GNFAC Avalanche Advisory for Tue Feb 4, 2014

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 4th at 7:30 a.m. **Grizzly Outfitters** in partnership with Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

In the last 24 hours snow fell and temperatures plummeted. The northern mountains got one to two inches while three to four inches fell in the south, with closer to seven inches outside West Yellowstone. Mountain temperatures are minus 15 to 20 this morning under partly cloudy skies with light, variable winds. Temperatures will not budge much today and drop even further tonight. In the next 24 hours I do not expect any snowfall or changes in the wind. If you liked the cold snap the beginning of December you're in for a treat; it will be even colder this time.

Snowpack and Avalanche Discussion

Lionhead area near West Yellowstone

Today the Lionhead area near West Yellowstone has slightly worse avalanche conditions than other areas because they got more snow. These mountains have added .8" <u>SWE</u> at the higher elevations. I toured above Hebgen Lake yesterday and found the weakest, most unstable layer in the snowpack to be the recently buried facets (<u>photo</u>, <u>video</u>). This layer of unbonded, sandy feeling snow, is two inches thick and easily seen by the naked eye under the new snow (12-18" under the surface). It's breaking clean in our stability tests and last night groomers were able to trigger slopes above the trails. Consequently, the avalanche danger is rated <u>CONSIDERABLE</u> on all slopes today.

Bridger Range Gallatin Range Madison Range Cooke City

If you bundle up and head out you're going to want to search for the same weak layer no matter what mountain range you travel in. During January's spell of dry weather a layer of small-grained facets formed on the snow surface. It got buried six days ago and is now 1-2 feet down and is our primary avalanche concern. Its distribution is more variable in the Bridger Range, but even here a skier triggered a small slide immediately north of Bridger Bowl on Saturday in the Dog Leg Chute. This weekend outside Cooke City Eric found these facets in his snowpits (video, photo) and skiers triggered a small slide on this layer too (photo). Around Big Sky on Sunday a backcountry skier triggered an avalanche on these facets near Lone Lakes. This layer is easy to identify with a quick dig of a shovel. The stripe of facets is unmistakable. If you find it I would stay off of steeper slopes since there's no sense tickling the avalanche dragon. If you don't find it, I'd make double sure it's absent before committing to a line.

The advisory would not be complete without mentioning the larger, depth hoar facets at the ground. These are now relegated to the number two position of avalanche concern. They are slowly getting stronger, but I'm not taking my eye off them. An avalanche initiated in the upper layer could easily step down to the ground on these weak, sugary grains.

For today, given the new snow and buried weak layers, the avalanche danger is rated **CONSIDERABLE** on all slopes steeper than 35 degrees and **MODERATE** on all other 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.

TWO NEW BLOG POSTS

Eric wrote an article titled, "The Facet Factory An Introduction to Snow Metamorphism".

Doug posted an article called, "Toughness and Survival".

KING AND QUEEN OF THE RIDGE

Saturday, February 15th is the **12th Annual King and Queen of the Ridge** Hike/Ski-a-thon fundraiser to support avalanche education in southwest Montana. Collect pledges for one, two or the most ridge hikes you can do in the five hours of competition. 100% of the proceeds go to the Friends of Gallatin National Forest Avalanche Center. Kids and families are encouraged to hike too! Hike as an Individual or Team. **Make a Pledge** . **Sign Up. More Info**.

EVENTS/EDUCATION

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.

February 22, BIG SKY: Saturday, 10 a.m. – 2 p.m., Beehive Basin Trailhead, **Companion Rescue Clinic**. Space is limited and pre-registration is required. https://ticketriver.com/event/9964

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