GNFAC Avalanche Advisory for Thu Feb 5, 2015

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, February 5, at 7:30 a.m. The **Cooke City Bearclaw and Super 8** in partnership with the **Friends of the Avalanche Center** sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Last night most places received a trace to 2 inches of snow while the mountains near Cooke City received 3-4 inches. Temperatures did not cool overnight and were near freezing in the Bridger Range and mid 20's F all other places. The big story is winds which were dead calm yesterday morning, but increased significantly this morning averaging 10-20 mph from the SW and gusting 30-50 mph. Snowfall will return late Friday night though we may see a few snowflakes fall between now and then. Strong southerly winds will continue and push temperatures near 30 degrees F or higher today.

Snowpack and Avalanche Discussion

Bridger Range

The main avalanche problem today will be fresh wind slabs formed by strong southerly winds. This is the only avalanche problem in the Bridger Range and a simple one to avoid. While surface hoar was observed in many other areas, this layer does not exist in the Bridger Range. For today with strong winds and new snow available for transport, the danger is rated **CONSIDERABLE** on wind loaded slopes and **MODERATE** on all others.

Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Strong winds were blowing throughout the advisory area and will make freshly formed wind slabs the main avalanche problem. Yesterday a skier in Hyalite Canyon just south of Bozeman observed many avalanches breaking within the new snow (**photo**). Strong winds this morning should cause more avalanches today.

A more difficult problem will be a layer of surface hoar buried 8-12 inches deep that formed last weekend (**photo**). In places like Cooke City strong winds last weekend destroyed this layer on most slopes prior to recent snowfall. However, we don't have a clear picture of where it remains. Doug found it on Lionhead near West Yellowstone on Tuesday (**video**, **photo**). Where this layer exists, there may be enough of a slab on top of it to create an avalanche. I'd assume EVERY slope has this problem until you prove otherwise. If you find this layer, do several quick Extended Column Tests (ECT tutorial **video**). Focus on whether or not a crack or a break in this layer propagates across the entire column.

With plenty of new snow, very strong winds this morning and a buried layer of surface hoar lurking on some slopes, the avalanche danger is rated **CONSIDERABLE** on any wind loaded slope or any slope steeper than 35 degrees. Less steep slopes without wind loading will have a **MODERATE** danger. There are plenty of stable slopes to be found but it will take a little investigating to ensure you've found one.

AN ARTICLE FOR PARENTS

Are you a parent of a kid that skis at a ski area? Do you know if they head out-of-bounds into the sidecountry? Doug's article "Sidecountry": Rated R sheds light onto the seriousness of skiing the uncontrolled and unpatrolled slopes next to a ski area.

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.

KING AND QUEEN OF THE RIDGE

Saturday, February 14th is the **13th Annual King and Queen of the Ridge** Hike/Ski-a-thon fundraiser at Bridger Bowl to support avalanche education in southwest Montana. Collect pledges for each lap of hiking to the ridge and skiing back down. 100% of the proceeds go to the Friends of Gallatin National Forest Avalanche Center. Hike as an individual or form a team of your workmates or playmates or family! Prizes are awarded for Team and Individual categories. **Make a Pledge. Sign Up and More Info.**

AVALANCHE EDUCATION and EVENTS

Take a look at our **Education Calendar** for all classes being offered.

TONIGHT: 1-hour Avalanche Awareness, Great Falls, Back Alley Pub, Thursday, February 5.

Woman's 1-hour Avalanche Awareness, Bozeman, REI, 6:30 p.m., Wednesday, February 11.

Companion Rescue Clinic, Bozeman, REI, 6-8 p.m., Friday, February 20 and 10 a.m.-2 p.m. on Saturday, February 21 (field location TBD). Pre-registration is required: www.rei.com/stores/bozeman.html

1-hour Avalanche Awareness, West Yellowstone, Holiday Inn, 7 p.m., Saturday, February 21.