Collapsing and bad snow structure

Date Sun, 01/12/2025 - 17:30 Activity Snowmobiling

We rode below Lionhead Ridge via Denny Creek and found a snowpack with the worst structure we've seen in our forecast area. There was around 3 feet of snow on the ground between 8000-9000'. The bottom foot was sugary weak facets, and the upper snowpack was a supportable hard <u>slab</u> with new snow on top (profile attached).

We had two large collapses. The most significant <u>collapse</u> happened when we were leaving our <u>snowpit</u> and walking back to our sleds a few feet away. We heard a long "whumph" sound and saw our snowmobiles drop an inch, as the snowpack on the entire slope around us collapsed. Our <u>snowpit</u> had ECTP23 x2 breaking on the sugary <u>weak layer</u>.

We saw 4-5 avalanche crowns that were up to a week old, some had been reported and a few we had not heard of (3 pictured were previously not reported to my knowledge). One was a 3-4'+thick <u>slab</u> on a rocky heavily wind-loaded slope off Lionhead ridge, and the other two were ~2' deep on less wind affected slopes lower down in the trees, but probably had some previous wind-loading.

Despite no fresh avalanches the last few days, the poor structure and collapses suggest a person could easily trigger a large avalanche that breaks wide on the weak layers at the bottom of the snowpack.

There was evidence of recent winds in the meadows with thick drifts felt while riding and some ridges scoured free of recent snow. Skies were mostly clear and wind was calm today.

Region Lionhead Range Location (from list) LIONHEAD AREA Observer Name Marienthal and Zinn