GNFAC Avalanche Advisory for Sun Feb 19, 2017

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Sunday, February 19th at 7:00 a.m. Today's advisory is sponsored by **Grizzly Outfitters** in partnership with **The Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday morning the mountains got 5-7" of heavy snow near West Yellowstone and the southern Madison Range, 2-3" near Cooke City, a trace to 1" near Big Sky, and none near Bozeman. Temperatures this morning are 20s to low 30s F with wind out of the south to southwest at 10-20 mph and gusts of 30-40 mph. Today, temperatures will reach the low 30s F with south to southwest wind at 20-30 mph. By tomorrow morning, snow showers will deliver 4-6" near West Yellowstone, Big Sky and Cooke City, and 1-2" near Bozeman.

Snowpack and Avalanche Discussion

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

New snow in the southern Madison Range and mountains near West Yellowstone totaled .6 to 1.0" of **snow water equivalent** (SWE) since yesterday morning. Today it is easy to trigger avalanches in the new snow and wind slabs that formed from southwest wind.

Fresh snow and wind slabs added weight to weak layers buried 1.5 to 2 feet below the surface. Yesterday, Eric found a layer of surface hoar at Bacon Rind that is worth looking out for (video). These layers have gained strength since they were buried and are not found on all slopes, but new snow and wind-loading make avalanches easier to trigger where these layers exist. Avoid steep, wind-loaded slopes today and be aware of the potential to trigger a large avalanche on buried weak layers.

Human triggered avalanches are likely today and avalanche danger is **CONSIDERABLE**.

Cooke City Northern Madison Range

In the mountains near Big Sky and Cooke City, 1-3" of snow since yesterday will not create much new instability. Southwest winds formed small wind slabs that are possible to trigger near ridgelines. These slabs should be approached with caution or avoided in steep, high consequence terrain.

Near Big Sky, a layer of facets buried 1.5-2' deep should be looked for and assessed before committing to avalanche terrain. Near Cooke City the snowpack is generally deep and stable, but weak faceted snow exists in isolated areas. Avalanches are possible to trigger on this weak snow and will likely be large and destructive, similar to the one triggered by a snowmobiler last Sunday (photo, photo). Slopes with a shallower snowpack, or cross-loaded slopes with varying slab depth are the most suspect places to trigger a large slide.

Avalanches are possible to trigger today and avalanche danger is **MODERATE**.

Northern Gallatin Range Bridger Range

The Bridger Range and northern Gallatin Range have a shallow snowpack and have not received snow in over a week. Recent warm temperatures and strong winds created highly variable surface conditions. Eric and I skied Mt. Blackmore on Thursday where we found very challenging skiing, but mostly stable snow. We observed a recent avalanche that was triggered by a cornice drop, which is a reminder that weak snow exists and avalanches are not impossible (photo). Last week, skiers in the Bridger Range found unstable test results about a foot below the surface and chose alternate, safer routes. It never hurts to check what is below your feet before committing to steep terrain.

The avalanche danger today is **LOW**. Above freezing temperatures could present wet snow hazards this afternoon, but clouds and wind today should minimize wet snow.

I will issue the next advisory tomorrow morning by 7:30 a.m.

We rely on your field observations. Send us an email with simple weather and snowpack information along the lines of what you might share with your friends: How much new snow? Was the skiing/riding any good? Did you see any avalanches or signs of instability? Was snow blowing at the ridgelines? If you have snowpit or test data we'll take that too, but this core info is super helpful! Email us at mtavalanche@gmail.com or leave a message at 406-587-6984.

Upcoming Events and Education

<u>Beacon Training Park at Beall</u>: Open and free to the public for avalanche beacon practice seven days a week from 9 a.m. to 8 p.m., southeast corner of Beall Park in Bozeman.

COOKE CITY

Weekly rescue training and snowpack update, 6:30-7:30 p.m., Cooke City Super 8 on Friday, Lulu Pass Road for field location Saturday (Look for the **yellow sign**).

Bozeman

Today, Bozeman Split Fest - More info here.

March 4, **Pinhead Classic**, Proceeds to benefit Friends of GNFAC. More info here.