GNFAC Avalanche Advisory for Mon Feb 20, 2017

Good Morning. This is Alex Marienthal with the Gallatin National Forest Avalanche Advisory issued on Monday, February 20th at 7:00 a.m. Today's advisory is sponsored by <u>World Boards</u> and the <u>Gallatin Valley</u> <u>Snowmobile Association</u>. This advisory does not apply to operating ski areas.

Mountain Weather

Snow showers yesterday dropped 4-6" in the Bridger Range, 1-2" south of Bozeman and near Big Sky, and 3-5" in the southern ranges. Temperatures this morning are teens to low 20s F with southwest to west wind at 20-30 mph and gusts of 30-40 mph. Temperatures today will be in the 20s to low 30s F with southwest wind at 30-40 mph. Seasonal winter weather settles in with light snow showers today and increased snowfall intensity tonight. By tomorrow morning the mountains will have 7-10" of new snow in the southern ranges, 5-7" near Big Sky, and 2-4" near Bozeman.

Snowpack and Avalanche Discussion

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

The southern Madison Range and mountains near West Yellowstone got 3-5" of dense snow yesterday for a total of 1-1.5" of **snow water equivalent** (SWE) over two days. Southwest wind formed drifts of snow near ridgelines that will continue to grow today. These 1-3' thick wind slabs are easy to trigger today.

Doug and I rode in Tepee basin yesterday and found the new snow bonded well with old snow, and buried weak layers were non-reactive in stability tests, similar to what Eric found at Bacon Rind on Saturday (video). Skiers near Quake Lake yesterday found reactive buried weak layers and triggered small slides that broke below the new snow. Weak layers of facets and surface hoar were buried 1-2' deep before this storm and have potential to produce larger slides. Avoid steep, wind loaded slopes today and assess the snowpack before committing to any steep slopes. The avalanche danger is **CONSIDERABLE** on wind loaded slopes and **MODERATE** on other slopes.

Bridger Range Northern Madison Range Cooke City

Four to six inches of dense snow fell in the Bridger Range and near Cooke City, and it bonded poorly to old frozen and wind-packed snow surfaces on some slopes. Skiers in the northern Bridger Range saw natural avalanches and triggered a small wind slab yesterday. Wind slabs near ridgelines are possible to trigger today and will grow larger and more sensitive with more snow and wind. Approach these slabs with caution and avoid them above cliffs and high consequence terrain. On steep slopes, loose snow avalanches could gain enough force to knock you over.

Near Big Sky, a layer of facets buried 1.5-2' deep could produce large avalanches. Skiers in Beehive found unstable test results on this layer over the weekend and it can't be trusted. Avalanches are possible to trigger today and avalanche danger is **MODERATE**.

Northern Gallatin Range

The northern Gallatin Range got an inch of dense snow yesterday on top of old frozen and wind-packed snow surfaces. This snow slightly improved the 'combat skiing' experience of the past week, but not enough to contribute to instability. The snowpack is generally stable and avalanches are unlikely. Eric and I observed an avalanche triggered by a cornice drop last week, which is a reminder that weak snow exists and avalanches are not impossible (**photo**). The avalanche danger today is **LOW**.

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 <u>mtavalanche@gmail.com</u> or leave a message at 406-587-6984.

Upcoming Events and Education

Beacon Training Park at Beall: Open and free to the public for avalanche beacon practice seven days a week from 9 a.m. to 8 p.m., southeast corner of Beall Park in Bozeman.

COOKE CITY

Weekly rescue training and snowpack update, 6:30-7:30 p.m., Cooke City Super 8 on Friday, Lulu Pass Road for field location Saturday (Look for the **yellow sign**).

Bozeman

March 4, **Pinhead Classic**, Proceeds to benefit Friends of GNFAC. More info here.