

GENERAL SCIENCE NOTES

OF DINOSAURS AND MEN

*By Arthur V. Chadwick, Professor of Biology & Geology,
Southwestern Adventist College, Keene, Texas*

WHAT THIS ARTICLE IS ABOUT

The riverbed of the Paluxy of central Texas has been a source of extensive discussion between evolutionists and creationists, and likewise among creationists. The interest stems from reports that both human and dinosaur tracks occur in the same Cretaceous limestones. This would mean that men and dinosaurs lived at the same time — a point that would support the creation model and severely challenge the evolutionary time scale which places the development of man about 100 million years after the dinosaurs.

Dr. Chadwick, who has been closely associated with the Paluxy River question over the years, recounts the history of major developments. While some creationists were producing films and writing articles supporting the humanness of the tracks, Dr. Berney Neufeld (Origins 2:64-76, 1975) raised serious questions regarding their authenticity. Some investigators unknowingly “reinvented the wheel” and repeated studies of the area, while others continued to claim authenticity of the tracks. Repudiation by some leading creationists has not dampened the spirit of those who still believe that authentic human tracks exist in the riverbed of the Paluxy.

As the unofficial local scientist and “expert” on human footprints, I often receive queries regarding the happenings at Glen Rose. This past year has been no exception. In fact, the past two years have been rather remarkable for Glen Rose. But the story begins some 17 years ago.

Drs. Berney Neufeld, Leonard Brand and I were fresh out of graduate school and anxious to investigate various lines of evidence being used to support the biblical account of Earth history. Among the most prominent of these were tales of giant human tracks in the bed of the Paluxy River, near Glen Rose, Texas. These tracks were in Cretaceous limestone, supposed to be 80-100 million years old, alongside giant bipedal tracks of carnivorous dinosaurs (Morris & Whitcomb 1961, p 173-175). While we were interested in the significance of the tracks,



FIGURE 1. Photo of the famous “Taylor trackway” which initiated the current wave of interest in the Paluxy River locality. This series of bipedal elongate tracks was identified as dinosaurian by Dr. Berney Neufeld in ORIGINS in 1975.

we were also puzzled by the lack of careful analytical investigation. Here was a piece of evidence so important that — if correct — could turn the whole history of the Earth upside down. Why were the earth scientists not flocking to Glen Rose to investigate? Why were the creationists not carrying on a carefully orchestrated investigation to determine the nature and significance of the evidence? We had a lot to learn.

It did not take us long to organize an expedition to the river. Setting out late in the summer of 1970, we arrived at the site at an opportune time. A flurry of activity earlier in the summer connected with the work of Stan Taylor of Films for Christ had left many new tracks exposed, and piles of discarded sandbags and plastic sheets littered the banks. We were able to sandbag a section of the river and bail it dry (Figure 1). There on the floor of the river was a clear bipedal trackway unlike anything we had seen before. We made casts of the prints, photographed the site carefully, and puzzled about what could have made the trail. The tracks had a clear humanoid appearance, but lacked some of the most important characteristics. There were no clear pentamerous feet, and the profile was more elongate and narrow than one would expect for a human track. A careful study revealed that several of them bore three unmistakable divisions at the anterior end, which led us to conclude that they were probably made by sauropods, perhaps walking in water too shallow for normal tracks. But they were very different from the common tridactyl trackways in the river bottom. Our initial suspicions were further heightened by a trackway on a nearby ledge. Several of the poorly defined depressions exhibited the elongate appearance of the “man tracks,” but further along they became clearly defined as dinosaurian. While we harbored some doubt as to what had made the elongate tracks in the river bottom, we were now certain that they did not provide irrefutable evidence of the coexistence of man and dinosaur.

We returned to Loma Linda University convinced that the man-like tracks in Glen Rose were not human. But another problem had to be dealt with: a number of unmistakably human footprints reported to have been dug from the Paluxy River were in circulation, complete with notarized eyewitness accounts of their origin. Could they have been carved? How could we test for carving? We devoured anything we could find that related to the tracks in the river. We needed equipment to cut the rocks, and time to check out every lead. Neufeld traveled that

summer to New York, where he interviewed archivists at the American Museum regarding the whereabouts of the field notes of the scientist who first brought these tracks to widespread attention.

