GNFAC Avalanche Forecast for Mon Mar 24, 2025

This is Alex Marienthal with the avalanche forecast on Monday, March 24th, at 7:00 a.m., sponsored by **Spark R&D** and **Beartooth Adventures**. This forecast does not apply to operating ski areas.

Mountain Weather

Since yesterday morning 24 hour snow totals are:

- 5"+ near Cooke City.
- 3" near West Yellowstone.
- 1-2" in Island Park, Big Sky and Bridgers.
- Zero in Hyalite.

Wind has been westerly at 15-35 mph with gusts of 40-60 mph overnight. Temperatures are high 20s and low 30s F.

Today, under mostly cloudy skies, temperatures will reach high 30s and low 40s F, and wind will be from the west at 15-30 mph with some stronger gusts. There is a chance for snow showers and possibly rain this afternoon and evening. The mountains could receive a trace to an inch of snow by morning.

Snowpack and Avalanche Discussion



Near Cooke City strong winds have drifted 5" of new snow and snow from last week into stiff slabs that can avalanche under the weight of a person. These **wind slab avalanches** are the primary concern, and today the wind will continue to build slabs and create dangerous conditions on wind-loaded slopes. Additionally, a weak layer buried 2 feet deep below last week's snow can produce larger **persistent slab avalanches**, even on non-wind-loaded slopes. A natural avalanche appeared to break on this layer a couple days ago in Sheep Creek (**photo**), and yesterday Dave and Haylee found it in snowpits with unstable test results (**photo**, **video**, **observation**). Avoid big, wind-loaded slopes and dig down 2-3 feet to assess the snowpack for recently buried weak layers. Be cautious crossing below steep slopes because the recently buried weak layer creates potential to trigger a slide from flatter terrain.

The avalanche danger is <u>CONSIDERABLE</u> on wind-loaded slopes and <u>MODERATE</u> on all other slopes around Cooke City.



Near Bozeman, Big Sky, West Yellowstone and Island Park, **wind slab avalanches** are the primary concern where strong winds have drifted last week's snow into slabs up to a couple feet thick. Be cautious of recently wind-loaded slopes, often identifiable by a textured or rounded snow surface, and typically found near ridgelines

below cornices.

Above freezing temperatures, and any rain, will melt the snow surface and make **wet loose avalanches** possible. These slides will probably be small today, and most hazardous if they knock you over in terrain above cliffs or rocks. Feel for a moist snow surface as a sign wet snow danger is rising, and find lower angle or colder slopes.

Near West Yellowstone, including the southern Madison and southern Gallatin ranges, a person can trigger **persistent slab avalanches** 2-4 feet deep on a weak layer that was buried in January. Avalanches were triggered on this layer in the Taylor Fork on Saturday (**photos**) and Wednesday (**photos**). These slides have not been huge, but large enough to be deadly, especially in terrain similar to where they have occurred. They broke on slopes with thick trees that could cause trauma, or depressions at the bottom where snow can pile up deep. Select terrain with minimal terrain traps like trees, cliffs or gullies.

There is also a chance for slides to break a couple feet deep below last weekend's snow. Last weekend we saw layers break in stability tests below the new snow near West Yellowstone (**observation**) and Island Park (**observation**). Dig down a couple feet to check for potential weak layers.

Human-triggered avalanches are possible and the avalanche danger is <u>MODERATE</u> near Bozeman, Big Sky, West Yellowstone and Island Park.