

Defining Deep Slab Instability



Submitted by Doug Chabot on Wed, 01/22/2014 - 08:05

Cooke City has a deep slab problem: a 7+ foot thick snowpack resting on a layer of facets. This recipe might be a preview for the rest of our forecast area since there are still months of winter left. I tried to explain the problem with the analogy below. A proper, technical definition can be found on the [Colorado Avalanche Information Center's website](#).

DEEP SLAB INSTABILITY: an analogy

To help us understand deep slab problems, picture a football field. Now picture a cafeteria tray tossed onto the field. The field represents an open avalanche slope and the tray represents a weak zone (typically thinner snowpack), the only spot on the football field where you can trigger it. You can ride and ski to your hearts content on that field as long as you don't hit the tray, which is hidden like a buried mine. If you do, you'll trigger the entire slope. A snowmobiler on Friday hit the tray and released a large avalanche. Many slopes in our area have snowmobile and ski tracks on them. The tracks look inviting, yet beware the cafeteria tray. A skier can hit it just as easily as a snowmobiler and the result is the same--a deep and potentially unsurvivable avalanche.