Avalanche Advisory for Monday, March 16, 2015

Expires tonight at 12:00 midnight

Tuckerman Ravine has Considerable and Moderate avalanche danger. The Lobsterclaw, Right Gully, Sluice, Lip, Center Bowl, and Chute have Considerable avalanche danger. Natural avalanches are possible and human triggered avalanches are likely. Dangerous avalanches conditions exist. Careful snowpack evaluation and conservative decision making is essential. Left Gully, Hillman's Highway, and the Lower Snowfields have Moderate avalanche danger. Natural avalanches are unlikely and human triggered avalanches are possible. The Little Headwall has Low avalanche danger.

Huntington Ravine has Moderate avalanche danger. Natural avalanches are unlikely and human triggered avalanches are possible. Heightened avalanche conditions exist on specific terrain features. Evaluate snow and terrain carefully to identify areas of concern.

AVALANCHE PROBLEM: Wind Slabs are the primary concern today. Slabs of varying density developed during about 34 hours of continuous precipitation. Initially, small snow grains fell, mixed with some ice pellets, before changing to lighter dendritic forms of average density. This was followed by very low density snow that began around lunchtime Sunday afternoon. Wind Slabs of different density can be found from this storm with a number of weaknesses at interfaces between hardness layers. In addition to crystal type changes, density differences were also made by a shifting and increasing wind from the W to the NNE. Expect most new slab to be quite reactive to triggers particularly on S facing slopes and crossloaded rollovers.

WEATHER: This storm produced 9" (23cm) of recorded snow at the summit, the majority falling yesterday between mid-morning and the early evening. A NW loading wind shifted to the N in the afternoon and increased, gusting briefly to 80mph (128kph). Temperatures fell a total of 27 degrees F, from 25f to -2F, before quickly rebounding this morning to 10F. This warming trend will continue to about 20F as winds return to the prevailing NW and decrease to about 35mph. This is in prelude to increasing clouds this afternoon and another weather maker tonight and tomorrow.

SNOWPACK: What was looking like a storm that wasn't going to meet expectations, it certainly came through in the homestretch. With 2-4" (5-10cm) anticipated for Saturday, 7" (17.5cm) were realized by 10pm. This gave the summit of Washington 9" (23cm) for the storm. Winds initially loaded high to average density snow into the Ravines on a NW flow. Then around noon yesterday, winds moved to come from a N direction and the low-density, upslope, wrap-a-round snow engine began. This is a typical pattern where a low pressure storm system chugs past heading into the Canadian Maritimes. As it moves past, a N or NW flow brings in low density snow. As this occurred during the afternoon we saw S2 snowfall intensity rates (2cm an hour) on an increasing N wind. Velocities began around 30mph (48kph) and picked up to 60 (96kph) over several hours, peaking at 80mph (128kph) before midnight.

The primary instability bulls-eye weakness to be watching out for is an unconsolidated low density layer that fell around late morning on Saturday. This become covered by an increasing density soft slab as winds increased through darkness. I would expect reactive wind slabs in the lee of N winds on S facing slopes, particularly the larger slopes of Tuckerman. Examples include, The Lobsterclaw, Right Gully, The Sluice, Lip, and crossloading of E facing aspects. Considerable rated areas have some slight natural trigger possibilities today. This is due to minor loading with a wind shift to the NW and a period of solar gain on S aspects, but ratings are more pointed to the likelihood of a human trigger. Expect newly created soft slabs, with cold overnight temperatures, to be reactive to a skier, rider, or climber. Expect slab hardness to be variable based on their exposure to wind, or their protection from it. There are also sizable slabs that exist under this new instability, left over from Thursday, so there is potential for a overrunning new soft slab to step down into deeper weaknesses. In Huntington, this human triggered avalanche potential exists as well, although slab failure is slightly lower based on slope size, avalanches from early in the storm, and terrain features breaking up bed surfaces. This "lesser" concept should still be kept in perspective as there is a solid possibility of a human triggered avalanches in Huntington, especially in North, Damnation and Yale. In Central Gully through the Escape Hatch, on the southern side of the Ravine, a Moderate Rating is appropriate, but it is on the lower end of the definition. This is based on exposed old surfaces allowing skilled users to mitigate risks and choose a route with less hazard than S faces. Another snow event is on tap tomorrow. Check the avalanche advisory before heading into the terrain.

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 8:15 Monday 3-16-2015. A new advisory will be issued tomorrow.

Christopher Joosen, Snow Ranger USDA Forest Service White Mountain National Forest (603) 466-2713 TTY (603) 466-2856

