

Avalanche Advisory for Friday, January 30, 2015

Expires tonight at 12:00 midnight

Tuckerman and Huntington Ravines have CONSIDERABLE avalanche danger. Natural avalanches are possible and human-triggered avalanches are likely. Dangerous avalanche conditions will exist today. Careful snowpack and weather evaluation, cautious route-finding and conservative decision-making is essential.

AVALANCHE PROBLEM: Wind Slabs left over from the last storm coupled with the new Wind Slabs that are currently developing are the #1 problem today. Up to +/-6" (15cm) of new snow today will load new unstable slabs into the Ravines today. Schizophrenic wind speeds and direction as well as a dropping temperature will create multiple density changes and snowpack layering affecting this problem. Expect new wind slab to develop on NE facing slopes first, then E, followed by SE facing aspects this afternoon.

WEATHER: Conflicting weather forecasts from a number of sources required a review of model outputs as well as phone calls to the Mount Washington Observatory staff to resolve conflicts in the wind direction forecast. The OBS staff's latest model research indicates that wind will shift quickly from its current SW direction through the W before settling in to blow from the NW. This wind direction will more efficiently build dangerous wind slabs with the potential 6" (15cm) of snow during daylight hours than a shift through the E. Some sources believe this counterclockwise E spin on the compass rose is possible, but we are most confident today with our local specialists. Winds are expected to diminish for a period mid-day before cranking up again. This creates the potential for a lighter layer of snow to build before higher winds create a slab on top.

SNOWPACK: This morning we wrestled with a difficult weather scenario and expected wind directions. These discrepancies relate directly to very different snowpack instabilities depending on what exactly plays out. We have good confidence that winds will directly load new wind slabs across all our forecast areas as the flow moves from the SW, then W, and eventually from the NW. This will initially load NE and E facing slopes such as start zones in Hillman's, Left Gully and the Chute in Tuckerman as well as the Escape Hatch, South, and Odell gullies in Huntington. Expect direct loading of our most historically prolific avalanche producers this afternoon such as Tuckerman's Center Bowl, Lip and Sluice along with Huntington's Pinnacle, Central, and Yale. New wind slab should layer into the terrain with various densities due to a dropping temperature and the up and down wind velocity over the next 12 hours. If natural avalanches do occur they are most likely to fail on a weak layer of low density snow that develops during periods of light wind today, rather than directly on the interface with the old surface. It is possible that avalanche activity may step down into left over wind slab from the last storm. Hard slab that was in place across most of the Tuckerman Center Bowl would likely propagate a long fracture leading to a more significant failure and avalanche. This is quite plausible with the load of a natural, new, soft slab avalanche overrunning these older dense slabs today. There is a lot of complexity to how things will exactly play out today which should force you to be conservative in your decision making.

We are now using the Winter Lion Head Route which is marked by orange signs half way up to Hermit Lake at the bottom and at treeline up top. Expect a post holing slog until it is packed out, snowshoes could be helpful. The Sherburne Ski Trail has improved dramatically. Based on so many variables for the weekend we will do an over all conditions "Pit" post today getting into the nasty weather, the Sherburne, the newly opened Lion Head winter route, and what Frank forecasts for his beloved Patriots on Sunday.

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 8:35 a.m., Friday, January 30, 2015. A new advisory will be issued tomorrow.**

Chris Joosen and Frank Carus, Snow Ranger
USDA Forest Service
White Mountain National Forest

