

Avalanche Advisory for Thursday, December 25, 2014

Expires tonight at 12:00 midnight

Tuckerman and Huntington Ravines have Considerable avalanche danger today. Natural avalanches are possible and human triggered avalanches are likely. Dangerous avalanche conditions exist and conservative decision making is essential.

AVALANCHE PROBLEM: Wet Slabs are the #1 avalanche problem today. Record breaking heat coupled with rain continues to saturate our snowpack with free water, creating wet slabs of varying thickness depending on location. A distant #2, is the potential for some wind slab to develop as the front moves through. This will turn rain to snow, adding up to 1-3" (2.5-7.5cm) later this afternoon. If this accumulation occurs this will be a late day issue.

WEATHER: Forecasts had difficulty with the precipitation amounts over the last 24 hours, as actual rain accumulations came in short of expectations. As of midnight, the summit and Hermit Lake picked up about 0.7" (1.8cm) of water during the previous 24 hours, with the general region getting a bit less. Rain is expected to continue for a little longer before transitioning to snow as the frontal freight train draws cold air into the mountains. 1-3" (2.5-7.5cm) of snow is expected, associated with a building wind from the West, smashing the 100mph (160kph) mark gusting over 120mph (192kph) late in the day. Temperatures peaked very late last night at 44F, crushing the previous daily high record for the Mount Washington summit. Since then, the mercury has steadily been falling which will occur more rapidly as the front moves through this morning. The Ravines are sitting in a mid-elevational warm band in the high 40'sF, trapped between the colder air above and below. This will likely continue for a while this morning until mixing becomes more substantial with higher wind speeds.

SNOWPACK: We feel very fortunate that rain totals did not match the earlier predictions of up to 4 times the actual observations. That said, we are still dealing with a wet snowpack due to both the falling intermittent rain, as well as the melting snow already on the ground. **Natural avalanches will continue to be possible due to wet slabs particularly during the first half of the day.** As the moisture moves out, temperatures will fall slowly, decreasing the potential for natural wet slab avalanches. As this occurs, the water draining rate will exceed the melt rate and the wet surfaces will begin to refreeze, helping stability. I would expect off trail travel to be arduous and slow because of the isothermal snowpack, inducing very deep boot penetration in most locations. Climbers should expect the development of ice dam hazards particularly in the Huntington gullies and near ice bulges of the Tuckerman Headwall. This hydraulic pressure can release explosively with a tool placement as refreezing dams up water flow.

As the day progresses wet slab concerns will dissipate, but new thin dry slab concerns will be something to keep in mind. Up to 3" of new snow is forecasted which could add up to isolated problems created by a building W wind. Based on the high velocities, look for pockets behind terrain features sheltered from the anticipated high winds. Extreme velocities are expected to build, gusting towards 130mph on the Washington summit late today. Maximum winds should hit the highest mark yet for 2014. As high pressure moves in weather will improve over the next several days, but expect very hard surface conditions to exist. The consequences of a slip and fall will likely be..... terminal velocity. We'll discuss more of this tomorrow.

Please Remember:

- Safe travel in avalanche terrain requires training and experience. This advisory 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 a changing avalanche danger 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 or the Harvard Cabin.
- **Posted 8:20a.m. Monday, December 25, 2015. A new advisory will be issued tomorrow.**

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