## New Snow, Wind, and ... Dust? at Buck Ridge

Date Tue, 02/04/2025 - 15:40 Activity Snowmobiling

Today, we had the pleasure of riding with USFS Snow Rangers from Bozeman, Livingston, Gardiner and Cooke City. We rode into First and Second Yellow Mule and Buck Creek drainages.

Temperatures were warm, topping nearly 40 degrees at the parking lot around 4pm. Strong winds blew all day from the SW, sustaining 30mph at ridgelines. Snow was actively transported all day by winds, and plumes were visible on far away ridgelines and summits. There was around 1.5-2' of new snow from the weekend. Widespread dirt and/or dust was also noted on snow surfaces.

Our primary concern today was slopes where strong winds had formed thicker slabs from recent snowfall. On the headwall of the Second Yellow Mule, we saw two recent <u>wind slab</u> avalanches. These were small (R1 D1), immediately below the ridge, and likely broke late last night or this morning.

Our snowpits today were relatively anticlimactic. We were curious as to how recently buried weak layers were reacting to the new snow. In three separate locations, we performed multiple tests and saw high scoring propagation in only 2 of 9 total tests. This propagation was difficult to replicate. We had ECTN's within the new snow and on the new/old interface. We found broken <u>surface hoar</u> feathers and facets under the new snow, but even those weak grains were not visible in every pit. That being said, we did not travel into Bear Basin, where, prior to the recent snow, Alex found large, buried <u>surface hoar</u> (<u>https://www.mtavalanche.com/node/33832</u>). We did not observe any cracking or collapsing.

Region Northern Madison Location (from list) Buck Ridge Observer Name H. Darby