GNFAC Avalanche Advisory for Tue Dec 30, 2014

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, December 30, at 7:30 a.m. Today's advisory is sponsored by **Javaman** and **Buck Products**. This advisory does not apply to operating ski areas.

Mountain Weather

Today freezing cold east winds will dominate the weather. After lots of snow over the weekend, winds shifted yesterday from the west to the east and blew 30-40 mph in the Bridger Range and 10-20 mph elsewhere. An arctic airmass pushed in last night and dropped temperatures to -15F to -22F in the mountains. Temperatures may reach the single digits today and drop to near -20F again tonight before a gradual warming trend tomorrow.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

Since Christmas over two feet of low-density 5% snow fell in the Bridger Range with 12-16 inches elsewhere. This snow measured .5 to 1 inch of snow water equivalency (SWE) which the snowpack was able to support evidenced by very little avalanche activity. Yesterday Eric and I went into Fairy Lake in the northern Bridger Range and spent a lot of time digging out our snowmobiles stuck in the deep snow. We did not see any signs of instability and our biggest avalanche concern is the east winds blowing the thigh deep snow into wind slabs (video). The weakest layer in the snowpack is surface hoar and/or small facets that are buried two feet deep (photo). I got this layer to break in my stability tests on Bacon Rind (video, snowpit) and a snowmobile guide got similar results in Cabin Creek. This layer is not avalanching naturally with the recent storms, but could be triggered by a person.

In the last five days Cooke City received over an inch of SWE. Eric visited the area on Friday and Saturday and found a deep, strong snowpack with improving stability (video). Winds since then have loaded a few slopes that avalanched a foot deep in the new snow (photo).

Lots of fresh snow, east winds and a buried weak layer are causing enough instability to warrant a **CONSIDERABLE** avalanche danger on wind-loaded terrain. On slopes without a wind-load the snowpack has a **MODERATE** danger since it is still possible to trigger avalanches.

Get a sense of snowfall, wind and avalanche activity on our "What's Been Happening" page.

I 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 Education Calendar for all our classes being offered.

1-hour Avalanche Awareness for Snowmobilers, West Yellowstone, 7 p.m., Saturday, January 3, Holiday Inn.

Avalanche Awareness for Snowmobilers, Billings, 6:30-8 p.m., Wednesday, January 7 at Hi-Tech Motor Sports.

Companion Rescue Clinic, Bozeman, Fri eve and Sat field, January 9 and 10, REI. Register for the class here: www.rei.com/stores/bozeman.html

1-hour Avalanche Awareness for Snowmobilers, West Yellowstone, 7 p.m., Saturday, January 10, Holiday Inn.

1-hour Avalanche Awareness, Three Forks, 7 p.m., Monday, January 12, Methodist Church Annex.

Women's Avalanche Awareness w/ Beacon Practice, Bozeman, 6:30-8 p.m., Tuesday, January 13, Beal Park.

1-hour Avalanche Awareness, 4 Corners, 6:30 p.m., Wednesday, January 14, GVSA Groomer Shed.

1- hour Sidecountry Avalanche Awareness, Bozeman, 6:30-8 p.m., Wednesday, January 14, REI.