo**) and more snow will not help the situation, and today we can expect natural avalanches on wind loaded slopes where the avalanche danger is **HIGH**. Slopes without a wind load are just as ripe for human triggered avalanches and the danger on these slopes is **CONSIDERABLE**.

Bridger Range Southern Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

This situation in the rest of the advisory area isn't much different. In fact a snowmobiler triggered a small slide two days ago in Carrot Basin near the Taylor Fork drainage and shared his helmet cam footage with us (video). While this slide was small and he was not buried, it is a clear warning sign. It is also a good reminder to avoid riding in the bottom of steep gullies where even a small slide can be fatal. On the same day another slide (photo) was spotted just south of Big Sky on Buck Ridge that occurred naturally. Both of these slides occurred on slopes without a wind load.

The Bridger Range and the mountains near Cooke City generally have a <u>deeper snowpack</u> that may lead to more stable conditions in the future. For now however, I would not trust the snowpack especially with strong winds and new snow today. This season has shown us that the snowpack should be considered guilty first (i.e. unstable)

and only proven innocent with overwhelming evidence which we do not have.

Recent avalanche activity, very strong winds, and more snow coming is all we need to know. Doug, Eric and I have avoided any slope steeper than 30 degrees and in many cases have been extremely cautious going near run out zones. For these reasons today the avalanche danger is rated **CONSIDERABLE**. However, the danger could easily rise today on steep, wind loaded slopes.

We have posted far more **pictures** and **videos** than those linked in today's advisory. To get a broader understanding of the avalanche problems take time to browse the collection.

I will issue tomorrow morning's advisory 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

TOMORROW, January 4, BOZEMAN: Saturday, 10:30 a.m. at Bridger Bowl, Free Avalanche Transceiver Workshop, next to rental shop at Jim Bridger Lodge.

January 7, BILLINGS: Tuesday, 6:30-8:30 p.m. at High Mountain Recreation, 90-Minute Rescue Presentation.

January 8, BOZEMAN: Wednesday, 6:30-8 p.m. at REI, Sidecountry IS Backcountry lecture.

January 9, BOZEMAN: Thursday, 6-7 p.m. at Mystery Ranch, 1-hour Avalanche Awareness lecture.

January 9, HELENA: Thursday, 6:30-7:30 p.m. at Exploration Works, **1-hour Avalanche Awareness** lecture.

January 11, COOKE CITY: Saturday, 10 a.m. to 4 p.m., **Companion Rescue Clinic for Snowmobilers**, Pre-Registration is required. https://www.ticketriver.com/event/9445

January 11, WEST YELLOWSTONE: Saturday, 7-8 p.m. at Holiday Inn, **1-hour Avalanche Awareness** lecture.

More information our complete calendar of events can be found **HERE**.