Recent avalanches, concerning surface hoar layer

Date Mon, 01/16/2023 - 15:00 Activity Skiing

Skied on Henderson mountain the afternoon of 1/16. Wind was calm, snowfall was light and steady through the day with 3-4" of new snow.

Dug a pit on the east side of Henderson at the ridgeline above Henderson Bench. ENE, 10,075' elev. ECTP19 x3 on a layer of <u>surface hoar</u> buried 60cm (2 feet) deep. HS 260cm. There was an avalanche a few hundred feet north on an east-northeast facing slope below the ridge. It appeared to be snowbike triggered and 1-2+ days old. 150' wide and 250' vertical. HS-AMu-R2-D2-O. It appeared to have broke about 2' deep on that layer of <u>surface hoar</u>. There was also a more recent natural avalanche (less than a day old) on Miller Ridge, slightly smaller. SS-N-R1-D1.5-O and probably broke on the <u>surface hoar</u> layer.

The location of these avalanches and poor <u>stability test</u> scores is concerning as they are in exposed areas, implying the <u>surface hoar</u> will remain an issue on large, steep open slopes that will likely be heavily wind-loaded at some point.

Additional photo of a <u>cornice</u> triggered avalanche on Miller Ridge that broke to the ground, appears to be many days or weeks old.

Region Cooke City Location (from list) Henderson Mountain Observer Name Alex Marienthal