GNFAC Avalanche Forecast for Tue Mar 16, 2010

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on Tuesday, March 16, at 7:30 a.m. **Jeff King at Edward Jones**, in cooperation with the **Friends of the Avalanche Center**, sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Sunny skies, longer days and high pressure brought mountain temperatures close to 40 degrees yesterday as light ridgetop winds blew southwest at 10-15 mph. Today will be a supersized version of yesterday: sun, mountain temperatures reaching the mid to upper 40s and calm winds. It'll be an SPF 40 day, although if you dare to expose your pasty white arms or legs, I'd lather on the hundred. Tonight we'll see a few high clouds roll in, but there's no precipitation on the horizon until Thursday. Maybe.

Snowpack and Avalanche Discussion

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

From the Bridger Range to West Yellowstone to Cooke City, there's a weak layer of small-grained facets buried a few inches under the snow surface. The added stress of just a few inches of snow Sunday morning was enough that skiers triggered some avalanches. A solo skier north of Ross Pass in the Bridger Range released a 4" deep slab that knocked him over and carried him downhill. He was unburied and uninjured, but it took a bit of searching to find his ski (photo1, photo2, photo 3). That same afternoon on the north facing, upper elevations of Lone Mountain a backcountry skier cut an avalanche on this layer. A soft wind slab broke 10-12" deep, but then stepped down to the ground as it ran the full 1,200 foot path (photo).

Facets found 4-12" under the surface are the layer we're most concerned with. They're on all aspects and when it snows again (I'm being optimistic using the word "when") I expect we'll see more avalanches. Deeper in the snowpack are two other layers of concern: surface hoar 1½ to 2 feet deep and larger facets at the ground, a gift we're still unwrapping from December. Over the past weeks, without much new snow and relatively warmer temperatures, these facets are starting to bond. Eric and I saw this in Lionhead yesterday when our stability tests only broke near the surface instead of deeper. Although the formation of these weak layers was quite uniform, strengthening is not. This variability makes it trickier to decipher where the deeper instability exists. We did not find it near West Yellowstone, nor did Eric see it in the Hyalites on Mt. Blackmore, yet a skier certainly found it outside Big Sky's boundary.

Wet snow avalanche danger will be on the rise today. It only got warm enough yesterday to create a few loose snow dribbles, but that will change today. We will likely see the new snow from Sunday slide easily. These loose snow slides may gouge into the pack, and in a few places could even create a slab avalanche if they break one of these deeper faceted layers.

For today the wet snow avalanche danger will rise to **CONSIDERABLE** by early afternoon. The dry snow avalanche danger remains **MODERATE** on all slopes since it's still possible to trigger slides.

New Beacon Park: Skiing or riding near West Yellowstone? Test your beacon skills at a new beacon park near the old airport where you can search for pre-placed beacons switched on/off by a control panel. Look for it by orange snow fence and signage just south of the snow cross track. For more information on beacon parks, visit:

$\underline{http://bit.ly/dqXrFM}$

I will issue the next advisory tomorrow morning at 7:30 a.m. If you get out in the backcountry let us know what you find. You can reach us at 587-6984 or email us at mtavalanche@gmail.com.