MORE HUMAN-LIKE TRACK IMPRESSIONS FOUND WITH THE TRACKS OF DINOSAURS IN THE KAYENTA FORMATION AT TUBA CITY, ARIZONA PART II: PHOTOMICROGRAPHIC STUDY AND COMPARISON OF QUASIHUMAN ICHNOFOSSILS WITH MODERN TRACKS

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Abstract

This is the second part of a report of research on quasihuman ichnofossils (supposed human tracks) found with tracks of dinosaurs in strata near Tuba City, Arizona. The material for study was collected on field trips June 21-27 and October 15-18, 1990 and June 1-6, 1995. This project is a continuation of previous research (Rosnau, P., J. Auldaney, G. Howe and W. Waisgerber, 1989 a, b).

Photomicrographic analysis indicates that the human-like impressions were created by pressure which created relatively smooth surfaces, unlike the rougher surfaces of impressions formed inside concretions and unlike surrounding surfaces. Comparison of the quasihuman ichnofossils with modern tracks in wet mud shows them to be closely comparable, supporting our theory that the fossil imprints were made by human feet.

We append a list and description of newfound quasihuman imprints, present the authors' summaries, offer a refutation of the Paleo-Indian theory of fossil track formation and answer other criticisms.

Photomicrographic Analysis

The biggest challenge we faced in this research was to find a test which would differentiate quasihuman ichnofossils from forms created by calcic concretions eroding out of the sandstone and leaving behind track-like shapes. Is there a way to distinguish them? Some of the impressions in our study area are obviously concretions, but there are also trackways of human-like foot impressions facing the same direction and occurring in a right-left sequence. Trackways exist in which all humanoid impressions appear to be shod while in other trackways all are consistently barefoot. There are side-by-side humanoid prints consistently facing the same direction. How are we to account for so many quasihuman ichnofossils concentrated in the same small area? There are too many coincidences to assign the cause to pure chance.

Navajo regulations do not allow us to use the method employed by others to test putative humanoid tracks along the Paluxy River in Texas, i.e., to slice the track in half to observe if the layered sediment shows pressure patterns such as would be made by a creature's foot (Helfinstine, 1994, p. 39). A genuine track would show dips in the layers while a track-like shape produced by weathering would cut through layers which would remain horizontal.

Unable to use this method, we decided on the microcompaction method pioneered by Dr. Wilbur Greely Burroughs, Head of the Geology Department at Berea College in Kentucky. Burroughs studied human-like tracks in Kentucky dated as Carboniferous, assumed to be 250 million years old (Ingalls, 1940; "Human-like tracks," 1938a; "Geology and ethnology disagree," 1938b). Auldaney, like Burroughs, using a mineralogist's magnifying lens, noted that the surfaces of fossil animal tracks are smoother than the surrounding rock surfaces, simply because the tracks were originally pressed into soft mud. Auldaney found smooth surfaces in fossil tracks of birds in the Eocene Green River Formation of Wyoming, in amphibian and reptile tracks in the Permian Coconino Formation of Arizona, in dinosaur tracks in the Jurassic Connecticut Valley of Massachusetts, in dinosaur tracks in the Jurassic Aztec Formation of California, and in camel tracks in the Miocene Barstovian Formation of California. Auldaney also observed that the smooth uneroded surfaces inside animal tracks contrasted visibly with the surfaces inside concretion impressions, which were about as rough as the surrounding surfaces.

Methods Used

Norman Davis, a retired optical engineer, offered to construct a photographic rig for the purpose of shooting photomicrographs. With the photomicrographs we would have an improved version of Burroughs' method, revealing the difference of tracks from concretions.

Davis's equipment consisted of a Nikon N2000 camera with a lens of 135 mm focal length. Tubes of 13" and 18" length were alternately attached to the camera's bellows to produce two strengths of magnification, 15X and 33X. A wooden jig adapted the camera to the undulating terrain of our Site 2.

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Davis photographed inside and outside three quasihuman ichnofossils, Numbers 39, 51 and 62. He also photographed two concretion impressions (Figures 15 and 18). The photos indicate that impressions with concretion features exhibited rough surfaces no different from the surrounding matrix. Quasihuman ichnofossils, on the other hand, showed smooth interior surfaces, in contrast to the surrounding rough-surfaced matrix.

The Photomicrographs

Photomicrographs in the left column are taken inside the tracks. Those on the right are taken immediately outside.

Conclusions from Photomicrographic Tests

Humanoid ichnofossil 39 is smooth,

Humanoid ichnofossil 51 is smooth.

Humanoid ichnofossil 62 is smooth.

Concretion 1 is smooth.

Concretion 2 is rough.

The results were mostly as expected but one was a complete surprise. Concretions 1 and 2 were selected as control specimens to show what nodular erosion would look like under magnification. However. instead of a rough interior surface concretion 1 had a smooth surface, evidence of compression! It is located just to the right of impression 49-5 in the Downhill Trail, a trackway of 18 putative humanoid foot impressions. Thus, concretion 1 could be the ball of a humanoid track in the process of eroding out of its overlying matrix (Figure 15 and 21).

Comparison of Fossil Tracks with Identified Modern Tracks

No paleontological research is complete, until fossils are compared to similar organisms, living or extinct, for identification. The pictures on the left are contemporary human tracks made in gummy mud similar to the sediment at Tuba City before it lithified. Those on the right are quasihuman ichnofossils at Site 2 at Tuba City.

Examination of the contemporary tracks, both shod and barefoot, walking and running, indicates very little difference regardless of whether the mud is very wet or almost dry. Detail is usually lacking. Some fossil prints at Tuba City appear similar to tracks made in puddles of water,
which lack features such as toes or shoe outlines. Some of the barefoot contemporary tracks exhibit toe gouge marks in the deep mud similar to the toe-like gouges in the putative, double Track 6 Auldaney found at Site 1. (See conclusions by Auldaney below). Also, details of contemporary tracks are often distorted by a suction effect of sticky mud as the foot is withdrawn. Such was our experience after heavy winter rains at Site 1. Note the distortion in the ichnofossil pictured in Figure 33.

