

Avalanche Advisory for Monday, February 24, 2014

Expires tonight at 12:00 midnight

Tuckerman and Huntington Ravines have Moderate avalanche danger today. Heightened avalanche conditions exist; evaluate snow and terrain carefully and identify features of concern. Natural avalanches are unlikely and human triggered avalanches are possible. The only exception to this is the Little Headwall which as Low avalanche danger. Natural and human triggered avalanches are unlikely in this location.

AVALANCHE PROBLEMS: Avalanche danger will be rising with incoming snowfall and wind loading this afternoon and evening. New wind slabs will be developing and adding to the existing wind slab problem. We expect danger to slowly rise within the Moderate range today. Expect areas to start the day with danger similar to yesterday, which was mix of Moderate and Low danger. The rise today means that human triggered avalanche are moving from unlikely to possible or simply from possible to "more possible". With the timing and expected snow totals, we don't believe we will rise into Considerable before this advisory expires. However, you should be carefully observing snow totals and be thinking about how much this is changing conditions from where they were at the start of the day.

WEATHER: Snow has already begun as of 8:00a.m. The forecast calls for 1-3" (2.5-7.5cm) by midnight. Winds today will be at an ideal speed for transporting any new snow into all forecast areas in both ravines. West winds 50-70mph (80-113kph) will combine with temperatures falling to -10F (-23C) on the summit to make for a challenging day to be above treeline. Over the past weekend, we had a freezing rain event on Friday in the ravines. This was followed by a light snowfall of 1.5" on the summit and a couple days of very strong westerly winds. Being a tourist destination, we welcome any and all snowflakes to come visit Tuckerman Ravine. Hopefully they will come by the masses, because we could use a lot more snow.

SNOWPACK: We have an interesting snowpack around the mountain right now, although not an enjoyable one. The most noticeable feature is the nasty crust that formed Friday in the ravines. This is at least a half inch thick, breakable, and sits on top of multiple weak layers that landed earlier in the week. Throughout much of the terrain, this crust is the surface layer, but there are exceptions. Some locations have been able to form new wind slab on top of the crust, or sluffs have formed thicker piles above the crust. In the absence of incoming snow, these areas are the most probable location where you'd be able to trigger a slide. Just beneath the crust, you'll find a thin layer of round ice pellets and underneath that is a thicker layer weak soft snow. Farther down, the layers get harder and stronger, but there are interfaces here that could act as potential failure layers.

Overall the crust is doing a good job adding strength to the snowpack, so concerns about a person triggering one of these deeper layers exists, but it lives in the back of our minds. The existing slabs on top are more concerning, wherever you can find them. The most concerning issue today is the incoming wind loading on top of the crust. It's conceivable that the weight of a new slab forming on top of the crust will be enough to overload the strength provided by the crust, thus bringing those deeper layers back into consideration for avalanche potential, especially if this upper slab were triggered by a skier or hiker.

- 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 8:10 a.m., February 24, 2014. A new advisory will be issued tomorrow.**

Jeff Lane, Snow Ranger
USDA Forest Service

