# **GNFAC** Avalanche Advisory for Thu Feb 6, 2014

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, February 6 at 7:30 a.m. <u>Mystery Ranch</u>, in partnership with Friends of the Avalanche Center, sponsors today's advisory. This advisory does not apply to operating ski areas.

#### Mountain Weather

This morning temperatures ranged from -25 F to -13 F. The good news is that mountain temperatures were averaging 2.4 degrees warmer than yesterday morning. Oh yeah! However, an inversion this morning means that some valley locations have temperatures near -40 F. Winds were blowing 5-10 mph from the SW. Today temperatures may rise slightly above 0 F and winds will increase to 5-15 mph from the SW. Near Cooke City and West Yellowstone, some clouds should appear late this afternoon and bring about an inch of new snow tomorrow morning.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Cooke City Lionhead area near West Yellowstone

Today's primary avalanche problems are:

- 1. Wind slabs. Even though there hasn't been a major wind event to form widespread wind slabs, snow that fell about a week ago and more that fell early this week drifted in some areas forming wind slabs mostly near ridge tops.
- 2. Small facets. A thin layer of small faceted snow crystals formed during dry weather in January and is now buried under a soft slab of snow 1-2 feet thick (<u>video</u> near West Yellowstone, <u>video</u> near Cooke City). Avalanches occurred on this layer in 5 out of the last 6 days. Several were near Cooke City, a few near West Yellowstone, one near Big Sky on Lone Mountain, and one near Bridger Bowl (<u>photos</u> of a few of these slides). Identifying where this layer does and does not exists is not easy.

What to do: Wind slabs are not widespread and should be easy to see and avoid. Identifying slopes with the thin faceted layer will be more difficult but necessary because triggering an avalanche on this layer is likely. Look for it in several low-angle, open slopes that have similar aspects and elevations to where you hope to ski or ride. To find this layer, dig 2 feet deep. You may see it or feel it with your shovel (**photo**). On southerly aspects it should be next to an ice crust. If this layer is not obvious, perform a quick stability test which should break cleanly and easily if this layer exists (watch this **video** from last season dealing with a similar layer). If snowmobiling, play on similar slopes and see if they crack or even slide, but make sure your partners are watching you.

In general, we won't remember this season for having a very stable snowpack. For this reason, assume every slope is guilty (i.e. unstable) until proven innocent with overwhelming evidence. Another factor to consider is that triggering a smaller slide may trigger a bigger one that breaks on facets near the ground. This layer is the weakest and most widespread south of Bozeman, near Big Sky and near West Yellowstone.

For today, the avalanche danger is rated **CONSIDERABLE** on any wind-loaded slope or any slope steeper than 35 degrees. All other slopes have a **MODERATE** 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.

## 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 15<sup>th</sup> is the **12<sup>th</sup> 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**

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

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**.