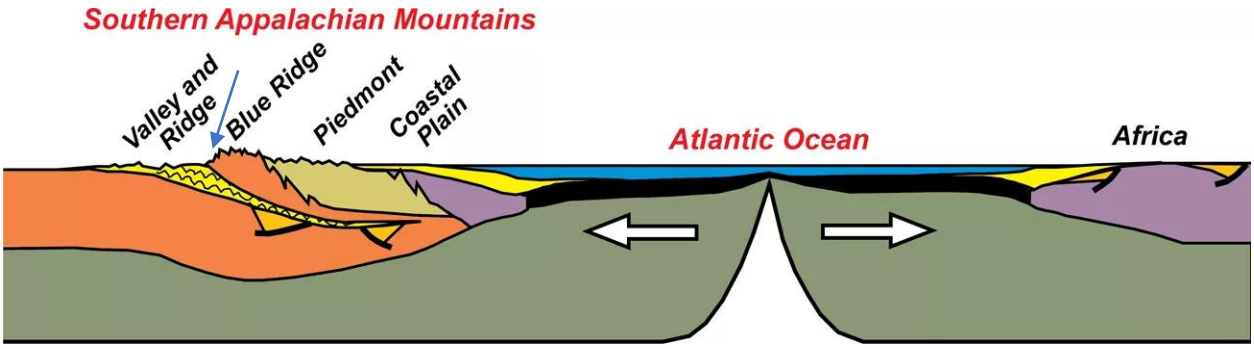
The Dusty Rock Rd property, in addition to the Indigenous Peoples history and the Floyd County cultural significance, has unique and interesting geologic history and positioning.

What we know as Virginia today was formed by the collision of the North American tectonic plate with other tectonic plates (Africa) millions of years ago. The illustration below (from the National Park Service website) shows a cross-sectional view of Virginia today, as well as the Atlantic Ocean and Africa on the other side. The Valley and Ridge, Blue Ridge and Piedmont initially on the eastern edge of the NA Plate, but were broken off and thrust high onto the North American plate due to the collision, leaving very high mountains that have been eroding away ever since. The collision created the spectacular geology of the three regions that we see today. The Dusty Road property (blue arrow) lies on the edge of one of those enormous thrust sheets, just at the edge of the Blue Ridge Plateau and overlooking the Valley and Ridge geologic province. This unique position allows one to sit on a metamorphic quartzite (used for tool making) ridge which was formed in the continental collision while looking directly down on the sedimentary rocks of the Valley and Ridge (New River Valley). It is an incredible view of a 250+ million year old geological event that created what we know as Virginia. In most places, one stands on rock of one age or another, in this spot you can stand directly on the boundary of some of the oldest rocks in the world and ones much younger (those still millions of years old). Being on the edge of this large thrust sheet is similar to standing on the San Andreas Fault in California with one foot on the North American Plate and one on the Pacific Plate (both tectonic plates). Both the Blue Ridge Thrust and the San Andreas show us massive collisions, though the movement directions are different. The Blue Ridge thrusting has ceased and the plates are currently separating again, while the Pacific/North American plates have ongoing continuous movement.



The following illustration (also from National Park Service site) provides a more detailed view as it is today. The Blue Ridge being composed of Pre-Cambrian rock (some of the oldest in the world) was broken off and moved far west of its original position. The thrusting action of the plates created intense heat and pressure which metamorphosed many of the rocks they slid over. This is the case with the quartzite underlying the Dusty Road property. The quartzite at one time was a sedimentary sandstone, but through pressure and temperature became hard and fractured like glass, making it perfect for spearheads, arrowheads and cutting/scraping tools. This interplay between millions of

years of geologic events, unique rock types and geographic positioning is represented by thousands of years of native artifacts and recent history.