GNFAC Avalanche Advisory for Fri Dec 19, 2014

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Friday, December 19 at 7:30 a.m. Today's advisory is sponsored by the **Community Food Co-op** in partnership with the **Friends of the Avalanche Center**. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday no snow accumulated, but some should come tonight and more Saturday night. This morning temperatures were in the high teens F. Winds increased since yesterday and were blowing 10-15 mph gusting 30 mph mostly from the SW. A short lived ridge of high pressure will bring some sunshine to most areas this morning and temperatures should reach the mid-20s F. Winds will continue from the SW and increase a little during the day. Snowfall tonight should bring 1-3 inches in most areas by tomorrow morning. Very strong winds should arrive Saturday night through Sunday with heavier snowfall.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone

The best place to trigger an avalanche today is on slopes with fresh wind slabs. These wind slabs may be resting on small faceted snow crystals formed near the snow surface last week. Skiers in the northern Bridger Range triggered many 6-10 inch wind slabs on Wednesday (**photo**). Other areas have these facets as Doug found just south of Bozeman on Mt Blackmore on Tuesday (**video**) and Eric and I found near West Yellowstone last week.

Slopes without fresh wind slabs are much less likely to produce an avalanche, mainly because they lack a slab and/or stress from new snow or wind drifted snow. My partner and I skied in Beehive Basin near Big Sky yesterday where we found a snowpack full of faceted weak layers. Once we get a heavy load of new snow, avalanches will have several faceted layers upon which they can fracture. A similar situation exists further south towards Buck Ridge, Taylor Fork, and near West Yellowstone. The snowpack is thin in most areas, and it doesn't take very cold temperatures to drive the faceting (aka – the weakening) process with such a thin snowpack.

For now, avalanches remain possible with heightened avalanche conditions on slopes with fresh wind slabs and the avalanche danger is rated **MODERATE**. Heads up – the danger could quickly rise in coming days if we get more snow and strong winds.

Cooke City

Near Cooke City the snowpack is much deeper and stronger (3-4 feet deep) as my partners and I found riding there early this week. Slopes like ones on Crown Butte or similar, steep, rocky terrain with a thinner snowpack are the places where you could trigger an avalanche (**video**, **photo**). For today the avalanche danger is **MODERATE** on slopes steeper than 35 degrees and **LOW** on less steep slopes.

Eric will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations drop us a line at mtavalanche@gmail.com or call us at 587-6984.

AVALANCHE EDUATION and EVENTS

Take a look at our $\underline{Education\ Calendar}$ for all our classes being offered.

Snowmobiler Rescue Course, Cooke City, December 27, 0800-1200. Register here: https://www.ticketriver.com/event/13721