GNFAC Avalanche Advisory for Thu Feb 21, 2013

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, February 21 at 7:30 a.m. **Northern Lights Trading Company** and **Knapp Sacks** sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday morning Hyalite Canyon received 3-5 inches of snow while all other areas received about 2 inches. Temperatures this morning were in the single digits and low teens F. Northerly winds were averaging 5 mph and gusting to 10 mph. Dry air will move over the area this afternoon and allow some sunshine. Temperatures will warm into the high teens F today and winds will remain light. A trace of snow may fall early tomorrow morning. Winds will shift to the W and increase Friday night.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone

The bad news: Weak faceted snow formed about one month ago and is now covered by a slab of snow 2-3 feet thick. This is a good recipe for avalanches. A skier triggered slide on Bridger Peak (**photos** and **video**) and a snowmobiler triggered slide on Lionhead on Tuesday and Sunday (**photo**) confirm the ability of this layer to produce avalanches. This weak layer of facets exists on many slopes and will persist for many weeks to come. On Tuesday while riding on Buck Ridge just south of Big Sky, my partner and I found this layer in almost all of our snowpits.

The good news: This layer of facets is variable which means slopes can be found where this layer either doesn't exist or is not very weak. Additionally winds have been incredibly light in recent days, and the load of new snow hasn't been added to the snowpack too quickly. With work (digging several snowpits and carefully assessing the snow and terrain), stable slopes can be found.

With a persistent weak layer buried 2-3 feet deep on many slopes, human triggered avalanches remain possible. Unfortunately this layer will not show many signs of instability and skiers and riders can hit many slopes before one slides. Today, the avalanche danger is rated **MODERATE**.

Cooke City

On Tuesday there were two human triggered avalanches near Cooke City. A skier took a long ride down an east facing couloir off Miller Ridge when the cornice he was standing on broke and triggered a slide. He was not buried and sustained minor injuries. Snowmobilers triggered a slide on a southwest facing slope in Sheep Basin with a thin snowpack (**photo**). Avalanches also occurred on Saturday (**photo**) and Monday (**photo**).

These avalanches broke on facets in shallow areas or on a thin layer of facets sitting on an ice crust 1-2 feet deep. It is unclear if these recent avalanches are a product of widespread instabilities or a product a lot of people riding in avalanche terrain. Either way, avalanche activity is conclusive evidence of unstable snow and should

not be ignored. For this reason, today the avalanche danger is rated **CONSIDERABLE** on all slopes steeper than 35 degrees and **MODERATE** on all other 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.

BRIDGER PEAK AVALANCHE

A report on this avalanche will be posted later today. Check back this afternoon for more information which will be posted on the <u>accidents page</u> of the website.

AVALANCHE READING (Articles Page)

Accident report by Mark Staples, from an avalanche on Alex Lowe Peak, February 9.

Sidecountry is Backcountry, printed in the February issue of *Carve*, by Doug Chabot.

Know Your Slope Angles, printed in the February Montana Snowmobile Association Newsletter, by Eric Knoff.