In summary, most of the fossil humanoid features appear to have been made in semi-wet mud, which seldom leaves diagnostic features other than general shape, similar length and width. Our observations of modern tracks show that isolated single tracks appear while their mates were not impressed due to varying amounts of water in the matrix, caused, for example, by the sloping or non-sloping of the sedimentary medium or by one foot stepping in a mudpuddle and the other avoiding it.

Conclusions of Auldaney

In our report (Rosnau et al.; 1989b, p. 92) I gave 10 reasons why some of these impressions may be human tracks and eight reasons why they may not be tracks of anything. In that report I stated that the evidence convinced me that a few of the quasihuman ichnofossils could be “human tracks but there [was] insufficient diagnostic evidence to establish it firmly one way or the other” whether they were tracks or nodule impressions (p. 94).

Continuing research has not revealed any new evidence against the track theory; it has instead falsified some of my earlier objections and has greatly increased the evidence in favor of the impressions being of human origin. Thus after six years of research several of my conclusions have changed.

New Data Support Human Track Theory

Here are the changes:

(4) Previously (p. 94) I believed that at Site 2 there were 23 good quasihuman ichnofossils which held a strong possibility of being human tracks; I now believe after more detailed study and the resultant increased data that there are about 34 candidates.

(7) The putative child or woman-size track 41, at right angles to the Classic Track 39, I now realize is part of a possible trail of prints similar in size and features. This includes 42-2,46,47(?), 48-2 and 48-3.

(10) The putative double print 6 which I found at Site 1 was in a possible trail of three tracks, numbers 6, 5 and 4. All are the same size and are aligned in the same direction. Impression 6 is 30 cm (one foot) behind impression 5. In the 1989 paper impression 6 was incorrectly mapped.

Evidence against Human Track Theory Falsified

(3) Previously I said the mounds gave no sign that they were part of a track layer because they were not flat like the majority of known dinosaur track horizons in the area. That is absolutely incorrect as I have located a flat dinosaur track layer on the north edge of Site 2 similar to one east of Site 1. Also, the unmistakable tracks of *Eubrontes giganteus (Dilophosauripus)* are found in mounds in the Navajo Formation in Colorado which are identical to the mounds at Site

2 at Tuba City. These mounds and tracks can be seen in photographs in Lockley (1991, Plate 8).

(4) Previously I pointed out that the Tuba City mounds were not horizontally stratified like most track layers. With further research I discovered that they are a part of the Navajo Formation of crossbedded sandstone formed from dune-like cross stratification depositions identical to the typical Supai (Esplanade), Moenkopi, Coconino and Wingate Formations which erode into mounds and commonly contain fossil tracks. (The Kayenta layer is sandwiched between the Wingate below and the Navajo Formation above. All appear to be members of one formation.)

Conclusion of Auldaney

Since 1990 I have discovered and studied several fossil track sites and noted hundreds of undisputed tracks. I found that the strongest evidence, which makes the identification of fossil tracks unmistakable lies in the clear repetition of identical features, correct trackway alignments, and unmistakable details of the foot.

The impressions in the crossbedded sandstone mounds at Tuba City are a poor medium for the preservation of track details and thus lack these definite features. Also, there are concretions which have a tendency to erode out and produce track-like shapes.

As believers in the absolute accuracy of the Bible, we know men and dinosaurs coexisted, because the Bible clearly states that men and all terrestrial creatures (including dinosaurs) were created on the fifth day, within 24 hours (Genesis 1:24).

The question we face at Tuba City is whether these imprints in stone which resemble human prints are proof of this fact. The question for the critic is, do you believe God's Word or man's constantly evolving speculation?

Jesus said (Matthew 12:39) that "An evil and adulterous generation seeketh after a sign (proof); and no sign" would be given except Jesus' resurrection from the dead. In Luke 16:31 Jesus tells us that, "If they hear not Moses and the prophets (i.e. the Bible), neither will they be persuaded, though one rose from the dead." II Peter 3:5, explains that unbelievers "willingly are ignorant" of evidence of the Flood.

Maybe this is why God has not given us absolute proof that men and dinosaurs coexisted, because He requires faith (Deuteronomy 32:20, Habakkuk 2:4).

There is overwhelming scientific evidence in support of the creation account-but God always leaves room for man to reinterpret the facts to fit his own ideas, because "a man convinced against his will, remains unconvinced still."

The most important part of this research is not to prove these quasihuman ichnofossils are human tracks, but the integrity and honesty of our work in presenting both positive as well as negative evidence. We do not have to seek only the evidence which proves our preconceived conclusions. Creationists are the only scientists who can be truly objective, because we seek only the truth. And if we are wrong-we want to know it. Circular reasoning only supports false beliefs.

We will have succeeded if we only succeed in demonstrating how true science (a rarity today) is conducted. The evidence at Tuba City has and will continue to convince creationists and unbiased observers that there are human tracks there with dinosaur tracks; and evolutionists will be convinced that all we found are mineral concretions.

Therefore, proof that these are man tracks will not be found until a clear human trackway is found in the flat track layer 166 feet north of the mounds. Here is where I discovered undisputed trails of small theropod dinosaurs at Site 2. The same place Eryl Cummings reported he saw barefoot human child's tracks followed by small dinosaur tracks 20 years earlier.

Until this time, my conclusions are that the evidence is strong, but inconclusive, pending further discoveries.

Conclusions of Rosnau

If our research were done for forensic purposes (i.e., if we were detectives searching for footprints which would implicate certain individuals in a crime) then, it seems to me, there would be no question by anyone that man trod the mounds of Site 2. In forensic research the criminal need not necessarily be caught *flagrante delicto*. Circumstantial evidence such as footprints is used as evidence to implicate a suspect for further investigation.

We have seen no people or dinosaurs trekking across Site 2, but we have seen strong evidence which duplicates human skid tracks, side-by-side tracks, barefoot tracks, shod tracks, adult tracks, child tracks, trackways, a child falling down on its hands and knees-all mingled with tracks which appear to be those of dinosaurs slipping and sliding in the mud. The absence of further evidence of man, such as human skeletons and goods of human manufacture, does not make our case inadmissible to investigation. The footprints, hand impressions, trackways and the 182 meters of overlying ash and sandstone lenses lead to one conclusion: man walked these mounds a long time ago under dire circumstances. Dinosaurs perished with him under volcanic ash and muddy floodwater.

