Stop 3 Giants Head

[00:05] Welcome back to our tour of the south Okanagan. At this stop we're looking across the lake so we're up above uh the village of Naramata and the Naramata bench looking across at a feature called Giant's Head. Giant's Head is an extinct dacite dome volcano erupted in the Eocene, um, and it has been highly modified by glacial activity, it's shape. So we're going to zoom in a bit on Giant's Head here so we can look at its shape. All right, so um, this area was glaciated, as we all know, glaciers flowed from the north to the south and we can see on the north side, the right side, of giant's head here we have um a fairly gentle and smooth slope leading up to the summit. Whereas on the left side or south side we have essentially a cliff a very steep, steep slope and this is a function of the way that glaciers, as they're flowing, interact with obstacles in their path and in this case it creates a feature called a roche moutonnée.

[01:14] So what happens is we have ice flowing in from the right um, from the north, it encounters this obstacle and that increases the pressure at the base of the ice. This pressure increase causes a decrease in the pressure melting point, allowing the ice to melt at temperatures below zero, which means we get liquid water on the bottom. Allows the glacier to flow over top um with sort of a little bit less erosive power; and then as it crests the summit and starts going over, that pressure is released and the um ice refreezes or the pressure decreases and the ice refreezes and it can pluck out chunks of rock. Resulting in this very steep face.

[02:09] We can also see I'm just going to zoom out, whoops, zoom out here, that these features are pretty common in this area. So just to the south of Giants Head we see another similar um feature and then as we're looking back south towards Penticton, we have Separatist Mountain and Mount Nikwala that both show these same shapes.