GNFAC Avalanche Advisory for Tue Feb 7, 2017

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, February 7th at 7:15 a.m. Today's advisory is sponsored by the <u>Gallatin Valley Snowmobile Association</u> and **World Boards**. This advisory does not apply to operating ski areas.

AVALANCHE WARNING

We are issuing a Backcountry Avalanche Warning for the **southern Madison** and **southern Gallatin Ranges**, the **Lionhead area near West Yellowstone** and mountains around **Cooke City**. Heavy snowfall over the last 72 hours accompanied by strong winds has created a <u>HIGH</u> avalanche danger on all slopes. Natural and human triggered avalanches are likely today. Avalanche terrain and avalanche runout zones should be avoided.

Mountain Weather

Snowfall continued in the southern mountains yesterday with Cooke City and the mountains around West Yellowstone getting 10-12" of moist, heavy snow. Last night the Bridger Range picked up 5-7" with Hyalite and Big Sky getting 2". West winds remain strong and are averaging 20-25 mph with frequent gusts of 50-60 mph. Mountain temperatures have cooled to 10F this morning. Today will remain cloudy and windy with snowfall returning later this afternoon and dropping 3-6" in the southern mountains and 2-4" in the northern ranges.

Snowpack and Avalanche Discussion

Southern Madison Range Southern Gallatin Range Lionhead area near West Yellowstone Cooke City

The snow keeps falling in the southern mountains. Ten to 12" of new snow may not sound like a lot, but it was heavy (1.4-1.6" **snow water equivalent**) and part of a storm cycle that dropped 3.5-5" of <u>SWE</u> since late Friday. Oh yeah, and it's blowing like crazy! On Sunday, outside Cooke City, a large natural avalanche in Sheep Creek and two human triggered slides were a preview of today's main attraction: an avalanche warning. Heavy snow and strong winds points to natural avalanches breaking on all aspects and elevations. Eric started driving to Cooke City at oh-dark-thirty to check on conditions. Seven pictures from this weekend's avalanches can be found on our **photos page**. Yesterday Alex rode into Teepee Basin with a Snow Ranger and found heaps of new snow blowing around and reminded us to look for buried weak layers of facets and surface hoar (**video**). He said, "If weak layers are going to break, it'll happen now." Agreed. For today a **HIGH** avalanche danger exists on all slopes.

Bridger Range

The Bridger Range received 5-7" of snow which measured .8" of SWE at Brackett Creek SNOTEL. The avalanche danger has spiked with last night's snowfall. This storm added a lot of weight in a short period of time which has created unstable conditions. Additionally, strong west winds made wind slabs which will be easy to trigger. For today, human triggered avalanches are likely and the danger is rated <u>CONSIDERABLE</u>.

Northern Madison Range Northern Gallatin Range

The mountains from Bozeman to Big Sky got a meager 2" serving of snow and an extra helping of wind. The .1" SWE will not adversely affect the snow stability. Strong winds have scoured many slopes above treeline and loaded just a few. About a foot under the snow surface is weak snow (surface hoar or small facets) that is

propagating in our stability tests (video). The layer is thin and hard to find but compression tests have been effective at locating it. For today, given the strong wind, a couple inches of new snow and buried weak layers, triggering avalanches is possible and the avalanche danger is rated MODERATE.

Here's a picture of the whiteboard in our office outlining the activity and stability concerns we have.

I 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

TONIGHT!! Sidecountry and Avalanche Awareness, 6-7:30 p.m., Beall Park.

TOMORROW!! 1-hr Avalanche Awareness, 7-8 p.m., Roskie Hall, Montana State University.

February 10 and 11, Companion Rescue Clinic, REI and field day, more info and register here.

WEST YELLOWSTONE

February 11, 1-hr Avalanche Awareness, 7-8 p.m., West Yellowstone Holiday Inn.

ENNIS

February 17, 1-hr Avalanche Awareness, 6-7 p.m., Madison Valley Rural Fire Department Station 1.