GNFAC Avalanche Forecast for Mon Mar 20, 2017

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Monday, March 20th at 7:15 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

At 4:29 a.m. spring has begun and the mountains have 2-3" of new snow near Bozeman, Big Sky and West Yellowstone, and 4-7" near Cooke City. Yesterday, precipitation fell as rain below 8000'-8500' and freezing levels dropped below 7000' last night. Wind has calmed from overnight gusts of 40-60 mph. This morning, temperatures are high 20s to low 30s F with west to southwest wind at 10-20 mph. Today, temperatures will reach mid-30s F with southwest wind at 5-15 mph. Snow showers through tonight will produce 2-4" of snow by tomorrow morning. In the southern mountains, the snow level could rise to 8000' this afternoon with rain below.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range Cooke City

Lionhead area near West Yellowstone

True to form, spring began with change. Wet snow was the concern this weekend, and today is colder with new snow. Below freezing temperatures since yesterday froze the upper few inches of a previously wet, non-cohesive snowpack, and avalanches are unlikely to break on layers below the new snow. Wind slabs that formed from strong southwest wind overnight are possible to trigger, and are up to 1-2 feet thick and found near ridgelines. Dry loose snow avalanches are possible on steep slopes and could grow large enough to carry a skier. Approach recently wind loaded slopes with caution and evaluate the consequences of terrain given any size of slide.

The spring snowpack is subject to high variability and rapid change. Temperatures hover near the melt/freeze point and allow the snowpack to change form at rates faster than what we're used to through winter. Below 8000', rain and above freezing temperatures could melt the surface crust and "unlock" the wet, weak snowpack below. Wet snow avalanches are possible where the snow surface is wet and not frozen. Avoid steeper terrain where pinwheels and small point releases are present (photo), if you sink past your boot top in wet snow, or if rainfall is heavy. It is a good idea to climb the route you plan to descend since conditions vary greatly with elevation.

Cornices are large (**photo**) and can fail naturally or with human triggers. These monsters can break farther from the edge than you might expect, and can trigger large avalanches like this one observed last week in the Bridger Range (**photo**).

Today, new snow and wind make dry snow avalanches possible, and warm temperatures make wet snow avalanches possible below 8,000'. The avalanche danger today is **MODERATE**.

Conditions and stability change quickly this time of year. Check out this <u>article</u> on spring snow avalanche problems for more travel advice and a breakdown of some things to look for.

Doug 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.