

GNFAC Avalanche Advisory for Tue Dec 22, 2015

Good morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Christmas Eve, Eve, Eve, aka Tuesday, December 22, at 7:30 a.m. Today's advisory is sponsored by [**Grizzly Outfitters**](#) in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

AVALANCHE WARNING

We are issuing a Backcountry Avalanche Warning for the mountains around **Cooke City, the Lionhead area near West Yellowstone** and the **southern Gallatin** and **southern Madison Ranges**. The avalanche danger is rated **HIGH** on all slopes. Another foot of snow fell with strong winds last night. The snowpack is weak and unstable and natural and human triggered slides are likely today. Avalanche terrain and avalanche runout zones should be avoided.

19 DECEMBER: COOKE CITY AVALANCHE FATALITY

A 5-minute video describing the accident is posted here: <https://youtu.be/xp6MqrJVSPg>

Later today I will post a written accident report on our website: <http://www.mtavalanche.com/accident>

Mountain Weather

In the last 24 hours the southern mountains picked up close to a foot of new snow. In the northern mountains the Big Sky area got 2-4 inches with 1-2 inches falling everywhere else. Winds have been westerly and strong; blowing 20-40 mph with an occasional gust reaching 50-60 mph. Temperatures are currently in the teens and will warm into the mid-20s this afternoon. Today will be cloudy with snow showers and decreasing winds. By tomorrow morning I expect another 2-4 inches in the mountains.

Snowpack and Avalanche Discussion

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone Cooke City

The snow continues to pile up in the southern mountains with close to a foot of new snow falling since yesterday afternoon. This snow is measuring almost an inch of snow water equivalency (**SWE**), a substantial weight in a short period of time. Our snowpack is unstable and becomes even more so immediately after big loads, which is why we are reissuing the Avalanche Warning. Conditions today are no better than Saturday when the avalanche fatality happened outside Cooke City. Weak, faceted snow at the ground, called depth hoar, is struggling to support all the new snow (**video**). In the last 2 weeks 5-6" of SWE has fallen around Cooke City and West Yellowstone, a large amount of snow weight. In the last week, besides the fatality, there have been natural avalanches in Carrot Basin, human triggered slides in Cabin Creek, and widespread cracking and collapsing around Hebgen Lake and Lionhead. The evidence is overwhelming that the snow is unstable, some of which is documented on our [**Photo**](#) and [**Video**](#) pages.

For today the avalanche danger is rated **HIGH** on all slopes. Avoid avalanche terrain. Triggering avalanches from flatter areas below open slopes is very possible. This is how three riders got caught resulting in a fatality in Cooke City.

Bridger Range Northern Madison Range Northern Gallatin Range

The mountains around Bozeman and Big Sky got an extra serving of wind and a smaller portion of snow: 1-2" at Bridger Bowl and Hyalite and 2-4" around Big Sky. The snowpack is weak and unstable. Avalanches have been occurring in the last week, some remotely triggered ([photo](#)). Wind-loaded slopes will be especially dangerous today, but even slopes untouched by the wind are unstable. A weak foundation of sugary depth hoar is cracking and collapsing with the weight of skiers and snowmobilers. In the last week every range has seen human triggered and natural avalanches. Look no further than Saddle Peak for evidence of continued instability; it is bordered on the north and south by avalanches ([photo](#), [photo](#)). Although many people continue to ski it without consequence, the snowpack is clearly weak and unstable and skiing it carries a very high level of risk, much more than I'm willing to take. In fact, no avalanche professional I know would ski it right now.

Given the wind, unstable snowpack and recent snowfall, the avalanche danger is rated **HIGH** on all wind-loaded slopes and **CONSIDERABLE** elsewhere.

I will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at mtavalanche@gmail.com or leave a message at 587-6984.

EVENTS and AVALANCHE EDUCATION

A complete calendar of classes can be found [HERE](#).

Cooke City: December 23, *1hr Avalanche Awareness*, Cooke City Visitor's Center, 6-7:30 p.m.

West Yellowstone: January 2, *1hr Avalanche Awareness*, West Yellowstone Holliday Inn, 7-8:30 p.m.

Bozeman: January 6, *Women's Avalanche Awareness and Beacon 101*, Beall Park, 6-8 p.m.

January 9 and 10, *Companion Rescue Clinic*, REI, Fri 6-8p.m., Sat 10a.m.-2p.m.

January 13, *1hr Avalanche Awareness*, REI, 6-7:30 p.m.

Livingston: January 14, *1hr Avalanche Awareness*, Neptune's Brewery, 6-7:30 p.m.

Dillon: January 19, *1hr Avalanche Awareness*, UM Western Library, 6:30-8 p.m.

ASMSU Intro to Avalanches w/ Field Course

January 20, 21 and 23 or 24: <https://www.ticketriver.com/event/16861>

The workshops will be held on Wednesday and Thursday evenings, with a field course on either Saturday or Sunday. Different topics will be presented each evening. Topics include: avalanche terrain recognition, the effect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.