GNFAC Avalanche Advisory for Thu Dec 12, 2013

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued Thursday, December 12 at 7:30 a.m. <u>Montana Ale Works</u> in partnership with the **Friends of the Avalanche Center** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

This morning most places had temperatures in the teens F. Winds were blowing stronger near Bozeman and less so further south. W and SW winds near Bozeman were blowing 20-30 mph. Near West Yellowstone and Cooke City winds were blowing 10-15 mph. Today will have more sunshine and temperatures approaching 30 F near Bozeman with winds from the W and SW blowing 15-30 mph. Further south temperatures will be in the mid to low 20s F and winds will be a little calmer.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

There have been many avalanches throughout the advisory area over the last two days. More can be triggered today. Yesterday's avalanches included:

- My partner and I remotely triggered <u>6 small slides</u> (video) along Buck Ridge near Big Sky on a non-wind loaded slope. Other sledders remotely triggered <u>2 small slides</u> nearby in the Beaver Creek drainage.
- A patroller at Big Sky unintentionally ski triggered a slide 3 feet deep on facets near the ground after the slope had been shot with explosives. When the pros are surprised, we should pay attention.
- A skier triggered a <u>slide</u> on the west side of the Bridger Range just west of Bridger Bowl. It was a wind slab resting on weak facets.
- The Bridger Bowl Ski Patrol triggered a <u>slide</u> on their southern boundary. While this avalanche didn't propagate over a wide area it broke near the ground.
- Many <u>slides</u> occurred near Hardscrabble Peak in the northern Bridger Range. Some were natural some were skier triggered. Many slides about 1-3 feet deep were easily triggered by a skier just south of Ross Pass. These involved mostly new snow and fresh wind slabs.
- Eric spotted a slide on Saddle Peak about 150 feet wide and 2-3 feet deep.
- A snowmobiler triggered a 3 foot deep slide on a NE facing slope near Round Lake near Cooke City. Fortunately he was able to pin the throttle and ride off the slab as it was breaking.
- Also near Cooke City, large naturally triggered <u>slides</u> were seen just inside the wilderness boundary on different aspects near Goose Lake.

Fortunately no avalanches yesterday involved ice climbers in Hyalite Canyon; however, climbers triggered many slides on Monday and Tuesday (see Doug's video, and photo1, photo2)

Why have these avalanches occurred? There are several factors. Seven days with temperatures well below zero F weakened the snowpack in many areas especially places that had a snowpack less than 3 feet deep. Also, snow fell on Monday and Tuesday. Bridger Bowl received about 26 inches while other places got 4-8 inches. More importantly strong winds occurred about the same time and caused most avalanches to occur on slopes with wind-blown snow. Winds were readily transporting new snow in the Bridger Range yesterday.

Today is a good day to remain conservative. There is a lot of uncertainty with the snowpack right now, and we are still assessing the effects of last week's extremely cold weather. However, recent avalanches are clear evidence of unstable conditions on many slopes. For this reason human triggered avalanches are likely and the avalanche danger is rated **CONSIDERABLE**.

ICE CLIMBERS: On Monday and Tuesday, climbers triggered many small wind slabs in Hyalite Canyon. These wind slabs were resting on weak facets and were very sensitive. Unfortunately the very nature of the sport means that ANY avalanche big or small can be deadly. These are the same conditions that killed Guy Lacelle in December 2009. Fortunately, we can still go climbing. Many ice climbs like G1, Champagne Slot and Sherbert, Palisade Falls, Mummy I, Amphitheater and others have almost no avalanche hazard. Watch for any signs of denser, wind drifted snow which will likely avalanche. Also, know if there is avalanche terrain above your climb.

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.

EVENTS/EDUCATION

BUTTE: Friday, December 13, 5-6 p.m. **1-hour Avalanche Awareness for Snowmobilers** at the Depot Theater in Butte. This is the Thunderstruck Premier. Call Jeff at 406-560-0897 for more info.

BOZEMAN: Saturday, December 14, 10:30-11:30 a.m. **Free Avalanche Transceiver Workshop**, Bridger Bowl, next to the rental shop at Jim Bridger Lodge.

GARDINER: Thursday, December 19, 7-8 p.m. **Avalanche Awareness**, at the Yellowstone Association in Gardiner. Call Zachary for more info at: 406-848-2850.

WEST YELLOWSTONE: **Snowmobiler Intro to Avalanches w/ Field Course**; 19 and 20 December. Info and registration: https://www.ticketriver.com/event/7116