GNFAC Avalanche Forecast for Sun Apr 9, 2023

Good morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Forecast on Sunday, April 9th at 7:00 a.m. This information is sponsored by **Highline Partners**, **Spark R&D** and **Avalanche Alliance**. This forecast does not apply to operating ski areas.

Mountain Weather

This morning there is 1” of new snow near Cooke City and none elsewhere. Temperatures are mid-20s to low 30s F. Wind has been west-southwest at 15-20 mph with gusts of 30-40 mph. Today will be mostly sunny with temperatures reaching mid-40s F, and wind will be westerly at 10-20 mph. Very warm temperatures are expected the next couple days, then the next chance for snow is Tuesday night.

Snowpack and Avalanche Discussion

All Regions

Temperatures will rise to at least 5 degrees warmer than yesterday, increasing the chances for wet snow avalanches. Additionally, a person can trigger avalanches that break on buried persistent weak layers. These could be 1-2 feet deep below last weekend’s snowfall or several feet deep on weak layers buried in January. If that isn’t enough to worry about, warm temperatures and sunshine might cause cornices to break off ridgelines which could trigger larger avalanches on slopes below.

An extensive and diverse list of avalanche activity over the last week shows what is possible today:

- Yesterday near Quake Lake a large natural wet avalanche buried the highway (**photos and details**).
- On Thursday, near Cooke City a skier triggered a wind slab on Scotch Bonnet Mountain (**details and photo**), and in the northern Gallatin Range a snowmobiler triggered a 1 foot deep wind slab (**details and photos**). Natural avalanches also broke 1-3 ft deep on wind-loaded slopes near Cooke City (**Cooke details 1**, **Cooke details 2**) and in the **Bridger Range**. These likely broke on weak layers below last week’s snowfall.
- After last weekend’s storm multiple huge avalanches broke several feet deep on weak layers that were buried months ago. **A massive slide on Mt. Abundance near Cooke City** that was not previously reported is a good example, and there were deep slabs early last week in the **Northern Madison Range**, **Southern Gallatin Range**, near **Lionhead**, **Cooke City**, and in the **Bridger Range**.

Warm temperatures the last couple days began to melt the upper layers of the snowpack on lower elevation slopes and slopes that receive direct sunshine. Last night, below freezing temperatures and clear skies re-froze the snow surface making it strong this morning, but this crust will not last long with today’s sun and heat. The crust will melt and make wet snow avalanches easy to trigger this afternoon, these could be large and a few may release naturally. Anticipate wet slides when the upper few inches of the snowpack become soft and wet, indicated by sinking above your ankles in wet snow. Be alert for quickly changing conditions and plan to be off and out from underneath steep slopes before the top few inches of snow become wet.

Before riding any steep slopes, dig down a couple feet to investigate for instability below last week’s snow. Deeper buried weak layers are difficult to find and assess, so your best bet is to avoid steep slopes entirely. If you accept the low likelihood, high consequence risk and venture into steep terrain, choose slopes without

previous wind-loading and without consequences like trees, cliffs or confined gullies.

A variety of avalanche concerns make human triggered avalanches possible. The avalanche danger is MODERATE, and will rise to CONSIDERABLE for wet snow avalanches this afternoon.

We expect wet snow avalanche danger will increase rapidly over the next couple days with very warm temperatures and no freezing overnight. We will continue to issue danger ratings through Tuesday. Please share avalanche, snowpack or weather observations via our website, email (mtavalanche@gmail.com), phone (406-587-6984), or Instagram (#gnfacobs).