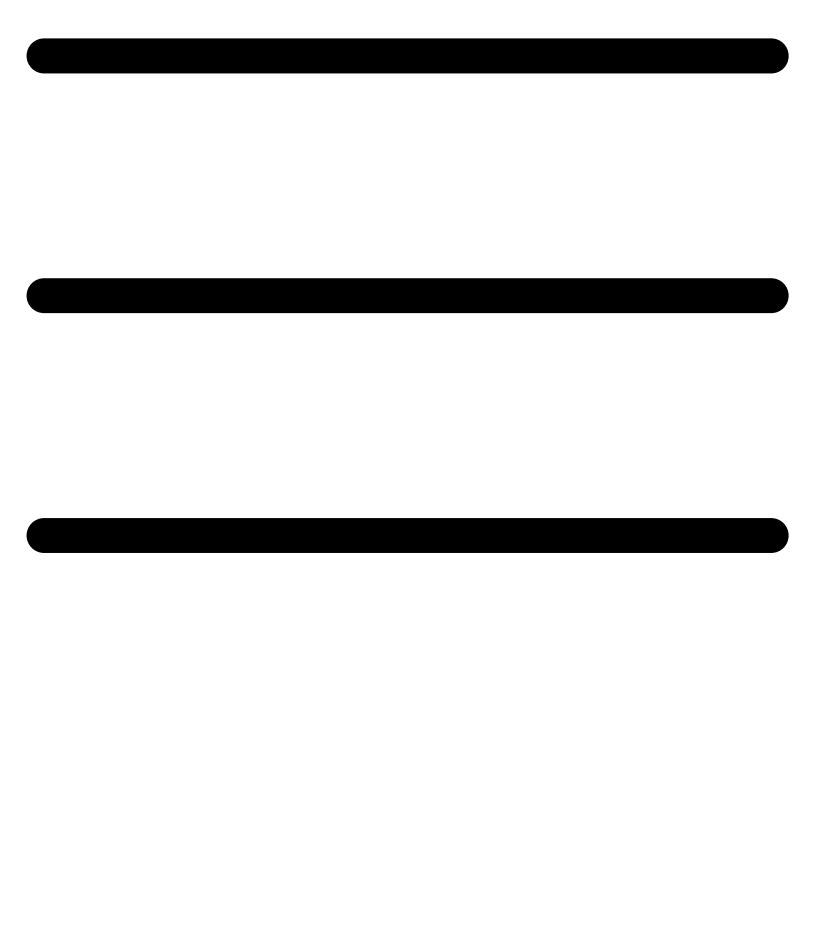


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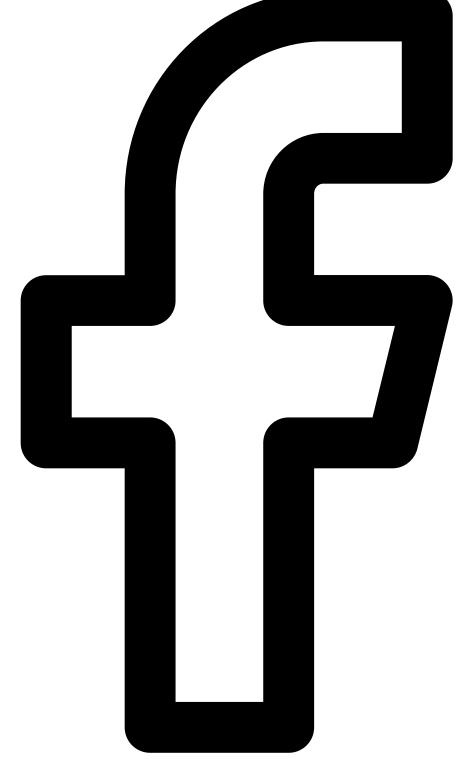
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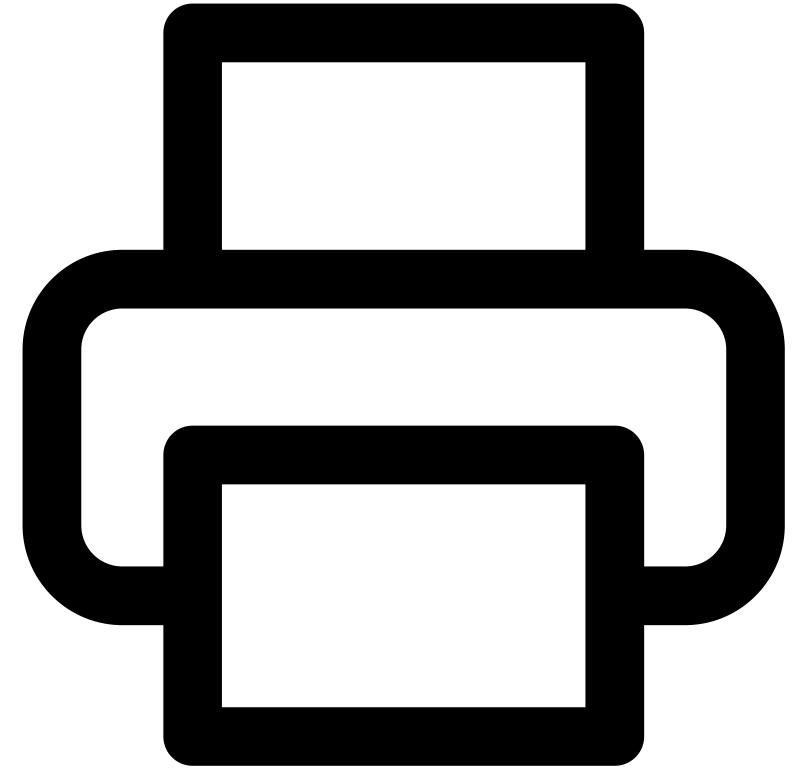
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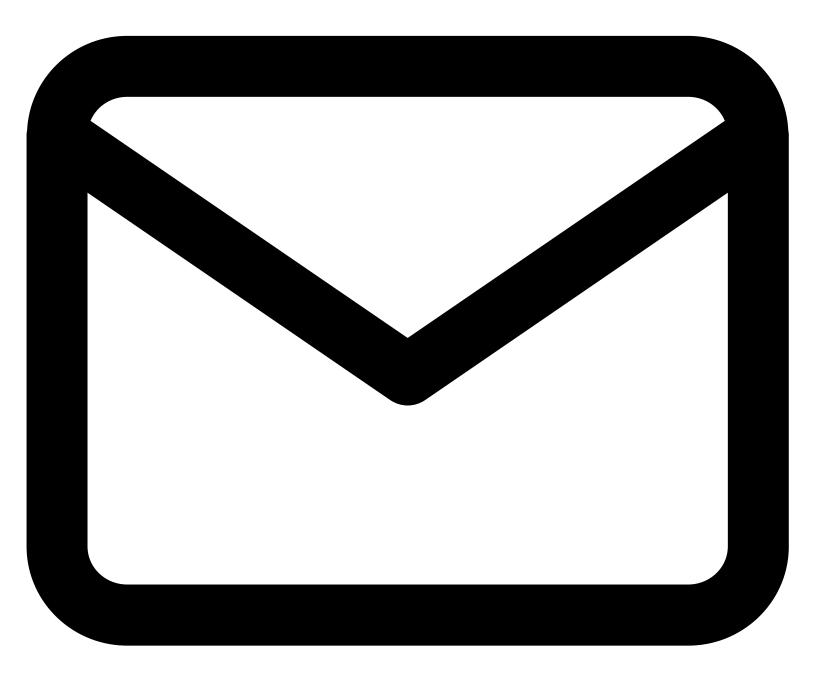
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## (mailto:?subject=GeoNotes&body=https://bigbendsentinel.com/2022/03/02/geonotes/)

## The Oldest Rocks in West Texas

The oldest outcropping formations in West Texas are of Precambrian age. They are located in the Franklin Mountains in El Paso and in the Carrizo Mountains/Millican Hills west of Van Horn. The most accessible open space lands are outcrops within Franklin Mountain State Park on the north side of El Paso and along the Trans Mountain Highway.

