Snowing and Blowing - Cooke City

Date Sun, 12/29/2024 - 13:00 Activity Skiing

This is avalanche weather - heavy snowfall and strong winds transporting snow. With this weather, it doesn't really matter what's going on in the snowpack. The <u>loading</u> from snowfall and strong winds will find the weakest layer in the snowpack and produce persistent <u>slab</u> avalanches.

Snow depths going up from Republic Creek at 8200 ft to the top of Woody Ridge at ~10,000 ft ranged from 60 cm to 120 cm. Weaker where thinner and stronger where deeper. **What surprised me** was that we couldn't get a single <u>collapse</u>/whumpf or any cracking despite our best efforts getting off the established skin <u>track</u>. Given the rapid <u>loading</u> and <u>wind loading</u> combined with buried facets, I expected at least on <u>collapse</u>. <u>However, a lack of</u> collapsing doesn't override all the other red flags.

The snowpack north of town and south of town seemed reasonably similiar. The biggest differences were with elevation. Generally above maybe 9000-9500 ft, the snowpack is a goof 4 feet deep.

I WON'T BE SURPRISED TO HEAR OF SOME LARGE AVALANCHES AT UPPER ELEVATIONS on peaks like Henderson, Crown Butte, etc where some slopes are being heavily wind-loaded.

Looking into the future, though, I feel optimistic. The snowpack is growing and will hopefully get stronger in the future as weak layers are insulated and buried more deeply. Yesterday north of Cooke, weak layers generally buried about 2 feet deep showed signs that they were gaining some strength and hardness. We'll see.

Region Cooke City Location (from list) Woody Ridge Observer Name Staples