DINOSAUR TRACK MOUNTED IN THE BAND STAND AT GLEN ROSE, TEXAS

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Dinosaur tracks have been reported from at least nine localities in Hood County, Texas. All tracks occur in the Glen Rose limestone. The vertical range of the tracks is very limited so far as present studies go.

Locally, the tracks are known as "bird tracks". One locality near the county seat, Glen Rose, was described in 1917*. Recently a superb dinosaur track was taken from the "fourth crossing" of the Paluxy River about six miles west of the town of Glen Rose and placed by the citizens of the community in the base of the bandstand located in the court house yard. This track is one of the largest known from the area and is remarkably well preserved.

The track was first seen by the writer in the fall of 1934, but it was not examined in detail until a visit in September, 1935, with Professor J. D. Boon, Mr. Martin Russo, and Mr. H. Curtis Jones. Mr. Jones, who is an artist and expert in plaster work, made a mold and cast of the track.

The footprint is found in a highly porous limestone, the openings being tortuous and channel-like in character. The track has a depth of five inches which is almost the total thickness of the porous limestone layer. This stratum is easily separated from the bed below and the bed above. As reported, the print was taken from a series of four tracks which measured track to track, nine feet.

From the base of the heel to end of the middle toe the measurement is 25 inches; the spread of the toes is 17 inches. The track was made by the right foot. The thrust of the foot buried it some eight inches forward in the lime mud.

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*Shuler, Ellis W.: "Dinosaur Tracks in the Glen Rose Limestone near Glen Rose, Texas", THE AMERICAN JOURNAL OF SCIENCE, Vol. XLIV, October, 1917, pp. 294-297.

The bottom contour of the foot is beautifully shown. In the rear, however, there is the mark of a projection which, because of its width (about four inches), is difficult to interpret. It may be a spur projection or a baggy non-muscular projection, or perhaps a sort of additional heel. The dinosaur making the track must have possessed great speed. The wide length of step, nine feet, and the forward thrust of the foot into the mud argues fast movement.

The track does not give positive evidence as to whether or not the toes were terminated by hoof-like or claw-like ends. The fact, however, that the mud was not largely disturbed on the withdrawal of the foot seems to indicate considerable flexibility in the toes. As the dinosaur lifted its foot, the toes automatically retracted and closed so that the track was left almost a perfect mold except for a slight in-push of the sticky lime mud into the opening. Undoubtedly the ends of the toes came to a fairly sharp point. The palm of the foot has a width of about 12 inches, and the cast of the foot shows that it was definitely convex. On the other hand, the cast shows that the undersurface of the toes was not developed into pads, but was flat.

Figure 1. Dinosaur track mounted in the band stand, Glen Rose.

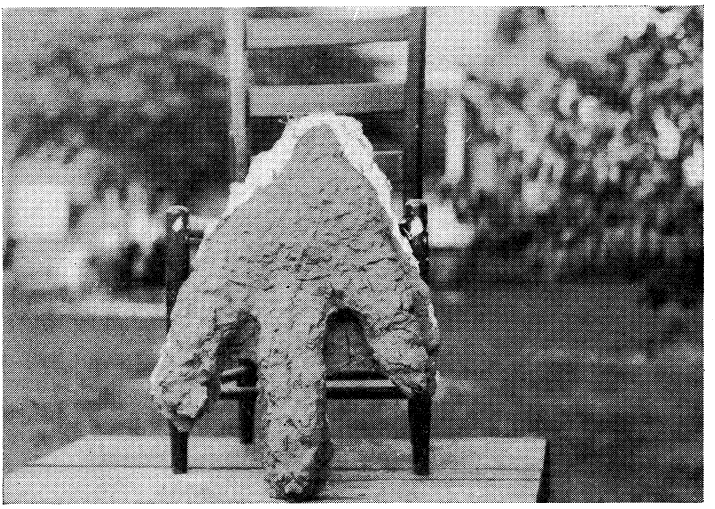

Figure 2. Cast of Dinosaur foot by Mr. H. Curtis Jones.

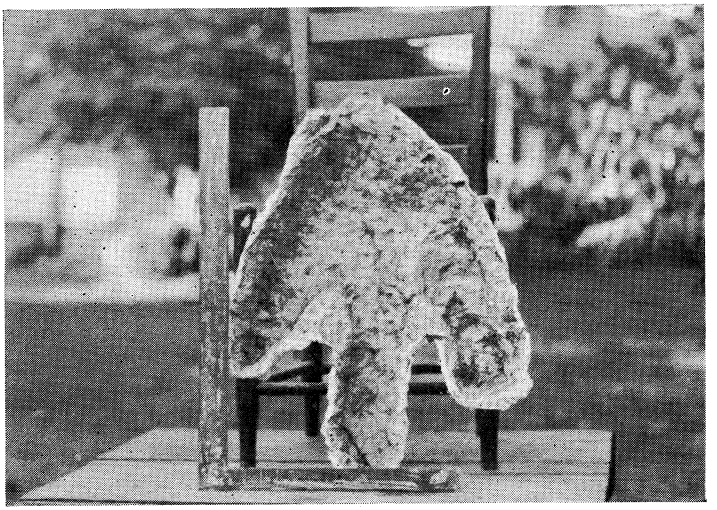

Figure 3. Mold of the foot taken from the cast with the top half cut away, by Mr. H. Curtis Jones.

The knife in the photograph (Fig. 1) has a length of three and three-eighths inches. The separation of the toes is normal and gives no indication of webs. Undoubtedly this dinosaur was quite at home on the land as well as along the beach margin.

Figure 2 shows a cast made with modeling clay. The clay was plastered over the bottom, sides, and ends of the toes of the original track to a thickness of about ½ inch; then a core of plaster was poured, which is seen to project above the clay in the top part of the picture. The core was removed and the modeling clay taken from the track and placed on the core. The rear spur or extension shows

Figure 4. Restoration of Dinosaur foot and lower part of leg.

sharply against the white plaster core. The size of the tracks is graphically shown by the cast photographed against a common kitchen chair.

Figure 3 is that of a mold made over the cast of the original track. The kitchen chair and the steel square again serve to show convincingly its size. The top part of the mold is cut away to show the bottom of the track in its full extent.

Dr. Barnum Brown who viewed the cast and mold rated the size as medium to large. He reported however a track at the American Museum with an over all length of 48″ and a width of 32″; one at Williams College at length of 54″ and a width of 36″.

Figure 4 shows an attempt to reconstruct the foot and lower leg of the dinosaur. There are no markings in the track to indicate whether or not the foot was covered with skin or scales.

The individual dinosaur making the track was most certainly of the flesh eating type, catching its prey by high bursts of speed. The name *Eubrontes* (*?*) *glenrosensis* sp. nov. is suggested for this species.

The writer has visited other localities in Hood County and studied the exhibit of tracks but to date has seen nothing to conflict with his views expressed in 1917, that the Glen Rose limestone is a near shore phase, deposited as lime mud, the conditions of deposition probably being lagoonal. This is inferred from the high content of salts in the Glen Rose formation, the shallow depths at which the tracks were made, and the absence of evidence of pronounced wave action.