The Precambrian of the geologic time scale begins with the formation of our planet 4.5-4.7 billion years ago and ends at the beginning of the Cambrian Period 540-542 million years ago. It comprises 85-90 percent of Earth's history and is subdivided into the Hadean, Archean and Proterozoic Eons. There are fossils of simple lifeforms like algae in Precambrian-aged rocks. Much of the rock record of the Precambrian has been recycled by the plate tectonics of our active planet into younger-aged rocks by metamorphosis, volcanism and erosion.

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Precambrian rocks of the Franklin Mountains include carbonates with well preserved algal stromatolites and rhyolites of the Castner (1.3 billion years); basalts of the Mundy; rhyolites and sandstones of the Lanoria; and conglomerates and rhyolite ash-flow tuffs of the Thunderbird Group (1.1 billion years).

The Carrizo Mountains are the steeply tilted beds that lie 5-12 miles west of Van Horn along I-10. Diorite and basalts comprise the Precambrian Park Hill. Quartzites, rhyolites and sandstones make up the Hackett Peak (1.4-1.3 billion years). Carbonates and phyllite of the Cat Draw lie at the top of the Carrizo Mountain Group.



(https://kinglandwater.com/)

To the north and west of the Carrizo Mountains across the east-west trending Streeruwitz Thrust fault are the Millican Hills, composed of the Allamoore and Hazel formations. These Precambrian-aged rocks have been mined for decades for talc and other mineral products.

About 10 miles west of the Precambrian outcrops of the Millican Hills occurred an important place and moment in the social and economic history of our country. The Texas and Pacific Railway met the Southern Pacific Railway on December 15, 1881, near Sierra Blanca, Texas.

This was 140 years ago, and it connected the Pacific Ocean at Los Angeles to the U.S. heartland. Two years later, the Southern Pacific line that turns southeast at the Precambrian outcrops linked the Pacific to the Gulf of Mexico at New Orleans, Louisiana, when rails met near Langtry, Texas (January 12,1883). These rail lines brought American settlement, ranching, mining and economic development to the southern border of the U.S. And 30 years later they moved U.S. military forces along the border during the nearby, and sometimes border crossing, unrest of the Mexican Civil War (1910-25).

Source: Texas Through Time, Bureau of Economic Geology 2016, Ewing, T.E. and Christensen, H.

