# Weak Snow, Improving Stability

Date
Sun, 12/31/2023 - 11:55
Activity
Skiing
Snowmobiling

We rode north of Cooke City today. The first stop was Scotch Bonnet, and just stepping off the snowmachines we were sinking through the upper portion of the snowpack. Here we transitioned to skis and started ascending, much of the tour was on a supportable crust with faceted weak snow below. Using a ski pole to probe during the accent we didn't find evidence of a cohesive slab below our feet.  At 10000' on the SW side of the mountain, we dug and did not have propagating results in stability tests (HS: 74, ECTN 28, below the early December storm). We continued and wrapped around to the SE side of the mountain and dug again. This slope had been previously wind-loaded and had more of a cohesive slab above weak snow. Again, we had no propagation in stability tests, ECTN 21, but the poor structure and the presence of a cohesive slab were enough for us to retreat to a different ski run where no slab could be found.

North of Sheep Mountain we dug again on a north-facing slope at 9600' and saw similarly poor structure and stability test results as we did on the southeast side of Scotch Bonnet. While this slope wasn't wind-loaded it likely received more snow during the previous storm cycles, and was the deepest snow we saw today, 106 cm.

On every slope, we found surface hoar, even at ridgelines.

Region
Cooke City
Location (from list)
COOKE CITY
Observer Name
Zach Peterson