It would be an injustice and bad science to rule out a priori the existence of human tracks in Jurassic strata just because current opinion says they cannot be there. People, also some Christians, will continue to be skeptical of what we have found because American society has been schooled to separate dinosaurs from men. But demonstration of empirical facts has shattered many a misconception. The photos in this paper speak for themselves.

(See Appendix I for a response to the Paleo-Indian theory of origin of the humanoid tracks.)

Conclusions of Back

Water ripple marks, quasihuman ichnofossils and dinosaur tracks are found in the Kayenta Formation near Tuba City. While some of the marks may be the results of concretion, erosion or nodule formation, there are marks that display human-like features involving stride, trackways, side-by-side tracks, skid tracks, a falling down on hands and knees, toe impressions and shoe impressions. These details are strongly suggestive of human origin and probably some of the marks are authentic human ichnofossils. Further research including excavation and the search for human artifacts or bones should be undertaken.

There is another site outside the USA where individuals report finding fossilized footprints of dinosaurs and humans together. Golovin (1996, p. 52) reports that the Russian journalist Alexander Bushev verified a 1983 report of human tracks with those of dinosaurs in a Jurassic stratum near the village of Khodga-Pil in Turkmenistan.

Even if only one human track in a Mesozoic stratum anywhere was real, it would offer a significant challenge to the present tenets of historical geology.

The water ripple marks remain a mystery to me, for as yet I have not heard a theory that adequately explains the formation and preservation processes. It is not enough to be able to name one or two minerals involved in the processes; an adequate understanding of the chemical reactions and their reaction rates is desired.

The more work given to this project, the more the sites yield exciting finds. These quasihuman ichnofossils deserve further research.

Conclusions of Davis

The sandstone knolls at Site 2 are made up of pure white silica grains, heavily stained red with hematite to a depth of several feet. The hematite is very finely powdered, fine enough to polish glass. It is of volcanic origin.

The ichnofossils at Site 2 were first covered with red-stained sediment about a foot thick, then with pure white silica 4 to 6 inches thick and then, judging from the nearby stratified mesas, by several hundred feet of red bentonite sediment alternating occasionally with white sandstone.

Using the Flood model, one can well envision the sky filled with finely powdered hematite, which in turn was brought to earth by rain droplets. The white sandstone strata represent brief periods of volcanic inactivity, where only rain and/or floodwater brought in more sediment.

Apart from the many nodules at Site 2, the tridactyl tracks at Site 2 are clearly those of dinosaurs. The human-like tracks, both shod and barefoot, are clearly those of humans-man, woman and child.

Appendix I

Are the Man-like Impressions Paleo-Indian Tracks?

A few people have suggested that the humanoid impressions at Tuba City could be the tracks of Paleo-Indians mingled with those of dinosaurs but made by these people much later, i.e., in the Ice Age. Such a theory would have to assume either that the dinosaur track stratum remained soft for great lengths of time without distortion of the tracks, or that the hardened sandstone temporarily softened to accept the human footprints, also without distortion of the dinosaur tracks.

Neither scenario is realistic. The limy sandstone in which the humanoid tracks lie is physically akin to hardened cement. Such a stratum only very slowly weathers into sand. One would not expect it to soften rapidly any more than one would expect a concrete sidewalk to soften rapidly. The eroded sand grains at Tuba City, when wetted, form a gummy clay, but do not harden again into sandstone. A clear unconformity exists between the exposed mounds bearing the fossil impressions and the unconsolidated alluvium which collects in low spots where modern unfossilized tracks might temporarily be found. Thus, if the impossible were possible and the stratum with dinosaur tracks were softened to accept human tracks, the dinosaur tracks would be destroyed and the tracks of man would not remain. Humanoid impression 48-1, found in a disintegrating state in 1990, eroded to broken bits and sand by 1995. (See Figures 3 and 4 in Part I.) There is no re-integration after disintegration.

The absence of any layer of fertile soil in the Kayenta Formation and associated strata excludes normal conditions for life. Immediately below the Kayenta at Site 2 one sees only bentonite. Stratified mesas nearby, consisting of loose bentonite and occasional lenses of sandstone, all rising 182 m above the fossil impressions, attest to an inhospitable environment of falling volcanic ash and inflowing water. Man, if one accepts the man-like impressions as those of man, and beast were treading on territory that had been buried under ash and muddy water and which was about to receive more of the same cataclysmic treatment.

The identification of the sandstone mounds at Site 2 with the Kayenta Formation links them to sedimentation on a grand scale. In a creationist/Flood model of geologic history the tracks could indicate a brief period of subaerial activity before what remained of life in Arizona was exterminated. Oard (1995, pp. 50-51) and Holt (1996) propose brief periods of exposed land during the first 150 days of the Flood, the causes being isostatic uplift and/or cyclonic gyres forcing the water away. In such a model the nine acres of site 2 at Tuba City could well have been a temporary island to which man and dinosaur fled.

Appendix II

Answers to Criticism of Our Work

Glen Kuban (1992) listed six problems with our research:

> 1. Ambiguous depressions are often referred to as "tracks" . . . before they are demonstrated to be anything of the kind. (p. 12)

Our answer: We agree, and that is why we stated in our 1989 report that when we refer to footprints, imprints, tracks or man tracks such references "are not to be taken as implying positive identification" and "are still being evaluated as regards their possible human origin" (Rosnau et al., 1989a, p. 42) because some might be concretions.

> 2. . . . even the "best" individual markings in the Kayenta reports show at best a superficial resemblance to human prints. Many bottom contours appear incompatible with genuine tracks. . . . Problematic features were often neglected (p. 12).

Our answer: Negative problematic features of certain imprints have left us undecided as to their origin. Nevertheless on the positive side enough human-like features at the Tuba City sites were found to lead an observer to conclude that many impressions are indeed human tracks. Mr. Kuban has not seen the evidence at Site 2, unpublished until now.

> 3. None of the photos or maps shows a natural striding sequence of even a few paces . . . and individual markings are not consistent or distinctly human in shape and detail. Supposed tracks and trails do not stand out readily from many other equivocal markings distributed in a helter-skelter fashion around them. (p. 12)

Our answer: Considering that the tracks were made in what was once wet sand, one would expect them to vary in length, stride and direction due to slipping and sliding on upgrades and downgrades. Comparison of some humanoid ichnofossils with modern human tracks, as discussed in the present paper, proves the putative man tracks and their strides do appear human.

