# **GNFAC Avalanche Forecast for Sun Jan 27, 2019**

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Forecast issued on Sunday, January 27<sup>th</sup> at 7:00 a.m. Today's forecast is sponsored by <u>Montana State Parks</u> and <u>Ph.D. Skis</u>. This forecast does not apply to operating ski areas.

## Mountain Weather

Yesterday the mountains got a trace to 1" of snow. Wind has been west to southwest at 15-25 mph with gusts of 35-45 mph. This morning, temperatures are teens F in the southern mountains and high 20s to low 30s F in the north. Today temperatures will be high 20s to low 30s F, then cool to the single digits F tonight. Wind will be west to northwest at 20-30 mph and stronger this evening. Expect snow late today and overnight. By morning, 4-6" is possible near Big Sky and Cooke City with 1-3" elsewhere.

Snowpack and Avalanche Discussion



The mountains throughout our advisory area have a variety of poor, unstable snowpack structures. On some slopes the bottom 2 feet of the snowpack is sugary, weak and unsupportive (video). Other slopes have a stronger foundation, but weak, sugary facets are sandwiched between that foundation and 3-4' of recent snow above.

Regardless of which poor snowpack structure exists, recent steady snowfall and strong wind have overloaded these weak layers past their breaking point. Since January 16 (last 11 days) the mountains have received 3-4' of snow equal to the weight of 2.5-4" of snow water equivalent (SWE) (Weather Log).

Natural and human triggered avalanches occurred each of the last 9 days with <u>ten avalanches reported</u> yesterday. Two of these yesterday were skier triggered in the Bridger Range. One skier was caught and fully buried during the slide, but ended up on top of the debris (<u>details</u>). The other was not caught (<u>details</u>). Big Sky ski patrol triggered a large avalanche that broke 3-10' deep on weak snow at the bottom of the snowpack (<u>details</u>). This is the first of this type (deep slab) they have triggered this season, which shows recent steady loading has pushed deeper layers in the snowpack to break.

Sadly, on Friday a skier was killed in an avalanche in the Tobacco Roots (**details and photos**), there was a snowmobiler killed in Idaho, and a snowmobiler buried and missing in Utah (**CAIC database**). Through the western U.S. buried weak layers and recent snow have created dangerous avalanche conditions. This year the snowpack is begging us to be patient and choose conservative objectives for our backcountry tours. Before you go to the backcountry do your homework. Carefully plan safe routes through low angle terrain, and view our **videos**, **photos**, and **avalanche activity** pages for a more thorough understanding of the snowpack.

Today large and dangerous avalanches are easy to trigger and could break naturally. Avalanche danger is **CONSIDERABLE**.

If you get out and have any avalanche or snowpack observations to share, contact us via our <u>website</u>, email ( <u>mtavalanche@gmail.com</u>), phone (406-587-6984), or Instagram (#gnfacobs).

# **Avalanche Fatality Tobacco Roots**

On Friday four skiers were caught in an avalanche while ascending a steep forested slope in the Tobacco Root Mountains. Two skiers grabbed trees and were able to self, the other two skiers were swept downhill. One skier was seriously injured, the other died from trauma. The GNFAC will issue more information once it becomes available. Our deepest condolences go to the family and friends of the victim. Preliminary <u>details and photos</u>.

# King and Queen of the Ridge

Next Saturday, February 2 at Bridger Bowl. This is the Friends of the Avalanche Center's second biggest fundraiser of the year. Come on out and help us raise some money by hiking and skiing some laps on the ridge. Prizes, camaraderie and a good time is guaranteed. <u>Register with Bridger</u> to hike in the event, and <u>create a pledge</u> page to raise funds with your Ridge laps.

# **Upcoming Avalanche Education and Events**

Our education calendar is full of awareness lectures and field courses. Check it out: **Events and Education** Calendar.

## BOZEMAN

February 2, **King and Queen of the Ridge** at Bridger Bowl (fundraiser). <u>Register with Bridger</u> to hike in the event, and <u>create a pledge page</u> to raise funds with your Ridge laps.

February 6, 1-hr Women's Avalanche Awareness, 6-7p.m. at REI Bozeman.

## WEST YELLOWSTONE

February 9 and 16, 1-hr Avalanche Awareness for Snowmobilers, 7-8 p.m. Holiday Inn West Yellowstone.

### LIVINGSTON

January 31, Intro to Avalanches w/ Field Day, Info and Register Here.

### DILLON

January 31-February 2, Intro to Avalanches w/ Field Day, Info and Register Here.

### HELENA

February 13, 1-hr Avalanche Awareness, 6-7 p.m. at Carroll College

### COOKE CITY

Every Friday and Saturday, **Rescue Training and Snowpack Update.** Friday 6:30-7:30 p.m. at the Soda Butte Lodge. Saturday anytime between 10-2 @ Round Lake.