

## **GNFAC Avalanche Advisory for Tue Apr 13, 2010**

The Avalanche Center is officially closed for the season and we won't be issuing advisories again until next fall. However, many of you will keep skiing for weeks or possibly months and there are a few things worth keeping in mind with the snowpack.

### **UPDATE: AVALANCHE FATALITY**

On April 14, 2010 a snowmobiler died in an avalanche in McAtee Basin near Buck Ridge just south of Big Sky. He was parked near the base of a north facing slope filming another rider climbing above him. As this rider reached the top of the slope, it fractured well over 1000 feet wide and 2-4 feet deep on a thin layer of small facets. The victim was carried 200 feet downhill and buried. His partners initiated an immediate rescue and found him very quickly. Digging him out of the debris was difficult because his sled was on top of him and there were many tree limbs in the way. Even with these difficulties, his partners dug him out in less than 15 minutes but it was too late. Our condolences go out to his family and friends. You can read the full accident report [here](#).

### Mountain Weather

### Snowpack and Avalanche Discussion

Recent spring storms and strong winds have added stress to facets buried 1-3 feet deep. These facets will be the most sensitive on recently wind loaded slopes. With many storms coming from the S-SW, slopes with east and north aspects will be the most loaded, subsequently making them the most dangerous. This is important information, since north and east facing slopes will hold the best skiing or riding conditions. Another weak layer to remember is a layer of facets near the ground. Avalanches initiating in upper layers of the snowpack can quickly step down causing larger and more destructive slides. Evaluating the strength of these deeper layers can be difficult. Ask two questions: Can this slope produce an avalanche? If it does slide, what are the consequences? Remember, most avalanche activity occurs immediately following a storm.

As winter loosens its grip on southwest Montana and true spring conditions gradually arrive, above freezing temperatures and wet snow avalanches are on the horizon. The first warm, sunny day after a fresh snowfall could be very active with wet, loose snow avalanches. Wet loose avalanches often initiate as small point releases near rock bands or ridgelines and can quickly encompass large amounts of snow leaving thick debris piles. Stay alert signs that the snowpack is heating and losing strength. Some years we get great "corn" cycles caused by freezing temperatures at night followed by sunny, warm days. If you do seek the elusive corn snow, you'll need to wake up pre-dawn to catch these great, magic carpet rides before the avalanche danger rises with the sun. Signs of increasing wet snow avalanche danger include sinking to your boot tops in slushy snow and pinwheels of wet snow rolling downhill.

Another concern is wet slab avalanches. These slides are difficult to predict and have the potential to propagate fractures over long distances, a much more dangerous event than wet loose avalanches. Watch for wet slab avalanches during the first major period of warm weather when the snowpack doesn't refreeze at night. Once the snowpack has transitioned from a winter snowpack to a spring/summer snowpack with drainage channels established, wet slab avalanches are no longer a concern. This transition will not occur uniformly on all aspects

and will happen first on south aspects and later on north aspects.

Even in spring, basic avalanche safety still applies: travel one at a time in avalanche terrain and carry the appropriate rescue gear.

Enjoy the spring!

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