

GNFAC Avalanche Advisory for Thu Jan 17, 2013

Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on Thursday, January 17 at 7:30 a.m. Today's advisory is sponsored by **Grizzly Outfitters** in partnership with the Friends of the Avalanche Center, and it is in memory of **Travis Engstrom** and **Kirk Hewitt** who died in separate avalanches four years ago today. This advisory does not apply to operating ski areas.

Mountain Weather

Yesterday was warm and sunny with more of the same forecasted today. This morning mountain temperatures were near 20 degrees F and winds were blowing from the SW to NW 5-15 mph gusting 25-30 mph. With more sunshine today, temperatures will be in the low 30's F. Winds will remain westerly and wind speeds shouldn't change much.

Snowpack and Avalanche Discussion

Bridger Range Madison Range Gallatin Range

Lionhead area near West Yellowstone Cooke City

There are two problems to manage today. Winds have blown new snow from Monday and formed fresh drifts and wind slabs, the primary avalanche problem. Ski Patrols at Bridger, Moonlight, and Big Sky triggered some avalanches yesterday on recently wind loaded slopes. Winds have been especially strong in the Bridger Range where Eric and Karl observed an [avalanche](#) on Saddle Peak that probably occurred on Tuesday. Being a couple days old, these wind slabs should be harder to trigger today, but I wouldn't trust them.

The other problem is a layer of facets buried 6-16 inches deep. Yesterday near Big Sky, my partners and I found this layer on many slopes between 8000 and 9500 feet ([snowpit](#)). On southerly aspects that had just a little wind loading, we experienced collapsing and cracking, a clear sign of unstable snow. In this area on Tuesday, a skier intentionally triggered a slide about 20 feet wide and 15 inches deep. Also on Tuesday, just outside the advisory area in the Tobacco Root Mountains, a skier triggered a slide that broke about 1 foot deep and 100 feet wide on a non-wind loaded slope.

This layer of facets remains weak and is a tricky problem because it does not have a predictable distribution in the large scale. Many slopes do not have it but some do. Because this layer is buried only about a foot deep, dig many quick pits and conduct quick stability tests as Doug recommends in this [video](#). Looking for this layer and testing it should take less than a minute. Check out the propagation potential of a hard wind slab resting on these facets in a [video](#) from Eric and Karl doing research yesterday.

For today, wind loaded slopes steeper than 35 degrees have a [CONSIDERABLE](#) avalanche danger. All other slopes have a [MODERATE](#) avalanche danger.

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.

Four years ago today: Travis Engstrom died in an avalanche when he forgot to turn on his beacon, and Kirk Hewitt died in an avalanche when he briefly rode away from the group and was caught in a small slide. In memory of Travis and Kirk, check the beacons of everyone in your group and make sure to watch your partners

from a safe location every time they ride in avalanche terrain, even on very small slopes. Make these actions habits you do every day.

EDUCATION

Saturday, January 19, Companion Rescue Clinic for Snowmobilers in Cooke City starting at Cooke City Motorsports at 9:30 a.m. This 6-hour clinic teaches how to use avalanche rescue gear and perform an avalanche rescue. Registration is required. For more info and to sign up, visit: <https://www.ticketriver.com/event/4980-companion-rescue-clinic-for-snowmobilers>

Saturday, January 19, 6 -7 p.m., 1-hour Avalanche Awareness at the Cooke City Community Center.

Wednesday, Thursday, and Saturday, January 23, 24, and 26. MSU Introduction to Avalanches with Field Course. Wed and Thurs evenings and all day Saturday. For more information and to register, visit: <https://www.ticketriver.com/event/4970-introduction-to-avalanches-w--field-course>