> 4. Trackway maps are woefully inadequate. (p. 12)

Our answer: In 1987-1989 our work had just begun. This present paper meets this need.

> 5. Alternate explanations are not adequately explored. The authors concede that some of the markings might be concretions, but this and other possible causes for many of the markings are hastily dismissed. (p. 12)

Our answer: We do not dismiss the possibility of other causes since we continue to designate the impressions as human-like tracks. They are either human tracks or they are eroded mineralization features.

> 6. Reviews by independent workers and professional paleontologists are lacking.

Our answer: At our invitation, several independent workers in paleontology have visited our research sites. We are still gathering data on the humanoid ichnofossils and deem it premature to call in outsiders before we publish more information. Our 1989 paper in *CRSQ* and this paper were given careful peer review before publication. We are, in fact, looking forward to personally showing serious students the evidence.

Acknowledgement

Once again we would like to thank the Creation Research Society as well as those who contributed to the Laboratory Fund, interest from which has been used to support our research. We express our thanks also to the Navajo Nation which takes no position on our discoveries. We also wish to thank George Howe for his consultative aid as well as Chris Chui for critical copy reading. We thank Glen Kuban (1992) for a critical review of our previous papers.

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_____1989b. Are human and mammal tracks found together with the tracks of dinosaurs in the Kayenta of Arizona? Part II: A field study of quasihuman, quasimammalian and dinosaur ichnofossils near Tuba City. *CRSQ* 26:77-99.

Table I. Newly identified qasihuman ichnites in an unmapped span of circa 30 meters between the Downhill Trail (H7) and the Classic Mound (H6). NP = no photo herewith. NM = no measurement taken. N.A. = not applicable. ? = periphery unclear, measurement approximate.

Imprint Number	Size (cm) (Length x width of ball)	Comments	Figure Number
55	33? x 12	A bare right foot quasihuman ichnite in stride with 56. A tridactyl dinosaur-like ichnite (D-2) is only 1.1 meters away.	22,23
56	23? X 12	A bare left quasihuman ichnite in stride with 55.	22,23
57	25 X ll?	Clear flat-bottomed right(?) foot impression, enhanced by white calcite crystallization on its interior surface. It could have been made by a human wearing a soft sole moccasin (Morris, 1980, p. 33; Helfinstine, 1994, p. 20).	24
58	N.A	A quasihuman ichnite with raised periphery (center). On the left a track facing the same direction; on the right a track facing the opposite direction.	25
59	31 X 12	A sharp-edged putative shoe print in stride with 59-l and 59-2. This is a partial trackway.	26,27
59-1	31 X 12	Clear, shallow depression in stride with 59 and 59-2.	27
59-2	NM	Brushing aside the sand we discovered this depression in stride with 59-l and 59.	27
60	2? X 11	Sharp track-like impression with eroded interior.	NP
61	27 X 8?	Impression resembling the human left foot, including faint toe depressions. Paired with 62.	NP
62	24 X 10	Appears to be a bare human right foot, alongside 61. It has a prominent big toe. See Figure 26, Rosnau et al., 1989b, for photo of 61 and 62 side by side.	12
63	28 X 10	Putative humanoid ichnite.	28
64	22 X 9	Double impression of putative child-size bare left foot. The impression at the right reveals an arch and the length of the foot. The overlying print (left) is of the ball only, and from this, the width is measurable.	29

Figure 1. Davis prepares to photomicrograph track 39. The heavily weighted tripod steadies the camera apparatus. The spot being photographed was lit by the sun via a magnifying glass.

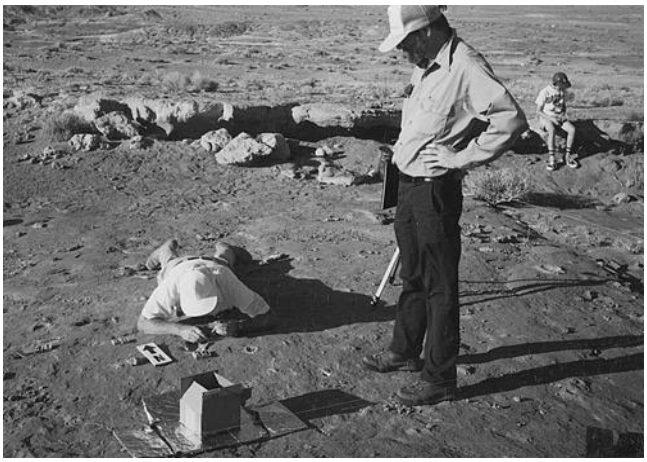

Figure 2. Back watches Rosnau examine track 39 with a field microscope. Dan Argenio sits on the eroded-back overlying sandstone which contains dinosaur trackways covered by volcanic ash.

Figure 3. Photomicrograph of a dime and a human hair on the rim of the arch of track 39, for size calibration at about 15X. Hair is about 100 microns wide.

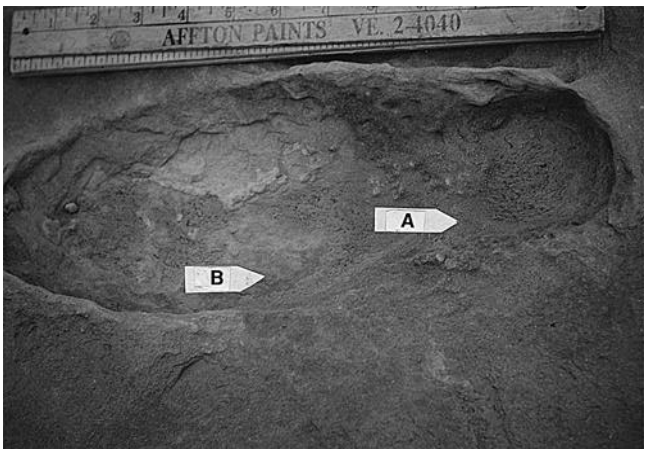

Figure 4. Classic track 39.

