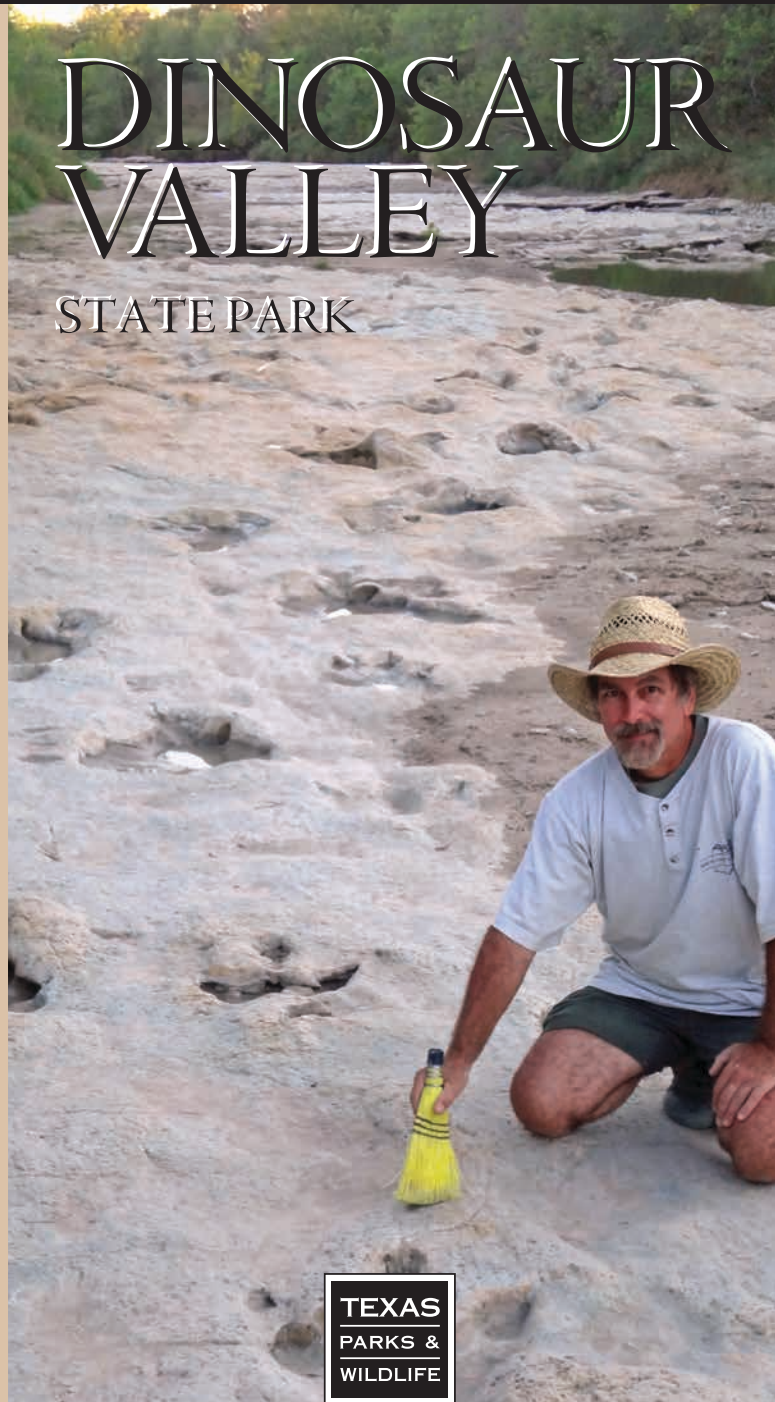




## INTERPRETIVE GUIDE

# DINOSAUR VALLEY STATE PARK



NICOLE GILBERT, TPWD

## THINGS TO DISCOVER

As you wade through the cool waters of the Paluxy River and look for dinosaur tracks, use caution as rocks are slick and currents can be swift.

