New snow and weak layers

Date Sun, 01/07/2024 - 13:30

We rode up to the head of Yale Creek, down a bit into the head of Hellroaring Creek and then returned via the East Fork of Hotel Creek. The depth of new snow increased dramatically with elevation from approximately 8" (0.5" SWE) at 8000 ft to 18" (0.7" SWE) at 9000 ft. The new snow had little cohesion.

We found buried <u>surface hoar</u> on both shady and sunny slopes. Sunny slopes had multiple melt-freeze crusts interspersed with weak facets throughout the pack. On shady slopes the lower snowpack was entirely faceted. We had an ECTP11 on facets just below the old snow surface on a S facing slope. Otherwise our results were ECTX and ECTN with <u>slab fracture</u> in <u>Propagation</u> Saw Tests (likely because neither the facets or new snow were cohesive enough to act as a <u>slab</u> in our tests).

Wind, <u>settlement</u> or more snow could quickly make for a cohesive <u>slab</u>. When that happens, with so much new snow and such weak snow beneath it conditions will rapidly become unstable.

We saw no avalanche activity and had no cracking or collapsing.

Region Island Park Location (from list) Yale Creek Observer Name Ian Hoyer