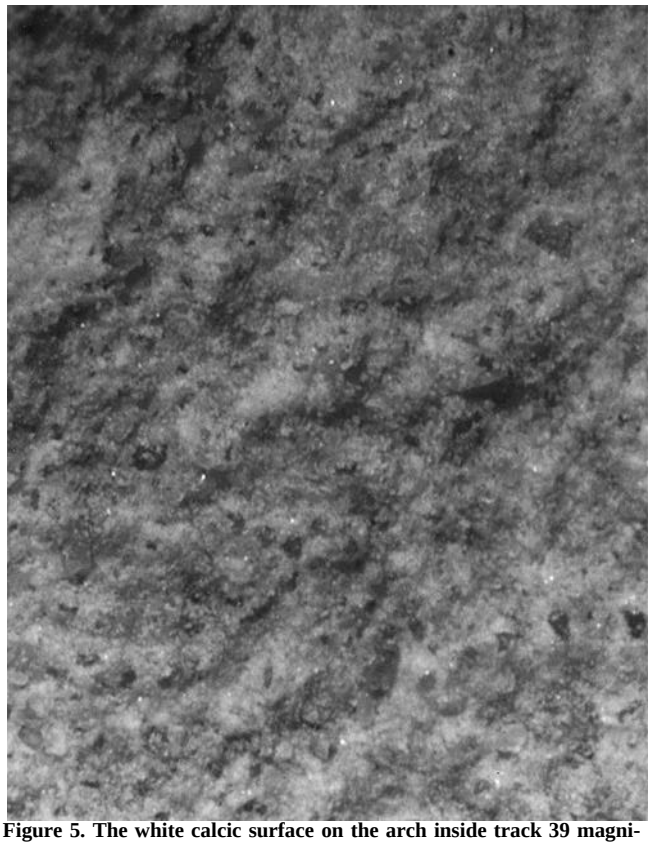

Figure 5. The white calcic surface on the arch inside track 39 magnified 32X (marked by arrow [A] in Figure 4).

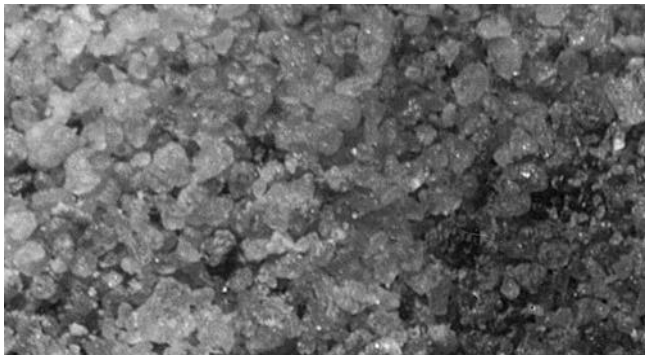

Figure 6. Surface outside track 39 magnified 32X, about 15cm, 45° toward the right rear of the track, the locus shown in Figure 1.

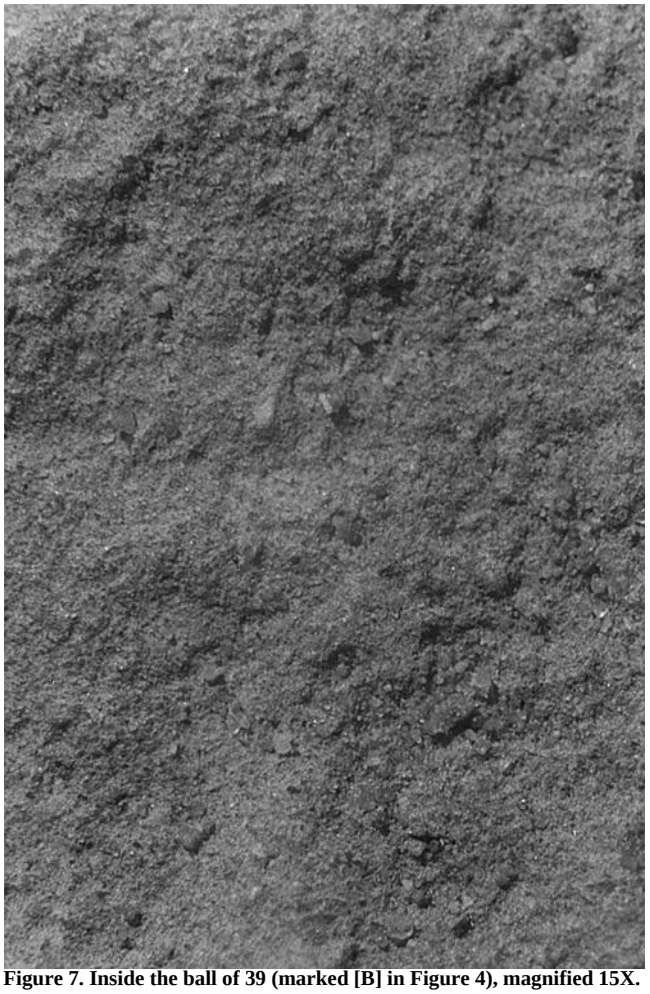

Figure 7. Inside the ball of 39 (marked [B] in Figure 4), magnified 15X.

Figure 8. Surface outside track 39 (same as Figure 6 but magnified 15X.

