

General Bulletin for Wednesday, January 1, 2020

A new bulletin will be posted when conditions warrant and resources allow.

- Carefully evaluate steep terrain which is continuing to be loaded by new snowfall.
- Avalanche danger will increase significantly as west and northwest winds on the summit reach 40-50 mph and above.
- Large and far running natural avalanches will become possible Wednesday and Thursday.
- Smaller avalanches of dense snow will have significant pushing power, even in narrow gullies and longer ice climbs.
- Numerous terrain traps in the form of cliffs, boulders and bushes and trees exist due our current thin snowpack.

The new snow has formed dangerous storm slabs in steep avalanche terrain. Natural avalanches are possible on many open, mid and high elevation slopes over 35 degrees. As west and northwest wind increases during the afternoon of New Year's Day, the potential for natural avalanches will also increase. This threat will persist through Thursday and to some degree Friday as well. Wind slab avalanches will be easily large enough to bury and kill a person, particularly in terrain that faces east and has some fetch upwind.

Mountain Weather: The low pressure systems which affected our area at the end of the year brought around 12" (30cm) of snow to the Presidential Range. Snow continues to fall through New Year's Day with low visibility persisting through the 2nd due to summit fog and new and blowing snow. Anticipate another 6" (15cm) new snow to fall through Thursday morning. Summit temperatures will fall today from the teens into the mid single digits overnight before slowly rebounding prior to the arrival of another round of snow and mixed precipitation that arrives mid-day Friday. Low visibility and blowing snow will hamper route finding over the next few days.

Recent forecast snowfall totals were dependant on subtle changes in the freeze-line by elevation as well as latitude while the storms played off each other like caffeinated comedians in an episode of Storm Systems in Cars Getting Coffee. The resulting snow stratigraphy in the upper snowpack contains multiple density and grain form changes, though most of the layers are of a denser variety - needles, sleet and even a tiny bit of rain, which built and settled fairly slowly. The overall density of this 15-17% snow will likely take a bit more windspeed to move than our more typical 10% variety, but when it does move, it will build slabs on softer failure layers along with an interface with the old coarse, rimed melt freeze layer. Regardless of the exact nature of the failure, my money is on the new wind slabs growing pretty thick before they fail due to the relative strength of the storm slab. Disregarding the lemons that may exist in the upper snowpack, the next couple of days are a good time to fall back on the weather red flags to inform your decision making. Though the new upslope snow will be lighter and drier than the previous 12", it will add weight and be transported by increasing winds more easily than the existing denser snow, which may remain in place and tolerate a significant load...until it doesn't. Low visibility is another watch-out situation to keep on your radar...it's hard to assess what you can't see clearly. And remember that the holidays bring many visitors to the mountains who may or may not drop in on you from above.

Please Remember:

- Safe travel in avalanche terrain requires training and experience. This bulletin is just one tool to help you make your own decisions in avalanche terrain. You control your own risk by choosing where, when, and how you travel.
- Anticipate the avalanche danger to change when actual weather differs from the higher summits forecast. For more information contact the Forest Service Snow Rangers, the AMC at the Pinkham Notch Visitor Center, or the caretakers at Hermit Lake Shelters and Harvard Cabin.
- **Posted 7:35 a.m. January 1, 2020.**

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USDA Forest Service