## Saddle Peak: Sidecountry Challenges, Misconceptions and Lessons

## By Doug Chabot

Ski areas are now open and so are their backcountry access gates. The sidecountry provides great skiing and snowboarding opportunities, but also presents some challenges. Last year, on February 16<sup>th</sup>, Saddle Peak avalanched. Located south of Bridger Bowl it's a popular out-of-bounds destination in full view of the ski area. Two thousand feet of skiing from the summit back to the lift is a powerful allure and unforgettable experience when conditions are safe. When they are not, the slopes can be deadly. At the bottom, 200 foot cliffs create high consequences for anyone caught in even a small slide. Avalanches are all about timing and on that Tuesday last year, the timing was bad.

A persistent weak layer was buried in December which sank further in the snowpack as winter snows fell. A hard wind slab capped this layer which easily supported skiers and snowboarders. People believed all the hundreds of ski tracks compacted the weak layer making it stronger and safer. Unfortunately, avalanches don't work this way. In the ski area, avalanche control with explosives and concentrated ski tracks create an artificially stable snowpack. Out-of-bounds, on the other side of the rope line, the sidecountry is a wild beast. Ski tracks couldn't reach the weak layer through the hard wind slab which was perched on sugary facets. With a slab, weak layer and steep slope, the only thing missing, until that morning, was a trigger. A snowboarder inadvertently walked too close to the edge and broke off a van-sized cornice which tumbled down and fractured the slope. The avalanche was up to five feet deep, 1,000 feet wide, 2,000 feet vertical and wiped out two months of ski tracks. Miraculously, no one was caught.

Besides erroneously thinking that ski tracks were a sign of stability, folks believed that only a large trigger (like the cornice) could have gotten the slope to slide; the weight of a person could never have been enough. While bigger triggers increase the odds of getting an avalanche, small triggers in the right spot can release avalanches as well. This is a simple fact with many dead skiers in the world as evidence.

A complicating factor with sidecountry terrain, especially slopes like Saddle which are in full view of the ski area, is that we tend to believe the avalanche danger is low since others are doing it. This magnetic pull is hard to resist, even as an avalanche forecaster. It takes extra concentration to fight the herding instinct. While the nuances of forecasting are complicated and dynamic, I've found that focusing on simple things can add clarity. The avalanche advisory is a tool to help folks answer the pertinent questions: How much did it snow? Where did it snow? What were the winds doing? Was there recent avalanche activity? Are there weak layers in the snowpack?

The day of the slide we reported four feet of new snow in the 72 hours prior to the slide, stiff west winds loading slopes, natural and human triggered slides on adjacent terrain during the previous two days and a deeply buried weak layer. With these red flags flapping in our faces, the timing was bad to play on high consequence terrain.

We all relearned some important lessons that day. Ski tracks don't equal stability, buried weak layers can linger for months, and the avalanche doesn't care about your experience level or that you think it's

safe. Before committing to any sidecountry or backcountry adventure, read the Avalanche Advisory (mtavalanche.com) to get the most recent weather and snowpack information. It can only help.