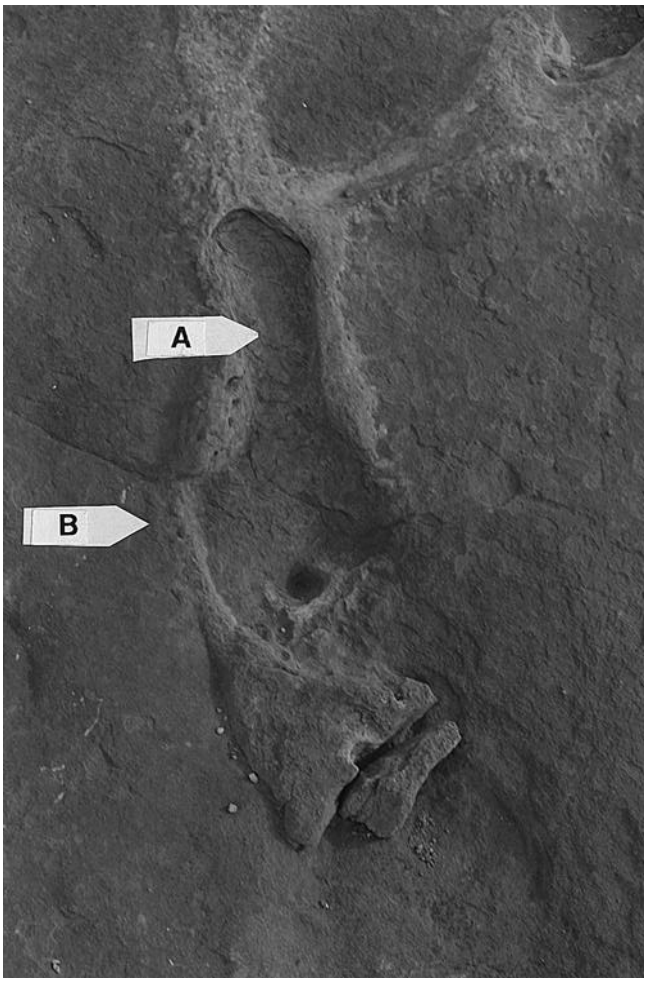

Figure 9. Downhill Trail track 51.

Figure 10. Surface inside the heel of 51 (marked by arrow [A] in Figure 9) and magnified 15X.

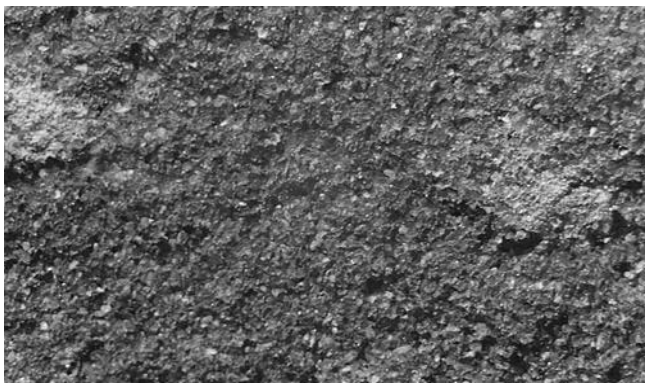

Figure 11. Surface outside 51 (marked [B] in Figure 9) and magnified 15X.

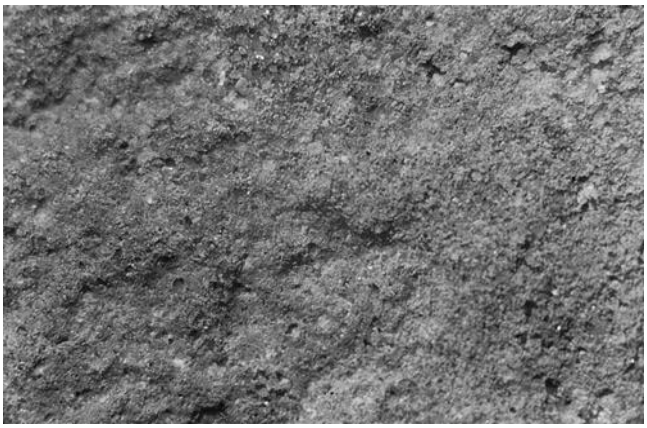

Figure 13. Inside the big toe of 62 (marked [A] in Figure 12) and magnified 15X.

Figure 12. The camera zooms in on track 62, the putative right foot impression of side-by-side tracks 61 and 62.

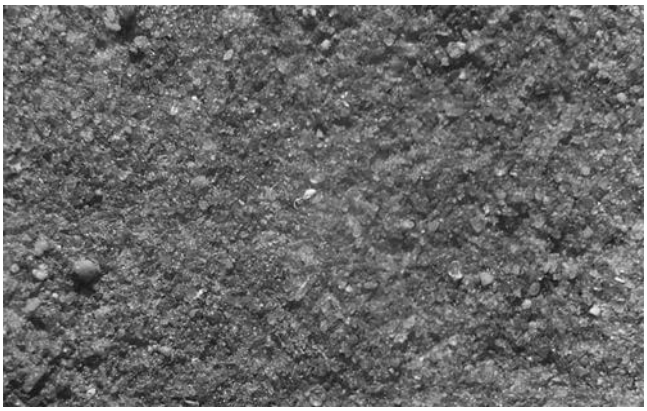

Figure 14. Surface outside 62 (marked [B] in Figure 12) and magnified 15X.

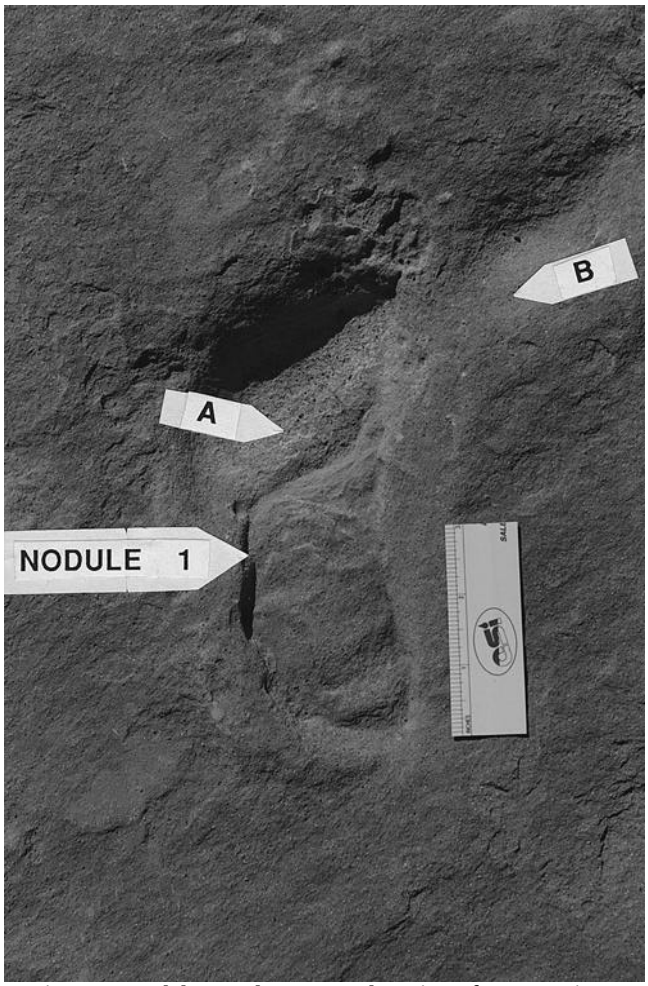

Figure 15. Nodule 1 used as a control specimen for comparison.

