Windy and previous drifting near Cooke City

Date
Fri, 01/10/2025 - 15:15

The main story from today was increased wind this morning and intermittently throughout the day. The moderate winds were actively blowing snow out of trees and over ridgelines, drifting snow into thick deposits, and there was evidence that wind had been active at high elevations (>9500'?) the last couple days. Today, winds strong enough to move snow started to reach all elevations. On Henderson bench we noted many thick, dense drifts while riding, and could see the snow surface textured from the wind up higher.

We looked at two 4-6' deep persistent slab avalanches that were reported yesterday on the east side of Henderson Mtn., which likely happened yesterday. Wind-loading was the likely trigger. There were not tracks near the larger one above the bench, where riders could easily get to, but they could have been filled in. The other slide was below the highest point below a cornice and likely natural. Both looked like they broke on facets at the bottom of the snowpack.

We dug a pit on Henderson Bench on a northeast facing slope, and one on Scotch Bonnet on a south facing slope (profiles attached). Both showed a 4' thick strong slab on weaker, faceted snow at the base. The weak layers are not terribly weak and didn't produce concerning test scores, so they may get better when they get a break from snowfall and wind-loading, but for now recent avalanches show these layers are weak enough and will produce more big avalanches as snowfall and wind continue.

Recent avalanches are clear evidence that the weak layers 1-2 feet above the ground are close to their breaking point. Continued snow and wind this weekend will make more of these big avalanches likely. Fresh drifts are also large due to all the recent snow that is being easily transported into slabs, and pose a significant hazard on their own.

Region
Cooke City
Location (from list)
Henderson Mountain
Observer Name
Marienthal and Hoyer