Check out our ranger-led track talks and other interpretive programs to learn about the park's amazing resources. Dates and times for all of the programs are posted online and around the park.

When hiking our beautiful trails, make sure to wear appropriate shoes and take plenty of water — the trails are steep and rugged.

Grab your binoculars and look for the endangered golden-cheeked warbler and black-capped vireo.

Snap your picture with the dinosaur models from the 1964 World's Fair in New York City.

Please help us care for the special natural and cultural resources of Dinosaur Valley State Park by leaving things as you found them and staying on designated trails. All of the plants, animals and fossils are protected by law so that everyone can enjoy them. Visit the park store for souvenirs and refreshments.

Dinosaur Valley State Park  
1629 Park Road 59, Glen Rose, Texas 76043  
(254) 897-4588 • [www.tpwd.texas.gov/dinosaurvalley](http://www.tpwd.texas.gov/dinosaurvalley)

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**DINOSAUR VALLEY STATE PARK IS MORE THAN JUST DINOSAUR TRACKS. IT IS THE SITE OF THE FIRST SAUROPOD TRACKWAY EVER DISCOVERED IN THE WORLD. DINOSAURS FROM THE CRETACEOUS AGE LEFT THEIR FOOTPRINTS IN THE SOFT MUD OF A SHALLOW SEA THAT COVERED CENTRAL TEXAS 113 MILLION YEARS AGO. HERE IN THE RIVERBED OF THE SCENIC PALUXY RIVER YOU CAN SEE WORLD-CLASS EXAMPLES OF THE SAUCER-SHAPED FOOTPRINTS OF SAUROPODS AND THREE-TOED TRACKS OF THEROPODS.**



Dinosaur Valley State Park is home to world-class examples of fossilized dinosaur tracks. During the Cretaceous Age, dinosaurs left tracks in the soft mud of a shallow sea that covered central Texas 113 million years ago. Dirt and sediment covered the dried prints, which the Paluxy River slowly revealed through millennia of erosion. Today, you can view two types of tracks in the river: the three-toed tracks of theropods and the saucer-shaped tracks of sauropods.

The discovery of dinosaur tracks here changed the field of paleontology. Trackways show that the sauropods moved more slowly (about 2.7 miles per hour) than the speedier theropods (about 5 miles per hour). The trackways also show that the sauropods travelled in herds. Adults positioned themselves on the flanks and juveniles stayed in the middle, possibly to deter attacks from predators.

Fossil hunter Roland T. Bird excavated large sections of the riverbed in the late 1930s. He theorized that the Paluxy trackway provided evidence of an attack by the faster and more ferocious theropod on a slower-moving sauropod, an idea that has been debated for years. The National Park Service designated Dinosaur Valley State Park a National Natural Landmark in 1968 because of its unique prehistoric resource.



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## A CHANGING ENVIRONMENT

Dinosaur Valley State Park owes its scenic beauty to its location in the Paluxy River Valley. Ashe juniper woodlands cover half of the hilly, hardscrabble limestone terrain providing habitat for the endangered golden-cheeked warbler and black-capped vireo. Meadows of big and little bluestem prairie grasses flourish in the open spaces. The riparian area along the river boasts tall hardwood trees like bur oaks, cottonwoods and pecans. Springtime brings beautiful displays of native wildflowers.