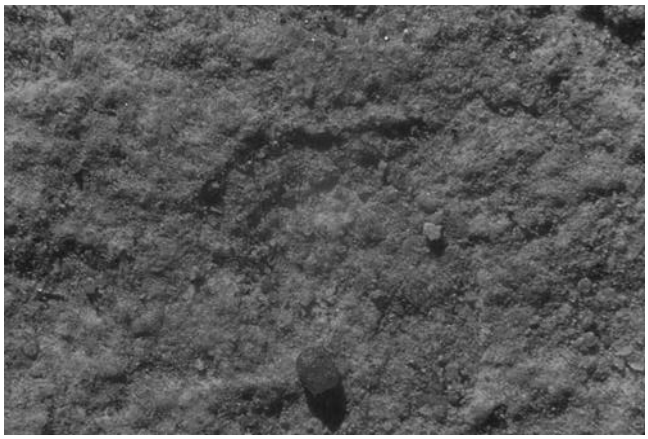

Figure 16. Surface inside nodule 1 (marked [A] in Figure 15) and magnified 32X.

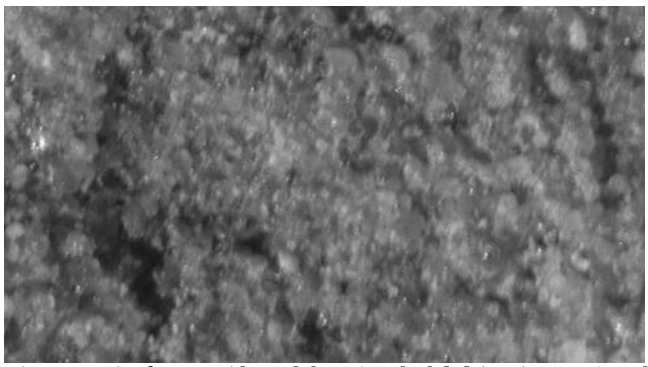

Figure 17. Surface outside nodule 1 (marked [B] in Figure 15) and magnified 32X.

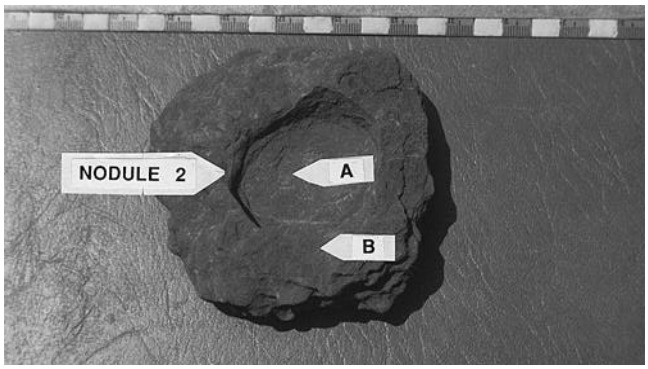

Figure 18. Nodule 2 used as a control specimen for comparison.

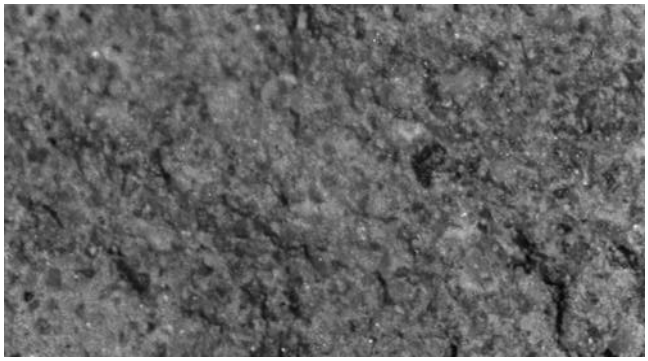

Figure 19. Inside nodule 2 (marked [A] in Figure 18) and magnified 50X.

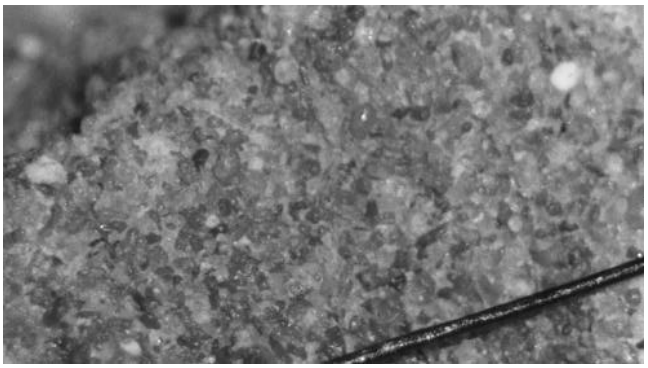

Figure 20. Nodule perimeter (marked [B] in Figure 18) and magnified 50X.

