

## **Snow Safety Plan 20/21 New Terrain.**

The purpose of this document is to describe Nordic Valley's method of implementing a Snow Safety procedure on the newly expanded terrain. Snow Safety is often referred to as Avalanche Mitigation. It is the Nordic Valley Mountain Patrol's process of snow stability evaluation, avalanche hazard forecasting, snow instability reduction, and openings / closings of ski runs. Included in this program is weather forecasting, avalanche and mountain rescue, patroller training, and avalanche mitigation.

Nordic Valley will implement two types of physical mitigation techniques for the 20/21 season

1. **Ski Cuts:** Testing the surface or near-surface instabilities by traversing several times across the starting zone of a given slope and cutting into near-surface layers. Ski cutting can be very effective in releasing new snow, causing failures in surface and near-surface slabs, and breaking up surface layers which then can improve the bonding of future layers.
2. **Skier Compaction:** Preventing the development of future weak layers by opening a slope to extensive skiing / boarding. The actions of many skiers / boarders on a slope chop and mix up the snowpack affecting all but the deepest instabilities.

There is four main focuses to our Snow Safety Program:

1. Early season boot packing to establish strong blended base layers in the snow structure.
2. Reduce or eliminate the avalanche hazard on a given slope by triggering small avalanches with ski cutting techniques.
3. Test given slopes with ski cutting techniques to see if failure is possible.
4. Open areas for skier compaction.

Ultimately, accomplishing one of the above may allow a slope to be open so it can benefit from the effects of skier and boarder traffic. This compaction chops and blends the layers of snow to form a stable snow structure

Nordic Valley will be expanding new skiable terrain for the upcoming 20/21 winter season. After reviewing the slope profiles, and terrain layout we have determined two main areas to focus Snow Safety work.

1. **New Chairlift Line.** This area is approximately 4200' long by 150' wide with steep undulating terrain. This area will remain closed to skiing until deemed stable by Snow Safety Staff. Stability measures will include boot packing after early season snowfall and ski cutting once enough snow is on the ground to do so
2. **Top to Bottom Cat Track.** This area is approximately 10000' long by 40' wide with a tall, steep continuous "back-cut" on the uphill side. This area will be stabilized by ski cutting the top portion of the back-cut slope. Areas where this is not possible due to terrain or is deemed not skiable will be roped off as a visual marker to avoid.