GNFAC Avalanche Advisory for Thu Jan 2, 2014

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 2 at 7:30 a.m. **Gallatin County Search and Rescue** sponsors today's advisory. This advisory does not apply to operating ski areas.

AVALANCHE FATALITY

A snowmobiler was killed in an avalanche yesterday in Onion Basin near Eaglehead Mountain in the northern Gallatin Range. Three snowmobilers rode in from Portal Creek. They were near the bottom of the slope when they were hit with a large avalanche. One person was partially buried and injured and one person was completely buried. A beacon search located the victim under five feet of snow and CPR was performed for 40 minutes, but the victim was not revived. The two snowmobilers then rode back to the trailhead and alerted Big Sky Search and Rescue who are coordinating the recovery. We will investigate the scene today and write a full report in the coming days.

Our deepest and sincerest sympathies go out to the victim's family and friends.

Mountain Weather

Two more inches of snow fell yesterday morning in the northern Gallatin Range. Winds have been west to southwest at 20-30 mph with gusts of 35 mph. Today will be mostly cloudy, winds will remain steady and mountain temperatures will rise from the teens into the upper twenties by this afternoon. A cold front and snowstorm are slated to arrive tomorrow morning. Wind and snow are on the menu for Friday.

Snowpack and Avalanche Discussion

Northern Gallatin Range

Yesterday the northern Gallatin Range had a High avalanche danger and was under an Avalanche Warning. Recent snow fell onto a weak snowpack and created very unstable conditions. The warning has expired since avalanches are no longer hair-trigger today, but the backcountry is still dangerous. Yesterday's fatality illuminates the seriousness of travel in and below avalanche terrain. Weak, sugary snow near the ground cannot support the one inch of water weight (SWE) from Wednesday night's storm. Skiers up Hyalite saw fresh avalanches yesterday (photo1, photo2). Winds are still strong at the Flanders Mountain weather station and wind-loaded slopes will remain very easy to trigger. For today, the avalanche danger is rated HIGH on all wind-loaded slopes and CONSIDERABLE on all others.

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

The snowstorm ended yesterday morning and dropped over an inch of water weight in the Bridger Range and around Cooke City and over half an inch elsewhere. New snow depths were reported to be 10-18" in at high elevations. Yesterday, new avalanches were seen on Buck Ridge south of Big Sky (**photo**) and outside Cooke City (**photo**). Slopes with a wind-load will be the most susceptible to avalanche, but even on slopes without it

I'm concerned. Yesterday, Mark and I went into the Bridger Range above Fairy Lake. The faceted, sugary snow is slowly strengthening, but we are still getting our tests to propagate fractures (**photo**). We conservatively interpreted this as a warning that we could trigger an avalanche and toured carefully.

How the three of us travel in the backcountry is taken into account when we decide the danger rating. We have been tip-toeing around the mountains for weeks, many times with our inclinometer in hand, treating most slopes above 30 degrees with suspicion and caution. We do not trust the poor snow structure (video) and all the avalanche activity this past week only strengthens my skepticism. For today the avalanche danger continues to be rated CONSIDERABLE on all slopes.

We have posted far more **pictures** and **videos** than those linked in today's advisory. To get a broader understanding of the avalanche problems take time to browse the collection.

Mark will issue tomorrow morning's advisory 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.

EVENTS/EDUCATION

January 4, BOZEMAN: Saturday, 10:30 a.m. at Bridger Bowl, **Free Avalanche Transceiver Workshop**, next to rental shop at Jim Bridger Lodge.

January 7, BILLINGS: Tuesday, 6:30-8:30 p.m. at High Mountain Recreation, 90-Minute Rescue Presentation.

January 8, BOZEMAN: Wednesday, 6:30-8 p.m. at REI, Sidecountry IS Backcountry lecture.

January 9, BOZEMAN: Thursday, 6-7 p.m. at Mystery Ranch, 1-hour Avalanche Awareness lecture.

January 9, HELENA: Thursday, 6:30-7:30 p.m. at Exploration Works, **1-hour Avalanche Awareness** lecture.

January 11, COOKE CITY: Saturday, 10 a.m. to 4 p.m., **Companion Rescue Clinic for Snowmobilers**, Pre-Registration is required. https://www.ticketriver.com/event/9445

January 11, WEST YELLOWSTONE: Saturday, 7-8 p.m. at Holiday Inn, **1-hour Avalanche Awareness** lecture.

More information our complete calendar of events can be found **HERE**.