GNFAC Avalanche Forecast for Sun Dec 27, 2015

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on, Sunday December 27, at 7:30 a.m. Today's advisor is sponsored by <u>Cooke City Super 8/ Bear claw</u> and <u>Spark 1</u>. This advisory does not apply to operating ski areas.

Mountain Weather

High pressure has produced clear skies and light to moderate winds over the past 24 hours. This pattern has also created a significant temperature inversion. At 4 a.m. valley temperatures are in the single digits above or below zero while mountain temps range between 10-20 degrees above zero. Today, high pressure will remain over the area producing sunny skies and relatively calm conditions. Daytime highs will warm into the upper teens to mid-20s F and winds will blow 5-20 mph out of the W-SW.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

Yesterday, snowmobilers triggered two large slides near Daisy Pass outside of Cooke City. One slide completely buried a snowmobile but fortunately not the rider (**photo**). It's unknown if anyone was caught in the other slide (**photo**). Both of these slides failed on weak facets near the ground. These avalanches are a serious reminder of what's possible around our entire advisory area.

The current avalanche problem is extra dangerous because slides are failing at the ground (**photo**). Yesterday, Alex and I toured to Mt. Blackmore in the northern Gallatin Range and found plenty of weak and unstable snow. We observed two natural avalanches and got unstable results in multiple stability tests (**photo**, **video**). This poor snowpack structure is widespread throughout the advisory area and capable of producing avalanches on nearly every steep slope.

Outside of avalanches failing at the ground, there is the possibility of skiers or riders triggering isolated wind slabs. This problem is mainly confined to alpine terrain where moderate winds out of the west-northwest have been transporting snow onto leeward slopes. Slides initiated in the upper layers of the snowpack could step down to weaker snow near the ground, producing a larger and more dangerous avalanche.

What's tricky about the current set up is the overlying slab is now dense and supportable in many areas (video). This is making backcountry travel more manageable, allowing skiers and riders to become increasingly aggressive their terrain selection. During this type of deeper instability, it's possible for multiple skiers or riders to hit a slope before it avalanches. Remember – tracks on a slope do not equal stability. Also – it's critical when traveling in the backcountry that everyone follows three simple rules: 1) Everyone carries rescue gear and knows how to use it. 2) Always watch your partner from a safe location. 3) Only expose one person at a time in avalanche terrain.

Today – Dangerous avalanche conditions exist. Human triggered avalanches are likely and the avalanche danger is rated **CONSIDERABLE**.

I will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found HERE.

West Yellowstone: January 2, Ihr Avalanche Awareness, West Yellowstone Holliday Inn, 7-8:30 p.m.

Bozeman: January 6, Women's Avalanche Awareness and Beacon 101, Beall Park, 6-8 p.m.

January 9 and 10, Companion Rescue Clinic, REI, Fri 6-8p.m., Sat 10a.m.-2p.m.

January 13, *1hr Avalanche Awareness*, REI, 6-7:30 p.m.

Livingston: January 14, *1hr Avalanche Awareness*, Neptune's Brewery, 6-7:30 p.m.

Dillon: January 19, Ihr Avalanche Awareness, UM Western Library, 6:30-8 p.m.

ASMSU Intro to Avalanches w/ Field Course

January 20, 21 and 23 or 24: https://www.ticketriver.com/event/16861

The workshops will be held on Wednesday and Thursday evenings, with a field course on either Saturday or Sunday. Different topics will be presented each evening. Topics include: avalanche terrain recognition, the effect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.