In 1937, Dr. Roland T. Bird, on a fossil-collecting trip from the museum, stopped at a rock shop in New Mexico. In the window of the shop were displayed two large human footprints, in stone! Inside, the owner showed him additional fossil footprints made by a three-toed creature. Bird recognized them instantly as dinosaurian. Investigating further, he learned that the track had been excavated from the Paluxy riverbed near Glen Rose, Texas. Shortly thereafter, he arrived in Glen Rose. There in the bed of the river, he found a bipedal trackway of three-toed *Allosaurus* and, nearby, a long trackway of *Brontosaurus*, the largest animal ever to walk on the earth. It occurred to him that this trackway would be a veritable prize for the American Museum's new Hall of Dinosaurs, where a full-sized skeleton of *Brontosaurus* was being readied for display. The dinosaur trackway was quarried from the riverbed and shipped to New York where it is presently part of that exhibit.

Neufeld discovered that either Bird took no notes, or they were never archived, so whatever information he may have had regarding the man-like tracks was lost to science. Continuing his quest, he traveled to Columbia Union College in Takoma Park, Maryland, where a collection of the man-like and dinosaur tracks supposed to have been removed from the Paluxy riverbed was housed. A series of cuts in both the dinosaur and human tracks led Neufeld to conclude that both the human and dinosaur tracks were artful carvings.

On his way back to California, Neufeld stopped by Glen Rose and interviewed some of the colorful local residents. He also purchased a genuine dinosaurian track from Mr. McFall, who owns the land along the stretch of river where most of the man-like tracks occur. How did he know it was genuine? "It looked too bad to have been carved." With this track he returned to Loma Linda. There, we carefully sectioned the dinosaur track in several planes. We observed that fine laminations which could be seen in the rock bent downward in conformity to the track just as one would expect, had the animal stepped in soft mud. This was in clear contrast to the Takoma Park "footprints" which cut across the laminations of the rock without any evidence of deformation. We obtained a human and a "cat" track from Dr. Clifford Burdick, who

graciously permitted us to cut them. We were told that this human track was the same one seen by Bird in New Mexico. Unfortunately, these tracks lacked any internal laminar structure, and yielded inconclusive results. This work eventually led to the publication of the first carefully documented study of the Paluxy River tracks in 1975 in *Origins* (Neufeld 1975). This remained the only scientific treatment of the tracks for over ten years. However, it was largely ignored by creationists who did not favor its conclusions, and by evolutionists who had not yet started to be interested in the fray.

During those ten years, several events conspired to bring renewed interest in the Paluxy River trackways. Creationists became increasingly vocal concerning the tracks and their inescapable meaning to evolutionary theory, and evolutionists became commensurately uneasy about the same things. Thus it was only a matter of time until the Paluxy area came to the forefront. It happened this way (Golden 1986).

In 1980, Glen Kuban, a young computer programmer from Ohio who was intrigued with the same stories that had motivated us a decade earlier, began a series of trips to the central Texas site of the “fossil man-tracks.” Apparently unaware of Neufeld’s article, he had hopes of being able to document the tracks as evidence for creation. It was not long before he recognized problems. In fact, he soon found himself becoming increasingly annoyed by the claims that various groups were making for the tracks’ “irrefutably human” origins. He saw the need to document unequivocally that the tracks were not human.

During the next two years, he worked doggedly on the problem, mostly alone. In 1982, quite by accident he encountered Ron Hastings, a local high school physics teacher who had come to the river with quite different motives. He had been annoyed by the noises that creationists had been making and especially by what he viewed as exaggerated claims about the Paluxy footprints. The two men, ideologically divergent, but united in their desire to get to the bottom of the Paluxy story, labored on. Increasingly their work, and that of a third player in the Paluxy drama, were making local and, occasionally, national news.

That third party was Dr. Carl Baugh, a Baptist minister. Baugh had also come to Glen Rose in the early 1980s with the goal of establishing a museum of creationist evidences at the site of the most famous of all creationist evidences — the Paluxy River man tracks. Baugh was understandably anxious to find authentic evidences of the human trackways.

