GNFAC Avalanche Advisory for Thu Mar 9, 2017

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Thursday, March 9th at 7:00 a.m. Today's advisory is sponsored by <u>Grizzly Outfitters</u> in partnership with the <u>Friends of the Avalanche Center</u>. This advisory does not apply to operating ski areas.

AVALANCHE WARNING

ISSUED ON March 9 2017 at 7 a.m.

The Gallatin National Forest Avalanche Center is issuing a Backcountry Avalanche Warning for the mountains around **Cooke City**. Heavy snowfall and strong wind over the last 48 hours 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

In the last 24 hours the mountains around Cooke City received 12-15" of new snow. The Bridger Range picked up 5" while the mountains around Big Sky and West Yellowstone picked up 1-3". At 5 a.m. it's still snowing lightly and temperatures are in the low to mid 20s F. Winds are blowing 15-30 mph out of the W-SW with ridgetop gusts pushing 40 mph. The Bridger Range is calmer with winds blowing 10-20 mph out of the west. Today, light snow will continue and the mountains should see an additional 1-3" by this afternoon. Highs today will warm into the upper 20s to mid-30s F and winds will remain moderate to strong out of the W-SW. A heavier round of snow moves into the area tonight and tomorrow. The northern ranges should pick up 2-4" tonight while the southern mountains including Big Sky should see 5-8".

Snowpack and Avalanche Discussion

Cooke City

Once again the mountains around Cooke City are in a league of their own. Over the past 24 hours this area has received over a foot of snow totaling 1.5" of SWE. This puts the 48 hour total at more than 2' of snow totaling 2.2" of SWE. This heavy amount of snow has been accompanied by strong winds out of the W-SW. This combination will create unstable conditions on all slopes (photo). Today, continued snowfall and strong winds will make natural and human triggered avalanches likely. For this reason, the avalanche danger is rated HIGH on all slopes. Avalanche terrain including avalanche runout zones should be avoided.

Madison Range Gallatin Range Lionhead area near West Yellowstone

The mountains near West Yellowstone haven't received as much snow as Cooke City, but they have picked up well over a foot the past few days. Madison Plateau Snotel site is recording 1.2" of SWE since Monday. Winds have been strong out of the W-SW which has created thick drifts on leeward slopes. These wind drifts are not confined to upper elevation ridgelines. On Tuesday, Doug and I rode in the Lionhead area and found heavy wind loading at all elevations. We even triggered a small slide on a wind loaded slope (video photo).

The mountains near Big Sky have been favored more by wind than snow. Although fresh snow has not been abundant, there is still plenty to blow around. Over the past few days, the Big Sky Ski Patrol has triggered numerous avalanches during control work, mainly in wind loaded terrain. On Tuesday, a skier up Lick Creek remotely triggered a small wind slab, which is bulls eye information wind loaded slopes are unstable. This

morning, winds continue to blow 20-40 mph out of the W-SW. Wind slabs will continue to grow in size and distribution throughout the day.

With more snow and wind in the forecast, human triggered avalanches remain likely on all wind loaded slopes which have a **CONSIDERABLE** avalanche danger. On slopes without a wind-load, avalanches are possible and the avalanche danger is rated **MODERATE**.

Bridger Range

The Bridger Range picked up 5" of snow overnight. The new snow came in with light wind and should be well bonded to the old snow surface. This shot of snow will improve riding conditions without significantly increasing the avalanche hazard. Today, loose snow avalanches in steep terrain will be a concern. These won't be exceptionally large, but they could carry a skier or rider into unfavorable terrain. Small wind slabs near the ridgelines will also be something to look out for. At low elevations on the west side of the range, an ice crust with facets below it are breaking 1-1.5 feet deep. This instability is very isolated, but anyone touring in that area should be cautious (video). For today, human triggered avalanches are possible and the avalanche danger is rated MODERATE.

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 mtavalanche@gmail.com 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 (**photo**).

COOKE CITY

Next weekend, March 10 and 11, **UYSC 21st Annual Hog Roast**. More info <u>here</u>. Free avalanche rescue practice on Saturday.