GNFAC Avalanche Advisory for Mon Mar 2, 2009

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Monday, March 2nd, at 7:30 a.m. The Yellowstone Club in cooperation with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

The ridge responsible for yesterday's warm sunny weather is finally showing signs it will depart the area and allow moisture to enter. This morning at 4 a.m. mountain temperatures were hovering on either side of freezing and winds were 10-30 mph from the southwest. This southwest flow will bring more warm air with high temperatures near 40 degrees F and winds will continue blowing 10-30 mph. Skies will become more cloudy throughout the day with snowfall beginning this evening. Most of this moisture will be near the mountains around West Yellowstone where 2-4 inches of snow will fall by tomorrow morning. The rest of the area may receive an inch. Fortunately colder temperatures and more snow looks promising later this week.

Snowpack and Avalanche Discussion

The Bridger, Gallatin and Madison Ranges, including the Lionhead area near West Yellowstone, the mountains around Cooke City and the Washburn Range:

With recent warm weather little snow remains to be blown by the wind and good powder is getting harder to find. After last week's storm avalanches are also getting harder to find, but highly variable conditions mean areas of unstable snow still exist. In many places south facing slopes have a weak layer of facets near an ice crust about 2 ft deep. Doug found this layer near Cooke City yesterday and investigated two human triggered avalanches that slid on this layer on wind loaded slopes. He also saw signs that many other slopes are stable as well as a good example of very poor travel in avalanche terrain. A similar situation led to 3 fatalities in Wyoming on Friday. Photos from Cooke City are posted at: http://www.mtavalanche.com/photos/photos.php

For information about the Wyoming fatalities: http://www.avalanche.org/data.php?date=&sort=&id=454

The conditions Doug found near Cooke City are very similar to what I found in the northern Bridger Range on Saturday. My primary concern was a similar layer of facets near an ice crust about 2 feet deep on a south facing, wind loaded slope. Because this layer is buried 2 ft deep it does not heal overnight but has slowly gained strength with several days of sunshine and warm weather. More shaded aspects present a dilemma. Some lack notable weak layers and are mostly stable. Others have weak snow throughout and should be carefully evaluated for stability. You'll know you've found one of these slopes if you step out of your skis or off your sled and sink to the ground. Other shaded slopes have a deeper and mostly strong snowpack but contain several potential weak layers. Skiers in mountain ranges just outside the advisory area found evidence of a large slab avalanche on a north facing slope as well as surface hoar buried about 1.5-2 ft deep. Skiers near West Yellowstone also found buried surface hoar on sun and wind sheltered slopes that produced very clean and easy shears in stability tests.

With these weaknesses present throughout the advisory area human triggered avalanches remain possible today, and the danger is rated **MODERATE**.

UPCOMING EVENTS

Make plans to attend the 28th Annual Pinhead Classic Telemark Festival on March 14th at Bridger Bowl with

events for all ages and all abilities. Prizes are awarded for everything but the fastest time and all proceeds benefit the Avalanche Center. A registration fee of \$30 gets you a ½ price lift ticket, t-shirt, commemorative pint glass, multiple laps on the dual slalom course, numerous prizes and awards, and dinner, dancing, and live music at the Emerson that evening. Visit www.pinheadclassic.com for more information.

AVALANCHE EDUCATION

1. March 6-9 the Montana Outdoor Science School will offer a Level I avalanche class. Contact MOSS at 406-582-0526 or admin@outdoorscience.org for more information.

Doug will issue the next advisory tomorrow morning at 7:30 a.m. If you get out in the backcountry give us a call or send us an email with your observations. You can reach us at 587-6984 or at mtavalanche@gmail.com.