Minimizing Uncertainty in the Backcountry



Submitted by Eric Knoff on Wed, 11/12/2014 - 14:41

There are no stoplights in the backcountry. The decision to ride into uncontrolled-avalanche terrain is a personal one with risks and rewards. Done correctly, pinning the throttle through a field of untracked powder or climbing a steep mountain face can produce unmatched excitement, but riding in avalanche terrain can produce severe and sometimes deadly consequences. A great way to increase the margin of safety in the backcountry is to reduce uncertainty about snowpack stability by gathering meaningful information that is relevant to the day's riding plan. This is done by taking a few simple steps before and during a backcountry ride.

One of the best sources of information is the daily avalanche advisory. This can be done through multiple outlets, usually home computers, smartphones and tablets. This is typically done by visiting the avalanche center website and reading the daily avalanche advisory which provides current snowpack and weather information and is a great platform for planning the day's ride. Informative photos and videos often accompany the daily advisory. Additional information such as SNOTEL data, temperature and wind speed/direction can also be accessed by visiting the avalanche center website. Discussing this information will help your group make informed decisions about the day's riding agenda.

Reading the day's avalanche advisory reduces uncertainty before firing up the sleds. Once in the backcountry, it's important to collect additional information to complement the avalanche advisory. One easy, but critical piece of information is using Mother Nature's clues to help predict snowpack stability. Obvious clues such as recent avalanche activity or cracking and collapsing of the snowpack are red flags and "Bull's Eye" data showing the snowpack is unstable. If these signs are present, avalanche terrain should be avoided. It's important to remember that avalanches can be triggered from low on the slope and avalanche run out zones are avalanche terrain if signs of instability are present.

What if signs of instability aren't present? What can be done to reduce uncertainty before committing to avalanche terrain? Digging a snowpit is a *fast* and *easy* way to investigate the snowpack under your sled. Snowpits provide a localized, first-hand look at snowpack structure on a specific slope. By digging a snowpit and assessing the different layers within the snowpack, it is possible to determine the general stability of a slope. Snowpits should be dug on low angle, representative slopes (similar aspect and elevation) to those the group plans to ride. It's important to remember that snowpits are only one piece of information and should be used in conjunction with other collected data.

Digging snowpits is a great time to turn off sleds and communicate with group members. Discussing snowpack and weather information is a key factor in safe mountain riding and should be done on a regular basis. Communication helps organize collected data and prioritize available information, helping reduce uncertainty in the backcountry. The saying – "The person who wonders about snow stability when standing on the edge of an avalanche path has thought of the problem too late." is pertinent when riding in avalanche terrain.

Managing uncertainty plays a significant role in safe backcountry riding. Taking a few simple information gathering steps before and during a ride can quickly decrease your margin for error. Calling the avalanche advisory, watching for signs of instability, digging snowpits and consistent communication are all steps that can make for a safe and successful day of riding.