GNFAC Avalanche Advisory for Tue Jan 28, 2014

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, January 28 at 7:30 a.m. **Bridger Bowl Ski Area** 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 under clear skies mountain temperatures fell to near 0F. At 5 a.m. winds are blowing west to northwest at 15-30 mph. Today will be sunny with winds remaining westerly and temperatures rising into the teens. Clouds will form later today ahead of a snow storm scheduled to arrive tomorrow morning. The storm will begin to kick in pre-dawn and last into Thursday and looks to drop 6-10" of snow, but tune in tomorrow for an updated forecast.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone

The Bridger, Gallatin and Madison Ranges, including the Lionhead area have snow depths of 3-5 feet and share a common snow structure: weak facets near the ground supporting a dense slab. The strength of the snowpack slightly varies from stronger and deeper snow in the Bridger Range to weaker and thinner snow at Lionhead. Even with these differences, they share good stability. It's counterintuitive to have poor snow structure and good stability, but it's true. There has not been significant new snow or wind-loading to strain the poor structure. Consequently the stability has slowly improved over the two week long drought.

My partner and I skied into Bacon Rind in the southern Madison Range yesterday and found the layers in my snowpit to be mostly unchanged from a visit weeks ago. I even sunk to the ground in facets when I stepped out of my skis; a sign of unsupportable snow and poor snow structure. However, stability was good. We were unable to get fractures to propagate in two different pits. This finding, coupled with only one human triggered slide (<u>Lionhead</u>) in 11 days, points to an improving situation which I outlined in a <u>video</u>. The drought has allowed the facets near the ground to get slightly stronger, but newly formed weak layers in the top inches of the snowpack may become our future nemesis (video).

Without new snow load the stress on the snowpack is a function of slope steepness. Given the poor snow structure, slopes steeper than 35-degrees have a MODERATE avalanche danger since it's still possible to trigger a slide. Slopes less than 35-degrees have a LOW danger.

Cooke City

The mountains around Cooke City have a strong and deep (6-7') snowpack on all but a few slopes. As riders and skiers push the boundaries in search of untracked powder they'll inevitably find these unstable areas. Steep, rocky and thinly covered (less than three feet deep) slopes are where the problems lie. Riders on Saturday found one of these slopes in Sheep Creek when one person was caught, but not buried (photo, photo). The same avalanche concern exists today and the avalanche danger is rated MODERATE on all slopes steeper than 35-

degrees and **LOW** on less steep terrain.

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.

ANDROID APP

If you have an android phone or tablet, you can download our new free app. It's a slick way to get the advisory. Search Google Play for GNFAC. An iOS version is coming soon. Stay tuned.

EVENTS/EDUCATION

January 29, 30 & February 1, BOZEMAN: Wednesday and Thursday 7-9:30 p.m.; all day Saturday in field, **Advanced Avalanche Workshop with Field Course**. Pre-registration is required: https://www.ticketriver.com/event/7114-asmsu-advanced-avlanche-workshop-w-field-course

January 31, February 1, BOZEMAN: Friday 6-8 p.m., Saturday 10-2 p.m; **Companion Rescue Clinic**. Preregistration is required: www.rei.com/stores/bozeman.html

February 6, BOZEMAN: Thursday, 6-8 p.m., Beall Park; Women's Specific Avalanche Awareness Class and Transceiver Practice.

February 8, BUCK RIDGE: Saturday, 10 a.m. to 4 p.m., **Companion Rescue Clinic for Snowmobilers**, Pre-Registration is required. https://www.ticketriver.com/event/9446

February 8, WEST YELLOWSTONE: Saturday, 7-8 p.m., Holiday Inn, 1-hour Avalanche Awareness lecture.

February 12, BOZEMAN: Wednesday, 6:30-7:30 p.m., MSU Procrastinator Theater, **Sidecountry IS Backcountry** lecture.

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