Avalanche Advisory for Monday, December 22, 2014

Expires tonight at 12:00 midnight

Tuckerman Ravine has MODERATE and LOW avalanche danger. The Sluice, Lip, Center Bowl, and Chute have Moderate avalanche danger. Natural avalanches are unlikely and human triggered avalanches are possible. Evaluate snow and terrain carefully to identify heightened avalanche conditions and features of concern. All other forecast areas have Low avalanche danger where natural and human triggered avalanches are unlikely. Watch for unstable snow in isolated terrain features.

Huntington Ravine has MODERATE and LOW avalanche danger. North, Damnation, Yale, and Central have Moderate avalanche danger. Natural avalanches are unlikely and human triggered avalanches are possible. Evaluate the snow and terrain carefully. Pinnacle, Odell, South Gully, and the Escape Hatch have Low avalanche danger. Natural and human triggered avalanches are unlikely. Watch for unstable snow in isolated terrain features.

AVALANCHE PROBLEM: Wind slab from last Thursday's wind event continue to be our primary concern. Piles of sluff or point release debris from steep terrain run a very close second. Though both types of slab offer moderate to good stability, a weak layer exists within reach of a human trigger on the surface in enough places in our Ravines to maintain the Moderate rating. Continue to evaluate snow carefully when moving around our terrain. Avalanches on this wind slab could be on the large side in Central Gully, and in the hangfire in parts of the Lip, Center Bowl and Chute with other smaller areas remaining a problem in many other areas such as the top of Yale and Damnation.

WEATHER: Light winds will continue today, though clouds and fog will challenge visual assessment of our snow surfaces. While not frigid, or even very cold by Mount Washington standards, overnight temperatures have been cold enough the last two nights to preserve the weaker layers in our snowpack which are creating our current instability. Calm winds, cloud cover and a high near 20F today won't change much about the snowpack or avalanche conditions again today and will help preserve our weak layers for Wednesday's rain on snow event.

SNOWPACK: Jeff and I split up with volunteers yesterday and made some observations in Huntington and Tuckerman vesterday. The changes that 98 mph winds last Thursday brought to the remaining snow was immediately obvious while climbing around on slopes beneath the steeper parts of gullies. Scouring action left a widely variable surface of refrozen wet snow and ice crust but with pencil hard wind slab the predominate surface. Our snowpack is pretty shallow, given our position on the calendar, so depth hoar and collapsing snow over rocks, holes and shrubs added to the fun. Stability tests confirmed suspicions that pencil hard wind slabs are still potentially active with moderate results on clean (Q2) shears on multiple layers with the upper 50cm. One ECT did not propagate, but I wouldn't bank on this result in all areas due to the variability in depth and strength of the weak layers. Most disconcerting is the interface between Thursday's wind slab and the refrozen wet snow crust. This layer is widely variable in depth and in many places has avalanched already (beneath the choke in Chute, low in Lip) or has been scoured out by the wind (top of Left Gully). In some places this layer is likely nearer the surface and here the overlying pencil hard wind slab may be thin enough to crack and avalanche. Central Gully, the mid-section of Chute and the bowl-like section of Sluice are areas I would avoid due to this issue and the expanse of wind slab. I would approach other areas like the top pitches of Yale, Damnation and Pinnacle cautiously and take the time to protect myself and my belayer. Sluff piles which have reloaded the bed surface in many areas are best avoided and left for Wednesday's rain to clean out. Last Saturday allowed for sunshine and warmer temperatures in the Ravines but solar gain in the snowpack was limited to very particular locations with the most direct southerly aspect near shrubs and rocks. Lately, night-time clear skies and calm winds have treated snow geeks to a really nice surface hoar display with frost feathers up to 10mm in places.

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 7:45 a.m. Monday, December 22, 2014. A new advisory will be issued tomorrow.

Frank Carus, Snow Ranger USDA Forest Service

