GNFAC Avalanche Advisory for Fri Feb 27, 2009

Good morning. This is Karl Birkeland with the Gallatin National Forest Avalanche Advisory issued on Friday, February 27th, at 7:30 a.m. The Hans Saari Memorial Fund in cooperation with the Friends of the Avalanche Center sponsor today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

After about a six week vacation, Old Man Winter is back. There was a short break in snowfall yesterday morning, but it kicked back in by midday. By 4 am we've received about 8 to12 inches of new snowfall throughout our advisory area, with a bit more than that falling in the mountains around Cooke City. The main storm is now east of us, but we've still got some energy and moisture wrapping around and putting us in a northwest flow, which is allowing the Bridgers to squeeze every last inch out of the storm. Snowfall is currently stopping in most areas, but the Bridgers could pick up another 3 to 6 inches this morning. Winds started out of the southwest, but have shifted to the west and northwest and are currently blowing up to 20 to 30 mph on the ridgetops. Temperatures dropped overnight into the single digits. A high pressure ridge is pushing in today, bringing clearing skies, moderating winds, and mountain temperatures in the upper teens and low-20s.

Snowpack and Avalanche Discussion

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

Recall that prior to this week observers were finding a variety of weak layers on a number of different slopes buried about a foot below the snow surface. Since Monday new snow has been piling onto these buried weak layers, with about 1.5 to 2 feet of new snow in the southern Madison Range and the mountains around West Yellowstone, and nearly three feet blanketing the mountains around Cooke City. The largest dose of new snow fell in the past 24 hours, and winds from the southwest to the northwest have been easily transporting this low density new snow onto the lee sides of ridges, gullies and other terrain features. The snowpack is straining under this recent, rapid loading. With our new snow I'd expect you'd find our buried weak layers anywhere from 2.5 to 4 feet deep, and possibly deeper on some wind loaded slopes. Needless to say, these could make for some large and dangerous avalanches. I think we'll be seeing some natural avalanche activity today, and that you would be quite likely to trigger avalanches on many steep slopes. For today, I'd call the avalanche danger HIGH on all slopes steeper than 35 degrees and CONSIDERABLE in less steep terrain. Today is going to be a day to definitely dial it back. The snowpack will need some time to adjust to the new snow load.

The Bridger, northern Gallatin and northern Madison Ranges:

Less snow has fallen farther to the north, but we have still had a pretty significant load this week, with snowfall totals of about 10 to 18 inches. Most of this snow has fallen in the past 24 hours, and even prior to that snowfall we were starting to get some avalanche activity. Yesterday the Moonlight Basin Ski Patrol triggered a sizable avalanche off the north face of Lone Peak during avalanche mitigation work. The slide released across the starting zone with a single explosive and ran 2000 vertical feet. Most of the recent avalanche activity has been confined to new snow, but some local avalanche workers were speculating yesterday that a bit more new snow would likely result in avalanches that will begin breaking out into our older weak layers formed during our prolonged dry spell. With last night's additional load, those weak layers are now buried at least 2 feet deep, and likely much deeper in areas with wind loading. It's also worth noting that we have had reports of weak, faceted snow from a variety of locations this past week, including Mt Ellis, the Hyalites, the west side of the Bridgers,

the west facing slopes of Beehive Basin and on south facing slopes by Buck Ridge. With an additional foot of snow and an inch or more of snow water equivalent added to these slopes, I'd expect to see some avalanches today, especially in areas with recent wind loading. For today I'd call the avalanche danger HIGH on all slopes that are steeper than 35 degrees and are windloaded. All other avalanche terrain will have a CONSIDERABLE avalanche danger.

SOME WORDS OF CAUTION

With our extended period of dry weather, winter enthusiasts of all stripes are excited to see new snow falling in southwest Montana. However, don't let your excitement cloud your judgment. Remember the last time we put a sizable load on our snowpack? That was back in January and the avalanches from that loading event resulted in several close calls and three fatalities. We just added a lot of weight to our snowpack, and with clearing weather later today and tomorrow many slopes will look tempting. However, they will also be dangerous. On days like today it's often best to steer clear of avalanche terrain while the snowpack adjusts to its new load.

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.

Mark Staples, our young Jedi apprentice, will issue the next advisory tomorrow morning at 7:30 a.m. May the Force be with him! 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.