GNFAC Avalanche Advisory for Tue Jan 13, 2015

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, January 13, at 7:30 a.m. Today's advisory is sponsored by <u>Cooke City Antler's Lodge</u> in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

Yesterday's mostly sunny weather was followed by a dusting last night in the northern ranges. At 5 a.m. temperatures are in the mid-teens with light westerly winds (5-15 mph) at all weather stations except the Bridger Ridge where it has been blowing 20-30 mph since midnight. Today will be sunny and mountain temperatures will reach into the high 20s as winds increase to match those in the Bridger Range. A high pressure ridge is blocking any chance of snowfall for the next three days.

Snowpack and Avalanche Discussion

Bridger Range

On Sunday the Bridger Range picked up eight inches of dense snow (1.1 inch of <u>SWE</u>). Avalanche activity was limited and one of the only slides reported was in the bowl immediately south of Saddle Peak. The new snow has bonded well to the underlying surface on most slopes. Moderate winds are creating soft slabs on the east side of the ridgeline and these wind slabs can be easily triggered. For today, the avalanche danger is rated <u>CONSIDERABLE</u> on wind-loaded slopes steeper than 35 degrees and <u>MODERATE</u> elsewhere.

Gallatin Range Madison Range Lionhead area near West Yellowstone

The mountain ranges from Bozeman to Big Sky and West Yellowstone have two layers in the snowpack we are concerned with. The first is a layer of facets or surface hoar buried 1.5 feet down that is propagating fractures in stability tests. Over the weekend skiers on Blackmore and Mt. Ellis in the northern Gallatin Range found this as did Eric on Bacon Rind in the southern Madison Range last week. The second layer is facets near the ground, which are most unstable in areas with less than three feet of snow. Mark had his stability tests break on this layer in Lionhead on Friday (snowpit profile, video). This matched the thin snow cover and poor stability scores I got earlier last week in the Beehive area north of Big Sky. Given these two layers of weak and potentially unstable snow the avalanche danger is rated MODERATE on all slopes. Not all slopes are unstable, but you'll have to dig and test to confirm where they are.

Cooke City

Yesterday I rode around Cooke City looking a layer of surface hoar buried two feet under the surface. My partners and I dug six snowpits on different aspects and found this layer in four of them and breaking in only two (photo). An extended column test on Mt. Abundance took 32 whacks to fully break across and another on Henderson Bench took 21 hits, a trend toward strengthening and stability. We rode by two small avalanches in Miller Creek that were triggered on very steep slopes by sledders and snowbikers on Wednesday and Thursday. Dig two feet down and test the snow before committing to a steep line. For today, the avalanche danger is rated MODERATE on all slopes steeper than 35 degrees and LOW on less steep terrain.

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.

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

1-hour Avalanche Awareness, 4 Corners, 7 p.m., Wednesday, January 14, GVSA Groomer Shed.

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

Companion Rescue Clinic, Cooke City, 9 a.m.-3 p.m. on Sunday, January 18. More details and registration: https://www.ticketriver.com/event/13990

Introduction to Avalanches with Field Course, MSU Bozeman, evening lectures 7-9:30 p.m. Wednesday and Thursday, January 21 and 22, with an all-day field session on Saturday or Sunday (your choice). Get more information and register here: https://www.ticketriver.com/event/13090

Advanced Avalanche Workshop with Field Course, MSU Bozeman, evening lectures 7-9:30 p.m. Wednesday and Thursday, January 28 and 29, with an all-day field session on Saturday. Get more information and register here: https://www.ticketriver.com/event/12445

The **Friends of the Avalanche Center** and **Montana Ale Works** are hosting an *Avalanche Forecaster's Beer Social Fundraiser* the evening of January 27th. Get more information and buy tickets here: https://www.ticketriver.com/event/14010