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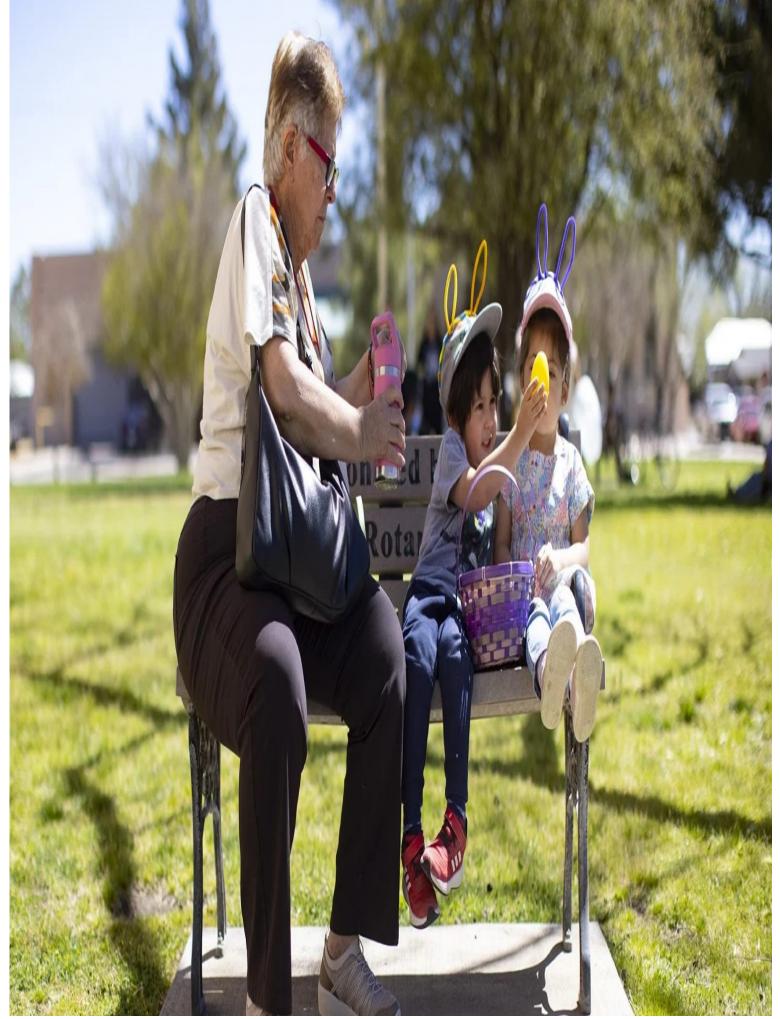
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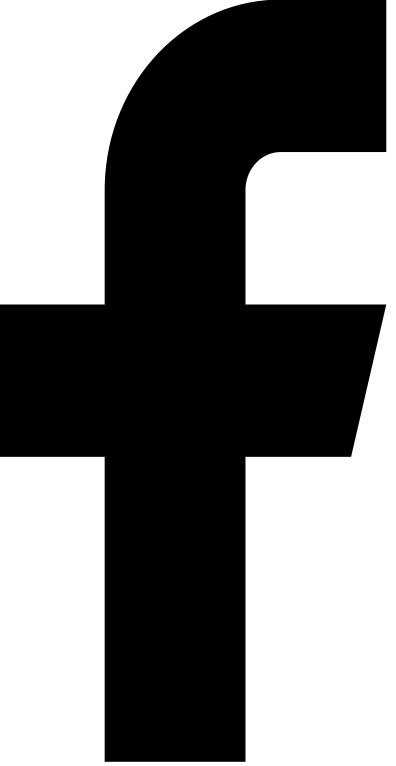


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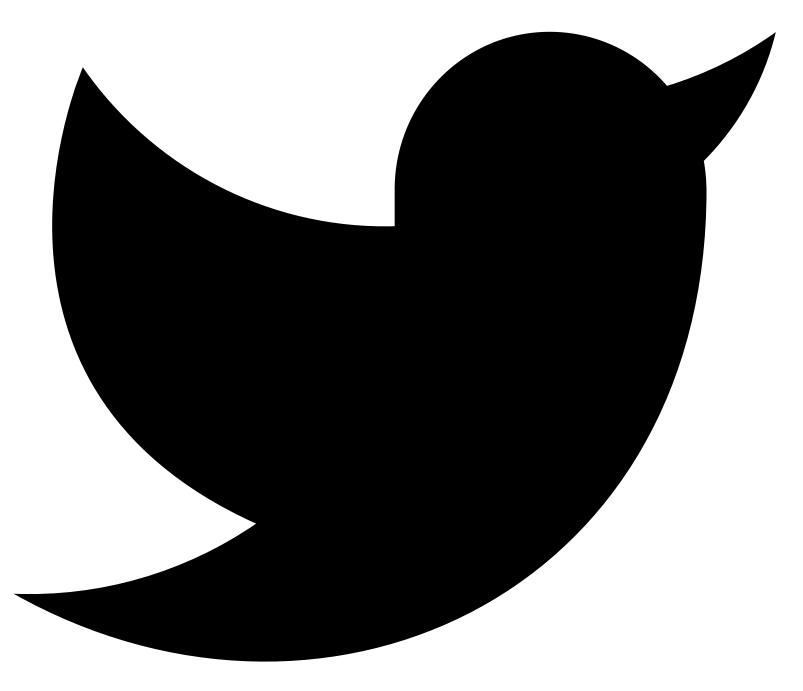
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