GNFAC Avalanche Forecast for Thu Dec 13, 2018

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Forecast issued on Thursday, December 13th at 7:00 a.m. Today's forecast is sponsored by **Yellowstone Arctic Yamaha** and **Friends of the Avalanche Center**. This forecast does not apply to operating ski areas.

Mountain Weather

Yesterday morning a quick pulse of snow dropped 3-4" in the mountains around Bozeman and Big Sky including the southern Madison Range. The mountains around Cooke City and West Yellowstone picked up 1-2". Snow shut off by noon yesterday and no new snow accumulated overnight. This morning, temps range from the single digits to low teens F under mostly clear skies. Winds are blowing 15-40 mph out of the west-southwest. Today, warm and windy conditions will continue. Highs will climb into the upper 20's F and winds will remain moderate to strong out of the west-southwest. No new snow expected tonight or tomorrow.

Snowpack and Avalanche Discussion

Lionhead Range Island Park

Over the past 48 hours the mountains near West Yellowstone picked up 4-6" of new snow totaling .3-.4" of SWE (snow water equivalent). This load was deposited on a snowpack with a very weak foundation. On Tuesday, I rode in the Lionhead area and found roughly two feet of snow on the ground with the bottom half consisting of sugary facets (**video**). These facets propagated easily in stability tests on any slope that had a cohesive slab of wind drifted snow (**photo**).

Today, dangerous avalanche conditions exist on wind loaded slopes. Terrain loaded by west-southwest winds will be especially vulnerable to unstable conditions. Given the poor snowpack structure, slopes without wind drifted snow also hold the potential to produce avalanches. Terrain management will be the key to safe travel today. Watch for and avoid all wind loaded slopes and keep slope angles less than 30 degrees.

Fresh snow, wind and a poor snowpack structure make human triggered avalanches likely on wind loaded slopes which have a **CONSIDERABLE** avalanche danger. Non-wind loaded slopes have a **MODERATE** avalanche danger.

Bridger Range Gallatin Range Madison Range Cooke City

Wind loaded slopes are main avalanche concern in the mountains around Bozeman, Big Sky and Cooke City. Moderate to strong winds out of the west-southwest in combination with fresh snow has created the perfect recipe for wind slab development. Yesterday, skiers up Divide Peak in the northern Gallatin Range observed active transport and signs of instability in wind loaded terrain (**video**, **photo**). This is consistent with Doug's observations from Mt. Blackmore on Tuesday (**video**, **photo**)

Today, strong winds are forecasted to continue, which will increase the size and distribution of fresh wind slabs. Watch for signs of instability such as shooting cracks and avoid all steeps slopes with rounded pillows of wind drifted snow. Fortunately, the lower portion of the snowpack is stable, which will keep avalanches confined to the new and wind-blown snow. With that said, it only takes a small slide to create a dangerous situation. Be especially cautious when traveling in terrain where trees, rocks, or gullies could amplify the consequences of being caught (**report**).

Today, human triggered avalanches are likely on wind loaded slopes which have a **CONSIDERABLE** avalanche danger. Non-wind loaded slopes have a **MODERATE** avalanche danger.

Upcoming Avalanche Education and Events

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

BOZEMAN

TONIGHT! December 13, **1-hr Avalanche Awareness**, 7-8 p.m. at Play It Again Sports, Bozeman.

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.