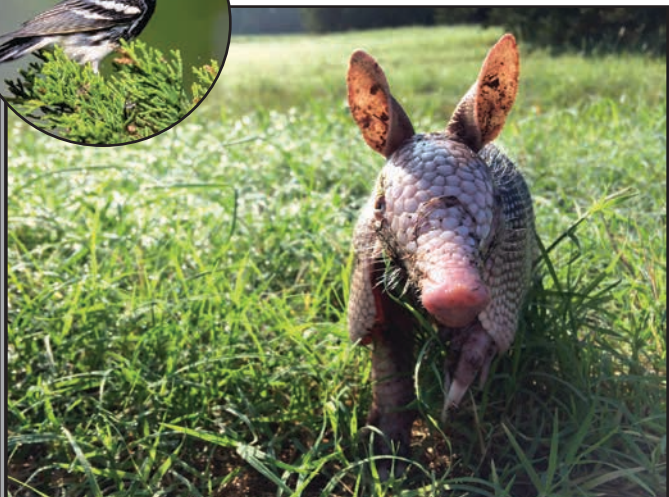
The variety of landscapes attracts many kinds of wildlife to the park. Listen for armadillos rustling through the underbrush as they forage for insects and grubs. You may see a white-tailed deer bounce off into the forest with her fawn. Coyotes are sometimes heard singing at dawn and dusk. Cast a line in the Blue Hole and see what you catch!

During the days of the dinosaurs, this area looked very different. A vast shallow sea covered the area. The Glen Rose area was a Cretaceous age coast with beaches, lagoons and coral reefs. Large tropical palm and conifer trees grew along the shore. Shells of crustaceans from this sea left calcium carbonate deposits that made the limestone you see today and created the special “limey” mud that preserved the tracks of the dinosaurs.



Golden-cheeked warbler  
STEVE MASLOWSKI, USFWS

Armadillo  
NICOLE GILBERT, TPWD



CHASE A. FOUNTAIN, TPWD

## DINOSAUR DISCOVERIES

### TRACKS OF THE THEROPODS

Locals first discovered dinosaur tracks in the area in 1909, a year after a massive flood on the Paluxy River exposed the fossilized prints. George Adams stumbled across strange three-toed tracks in a river tributary. Not long after, Charlie Moss discovered sauropod tracks in the riverbed while looking for a place for his moonshine still.

Dr. Ellis Shuler, a paleontologist at Southern Methodist University, wrote the first scientific reports about these theropod tracks in 1918. However, the Paluxy River tracks only became famous when Roland T. Bird visited in 1937. While collecting fossils for the American Museum of Natural History, Bird decided to journey to Glen Rose after spying a near-perfect theropod track collected from the Paluxy River at a trading post in New Mexico.

The theropod prints probably belong to the carnivorous *Acrocanthosaurus*, a dinosaur similar in appearance to *Tyrannosaurus rex*. *Acrocanthosaurus* ran on two legs as it pursued its prey. Reaching up to 38 feet long, it left tracks ranging from 12 to 24 inches long and 9 to 17 inches wide.

### STEPS OF THE SAUROPODS

While studying theropod tracks in the Paluxy riverbed, Bird made his big discovery—a large sauropod track! The Paluxy prints were the first distinct sauropod tracks ever found in the world. As he searched for more he found a near-perfect trackway recording the many steps of both sauropods and theropods.

Sauropods were large, plant-eating dinosaurs. Their pillar-like legs and large feet left distinct impressions in the mud. Rounded hind footprints over a yard long with smaller, clawless horseshoe-shaped front footprints. Finding these tracks revolutionized scientific thinking about these dinosaurs. Now scientists knew sauropods walked on land rather than relying on water to support their large bodies.

For many years scientists believed the sauropod tracks belonged to the brachiosaur *Pleurocoelus*. Then, bones found upriver on a ranch in Hood County in 1996 provided new clues for paleontologists. Peter Rose, a graduate student at

Southern Methodist University, determined the fossils belonged to a new species of dinosaur that he named *Paluxysaurus jonesi* in 2007. Even more recently, scientists have determined that the sauropod tracks belonged to *Sauroposeidon proteles*.

The 50-ton sauropod stood 92 to 112 feet long, 20 feet high, and 6 feet wide at its shoulder. Its almost 40-foot-long, giraffe-like neck was longer than its tail! Its cheekbones were higher than those of other sauropods, with small peg teeth for grabbing food and large nostrils flaring up on top of its snout.

