

# Avalanche Advisory for Friday, January 31, 2014

**Expires tonight at 12:00 midnight**

**Tuckerman Ravine has Moderate and Low avalanche danger.** The Sluice, Lip, Center Bowl, Chute, Left Gully, and Hillman's Highway have Moderate danger. Natural avalanches are unlikely and human triggered avalanches are possible. Expect heightened avalanche conditions on specific terrain features. All other forecast areas have Low avalanche danger. Natural and human triggered avalanches are unlikely. Watch for unstable snow on isolated terrain features.

**Huntington Ravine has Moderate and Low avalanche danger.** Natural avalanches are unlikely and human triggered avalanches are possible in Central, Pinnacle, Odell, South and Escape Hatch gullies. Expect heightened avalanche conditions on specific terrain features. North, Damnation, and Yale have Low avalanche hazard. Natural and human triggered avalanches are unlikely.

**AVALANCHE PROBLEMS: Wind Slab and Persistent Slab** are still the two avalanche problems you will face today. Wind slab formed from new snow earlier in the week loaded on W winds. The complexity of the avalanche problem increases where Persistent Slabs and Wind Slabs co-exist. Hollow sounding, stiff wind slab is more dangerous where it has developed over the weak layer of facets. These slabs are far from touchy but remember that they can still propagate a crack and fail if the right trigger is hit. Evaluate your snow and terrain carefully.

**WEATHER:** A slight chance of snow showers today with summit fog at times. Highs in the mid-teens around the mountain and colder on the summit. West winds in the 60-70 mph (95-110 kph) range will keep things real today above treeline and in the ravines. Continued cold temperatures in our avalanche forecast area for the next 36 hours will nourish our facet gardens. The next chance for significant snow fall is Saturday night when 3-5 inches (8-12 cm) is possible.

**SNOWPACK:** A snowpack needs a weak layer as well as an ability to propagate a crack in order to produce an avalanche. Field work and compression tests yesterday in Hillman's and Left Gully revealed two weak layers. Nearest the surface, a weak interface between the hard, surface wind slab and the slightly softer wind slab beneath was the first to fail during compression tests. This layer would slide out in places were it was undercut such as at a switchback or obviously in a test pit where it failed in CT 9 or 10 range. More disconcerting was the 1-5 cm weak layer of 2-3 mm facets found in many locations anywhere from 50-70 cm down on top of the January 11 rain crust (and below a thin temperature crust) which failed in the CT 21 range. A party in Hillman's wisely retreated after a *whoompf* and shooting crack near the fork confirmed their suspicions of the slope. The safest bet for travel is stay on the rain crust surface only venturing out onto the hollow wind slabs when you have some contingency plan in place, like a belay and known stable surface or safe zone nearby. This wind slab is hard and strong and, like most persistent weak layers, exceptionally hard to predict the exact trigger point or load required to bring about failure. Extended column test and propagation saw tests confirmed the stubborn nature of the slab and also point to the challenge of moving around safely. Conservative travel strategies are your best bet for handling this hazard.

## **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 8:30 a.m. Friday, January 31, 2014. A new advisory will be issued tomorrow.**

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