GNFAC Avalanche Forecast for Thu Mar 13, 2014

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Thursday, March 13 at 7:30 a.m. **Javaman** and **406 Brewery** sponsor today's advisory. This advisory does not apply to operating ski areas.

Tuesday, March 11, Cooke City Avalanche Fatality

On Tuesday an 18 year old male snowmobiler from Minnesota died in an avalanche on the northwest face of Crown Butte outside Cooke City. The victim was stopped on the slope while two others were riding when the avalanche was triggered. Neither he, nor anyone in his party of seven, was wearing a beacon. Cooke City Search and Rescue located him with a probe pole under six feet of debris near the toe of the avalanche about 2+ hours later. Our sincerest sympathies go out to the family and friends of the victim.

There are **<u>five pictures</u>** on our photos page.

Mark and Eric made a video explaining the snowpack and avalanche.

A full report will be issued in the coming days.

This is the fifth avalanche fatality in Montana and the fourth in the last three weeks. (table)

Mountain Weather

Temperatures are near twenty degrees under clear skies this morning. Winds are west to southwest at 15-25 mph. Today will be sunny and warm with mountain temperatures reaching the high thirties by midafternoon. Winds will remain moderate and tonight will be clear again. Today is a skin burning SPF 50 type of day.

Snowpack and Avalanche Discussion

Bridger Range Gallatin Range Madison Range

Lionhead area near West Yellowstone Cooke City

Yesterday Mark and Eric investigated the avalanche that killed an 18 year old snowmobiler near Cooke City. The snowpack broke near the ground on a layer of large-grained facets, the biggest crystals they've seen this season. When this layer fractures, deep slab avalanches occur. The chance of triggering a deep slab avalanche is not great, but the recipe exists on a few slopes in every range. These slopes are susceptible to being triggered from rocky and thin areas. Deep slab avalanches are hard to predict and scary to think about. I only have one lone arrow in my quiver of travel advice regarding this problem: avoid these slopes.

Sunny skies coupled with folks getting outside resulted in **great photo documentation** of Tuesday's avalanche cycle during the avalanche warning. Over two feet of dense snow fell which triggered slides on all aspects in all ranges. Strong winds blew from many directions as the storm rolled through and loaded many slopes mid path. Natural avalanches were seen on Cedar Mountain and Mount Wilson in the northern Madison Range as well as large avalanches on both the west and east side of the Bridger Range and up Hyalite. Many of these were new yesterday which indicate it's taking a bit of time to stabilize. New snow, windblown snow, avalanches running 3-4 feet deep on January's facets or near the ground on December's depth hoar, or even wet avalanches on sunny

slopes...all of these avalanche types are possible today. As you travel in the backcountry it's not necessary to concentrate on the nuances of these types, instead, pay attention to two simple things: <u>slope angle</u> and the <u>sun</u> <u>wetting the upper layer of the snowpack</u>. Triggering avalanches will be more difficult on slopes less than 35 degrees, and as the snow surface wets the avalanche danger will increase.

There have been avalanches reported 14 out of the last 16 days and today's gorgeous weather won't change the snowpack structure appreciably. For today the dry snow avalanche danger is rated **CONSIDERABLE** on all slopes steeper than 35 degrees and **MODERATE** on all lower-angled slopes. The wet snow avalanche danger could rise to **HIGH** on all steep, sun exposed slopes this afternoon.

More Bridger Range avalanche photos.

Mt. Jefferson Avalanche: Video

This is not in our forecast area, but it has a similar snowpack and avalanche concern.

Seven riders in the Jefferson's, all wearing beacons and airbags, climbing one at a time on what they considered a small angled slope triggered a deep slide. A guy rode it out, pulled his airbag and ended up on his sled when it stopped. No injuries and no one buried. Two photos are on our **photos page**.

Mark 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.