GNFAC Avalanche Advisory for Thu Apr 5, 2012

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Thursday, April 5 at 7:30 a.m. The Cliff Gullett Memorial Fund in partnership with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

NWS Forecast Discussion

Temperatures dropped into the high teens last night with 1-2 inches of new snow falling early this morning. Yesterday, under partly cloudy skies, temperatures reached the upper 40s as west winds blew 15-25 mph. Last night as the cold front moved in, winds speeds reached 40-60 mph. Light snow will continue today and pick up intensity tonight through Friday. Winds will be westerly at 15-25 mph with mountain temperatures dipping into the low teens tonight. By tomorrow morning I expect this spring storm to deliver 4-6 inches of new snow.

Snowpack and Avalanche Discussion

The Bridger, Gallatin and Madison Ranges and the Lionhead area near West Yellowstone:

Winter is back for her encore performance. The current below-freezing conditions have helped the snow stability; yesterday's wet surface is today's thick crust. Mountain temperatures dropped to below freezing for six hours before the snow started to fall. This allowed the snow surface to freeze, which will kill the chances of wet avalanche activity. Today's main avalanche concern is wind-loading. At the ridgetops the winds scoured any snowflake that was not glued down. Moonlight Basin had wind slabs two feet thick pull out on Tuesday. One to two inches of fresh snow this morning with a few more inches today will be enough ammunition to create wind drifts. With a thick ice crust on many aspects, a high-speed "slide for life" tumble has greater odds of happening than being buried by an avalanche.

Not all slopes have a crust. A few shaded slopes are holding onto powder snow too. At the base of the snowpack is a layer of depth hoar. This layer has proven itself to be unpredictable and untrustworthy no matter if the snowpack is moist or dry (photo). Triggering a deep slab avalanche is still possible from thinner spots on a slope. Any avalanche that's triggered at the ground will be large and destructive. I remain skeptical of this layer, even with a thick ice crust capping the snow. For today the avalanche danger is rated <u>MODERATE</u> on all slopes since triggering wind-loads or something much deeper remains possible.

The mountains around Cooke City:

Avalanche danger around Cooke City will be confined to wind-loaded terrain. These pillows will not be widespread or thick, but they will be reactive to ski cuts. Cooke City lacks the deep instability issues found in the rest of our region. Consequently, for today, the avalanche danger is <u>MODERATE</u> on wind-loaded slopes and <u>LOW</u> on all other avalanche terrain (<u>video</u>).

Mark will issue the last three advisories of the season starting tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations, drop us a line at <u>mtavalanche@gmail.com</u> or call us at 587-6984.