



This blog post was first published in Livestrong Magazine and has since been published in several other locations. Its focus was to raise awareness of some of the more unique and unknown features of the Texas landscape.

UNDERGROUND RIVERS IN TEXAS

Rivers in Texas have no choice but to go underground if they don't want to get dried up by the scorching heat. However, that's not why they sink below the surface. William Elliott with the Texas Speleological Survey says at least 20 percent of Texas is made up of what is called karst geography. It is because of this karst geography that Texas is able to keep its rivers underground.

Karst Geography

Elliott explains that karst is “a terrain formed by the dissolution of bedrock, and generally is characterized by sinkholes and caves that channel water underground.” Generally, this rock is comprised of limestone or dolomite, both of which are easily dissolved by seeping groundwater. According to Elliott, the major karst regions are generally found in the south-central to western Texas regions. This is roughly the area from Ft. Worth to San Antonio and across the state to El Paso, with a small column extending up toward Oklahoma from Abilene.

The Underground River Element

One of the places you can go to see up close why karst geography is home to so many underground rivers is Honey Creek Cave. Not always open to the public and generally only accessible to experienced cavers and divers even then, this underground river is a tributary to the Guadalupe River. As this river winds its way through the longest cave in Texas – 20 miles according to the Handbook of Texas – the mud it carries continues to carve the cave system. This cave is still being explored and may turn out to be connected to another famous underground river/cave system – the Caverns of Sonora.

The Larger View

Also formed by the movement of running underground rivers, the Caverns of Sonora website claims the caverns are known as the prettiest show caves in Texas. They are ranked among the best in the world. Located just outside of San Antonio, the map of this cave system demonstrates its river-related origin. The caverns are open to the public just enough to illustrate the effects of the river that runs through their center. One of the special attractions within the cave is Moon Milk Falls where one underground river spills from a rock tube to tumble down into another river at the cavern's lowest point. This cavern perfectly demonstrates how the underground rivers expand and connect the caves.

The Water Accumulation Process

Comprised of six major rooms and still host to the underground river that carved them, the Cave Without a Name is located in the Texas Hill Country. These caves enable visitors to see how underground rivers move underground. The progress of water seeping through the cavern ceiling

is traced by the melting rock it leaves behind as it makes its way to the flowing stream. These minerals drape into stunning stalactites hanging from the walls and strangely shaped stalagmites growing from the floors.

The Connection

Underground rivers don't always stay underground nor do they always start underground. At Devil's River State Natural Area in West Texas, visitors can make the connection of how these underground rivers interact with surface elements and vice versa. Texas Parks and Wildlife stresses the rugged and unspoiled nature of this river basin area, but they don't tell you that part of this river is found underground. At one point in the nature area, the river sinks underground where the underlying landscape is comprised of limestone. The river reappears above ground about 20 miles away where the substrate changes.

Sources used in this article:

Texas Speleological Survey: Overview of Texas Caves and Karst

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Caverns of Sonora: Welcome to Caverns of Sonora <http://www.cavernsofsonora.com/index.php>

Cave Without a Name: Welcome to Cave Without a Name <http://cavewithoutaname.com/>

Texas Parks and Wildlife Department: Devil's River State Nature Area

http://www.tpwd.state.tx.us/spdest/findadest/parks/devils_river/