He was probably also disappointed by what he saw in the river. But Carl Baugh was not afraid of hard work! If finding man tracks meant digging up the riverbank, or buying riverfront property, he was game for the task. He was also out to let the world know what he was doing.

Meanwhile, all this activity could hardly escape those who had originally brought the tracks to the attention of the world. In San Diego, at the Institute for Creation Research (ICR), various leaders were being apprised of the activity of Kuban. ICR and Paul Taylor of Films for Christ accompanied Glen to the site of the tracks in late 1985. There they saw for themselves evidence that Kuban and Hastings had discovered: surrounding and superimposed on some of the “man-tracks” were discolored haloes having the unmistakable form of tridactyl sauro-pod tracks. While the origin of the discolorations was not clear, the evidence was compelling. The tracks had to be dinosaurian.

Dr. John Morris returned to ICR and published a carefully worded retraction of the positions he and the Institute had taken on the character and significance of the tracks (Morris 1986). This must have been a difficult task, in the face of his own published book on the tracks (Morris 1980). In an equally difficult decision, Paul Taylor withdrew from circulation the film “Footprints in Stone,” an elegant and compelling account of the tracks and their implications for evolution. These repudiations occurred in early 1986.

The next move was a series of articles in the Spring/Summer issue of *Origins Research* (the journalistic arm of Students for Origins Research, an informed student creationist organization currently operating from Goleta, California). This issue featured an article by Glen Kuban, a member of the society himself, and articles by Morris and Taylor, an editorial, and responses by Kuban to Morris (Kuban 1986a). This was followed by a carefully documented monograph by Kuban on his track studies (Kuban 1986b). The work of Kuban resulted in a flood of “me-too” type articles from a variety of sources (Hastings 1987). A special issue of the Humanist journal *Creation/Evolution* featured four separate articles on the tracks. A second number continued the discussion.

In retrospect, we may well ask why it took so long for the mystery of the tracks to evaporate. It is clear that the evidence was in hand in the early 1970s. The *Origins* article was certainly known to the groups participating in this drama. Informed creationists had long known of

Neufeld's work. Well-read evolutionists had also been aware of the article for years, and it was often cited in anti-creationist writings. At what cost to truth did we ignore data which were contrary to some pet theory, however interesting or inviting it may have seemed? The cost was indeed great. Creationists might have had the honor of laying aside this misconception ten years ago with little philosophical expense, as a result of their own scientific research. It has now been torn away by individuals, many of whom, unlike Kuban himself, have little regard for the cause of creationism.

Creationism does not need footprints in the Paluxy River for its support. Scientists who recognized the validity of Neufeld's findings have done quite well without human tracks in Cretaceous rocks for 15 years. Those who refused to let go of the tracks have placed in the hands of the cause of humanism a new weapon with which to attack creationists. They can with some justification now say: "As the Paluxy River data went down under careful scrutiny, so will every other piece of data put forth by the creationists." How much better the scenario that could have been!

FIGURE 2. Dr. Carl Baugh points to a newly uncovered bipedal track in the bank of the Paluxy River, Glen Rose, Texas.



For the future, we would do well to learn from our past mistakes, refusing to use as scientific evidence material which has not been carefully scrutinized. Note also that other evidences used in the past as support for creationism made no sense in context: “human footprints” in deep marine sediments (Delta, Utah — was man walking on the floor of the ocean?), pollen in Precambrian deposits (Grand Canyon — how do you account for these?), and out-of-order fossils (Heart Mountain and Lewis Overthrusts — how do you explain the reverse order?), to name a few. Creationists and evolutionists alike would be well advised to pay particular attention to all of the creation literature, where other so-called “evidences” for creation have been investigated and reported, before waging an unnecessary and costly battle again.

Meanwhile, the story is not yet over in Glen Rose. The undaunted Carl Baugh recently announced a new site with new tracks (Figure 2), this time so incredible that you had to see them to believe them! The news coverage was back, this time a little older and wiser, but eager for anything that would produce a new headline. The authenticity of the tracks was attested by forensic experts from Dallas, a professor of anthropology, and the list goes on. Maybe, someday soon, if I have a little spare time, I will take a run down there just to satisfy my curiosity, you understand....

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