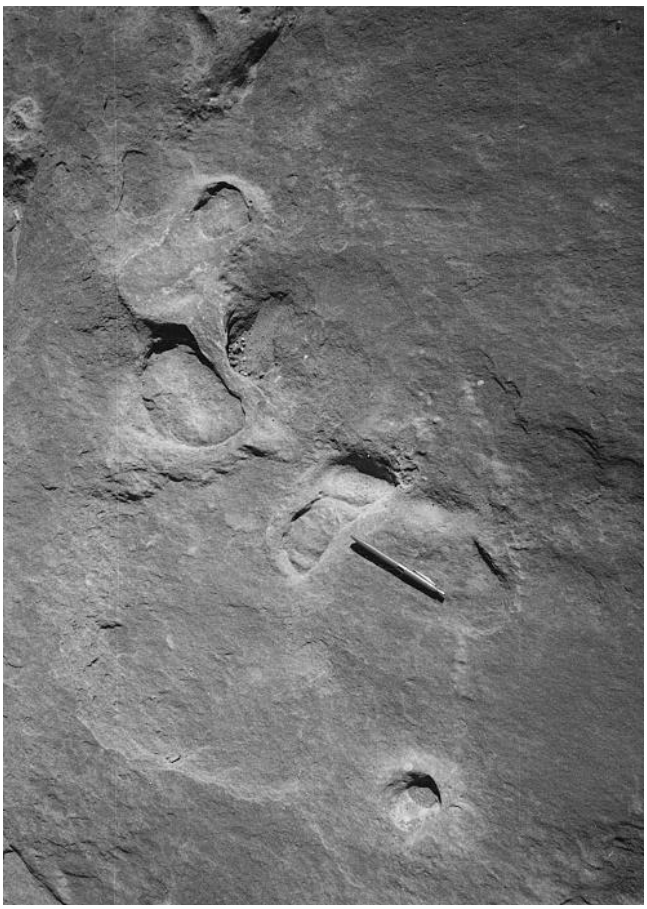

Figure 21. Nodule 1, next to pen, showing surrounding features. The beginning of the Downhill Trail is a few centimeters to the left of the picture.

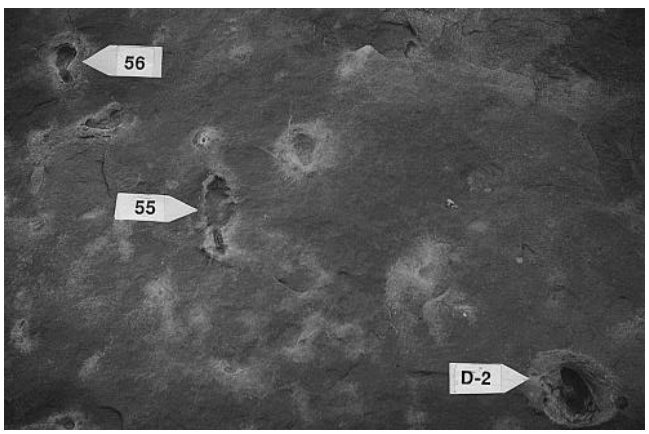

Figure 22. Dinosaur-like tridactyl impression (D-2) shown here is the closest such track to quasihuman ichnofossil 55, which is in stride with 56.

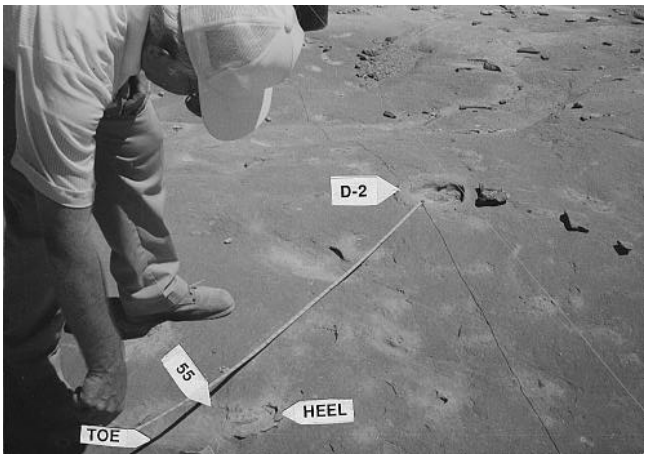

Figure 23. Measuring the 1.1 m between the putative dinosaur track D-2 and putative humanoid track 55.

Figure 24. Track 57 has some topographic relief at its front end, but the rear is revealed only by a calcite coloration covering the interior surface. This condition is similar to that of some humanoid and dinosaur tracks along the Paluxy River near Glen Rose, Texas (Morris, 1980, p. 33; Helfinstone, 1994, p. 20).

Figure 25. Quasihuman ichnite 58 in the center, flanked by two unmapped tracks, all enhanced with water.

Figure 26. Putative shoe print 59 with sharp lines, enhanced with water, in stride with two elongate depressions.

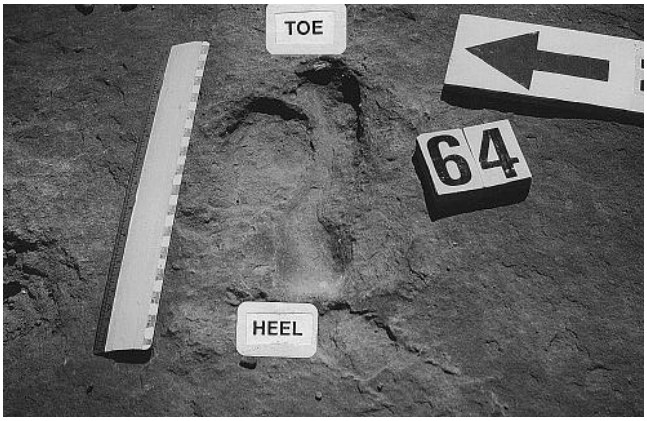

Figure 29. Child-size overlapping tracks 64, with clear arch in the track on the right. It is unlikely a nodule would form inside another nodule to produce this effect. Arrow points north.

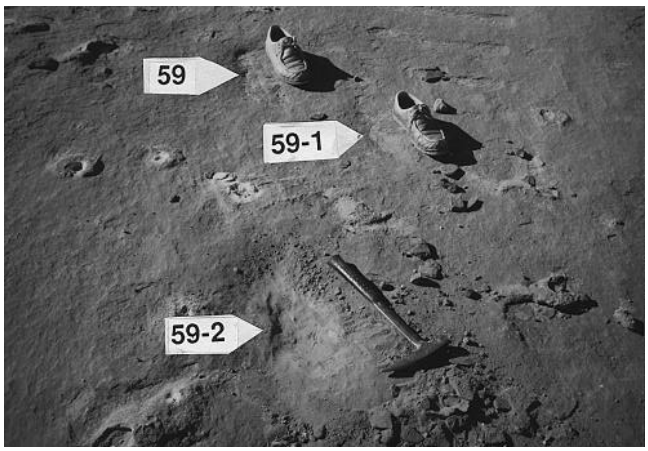

Figure 27. A high angle shot of tracks 59, 59-1 and 59-2, a partial trackway facing south, with the tracks coming toward you.

Figure 30. Contemporary track a week old, in surficially softened mud which hardened.

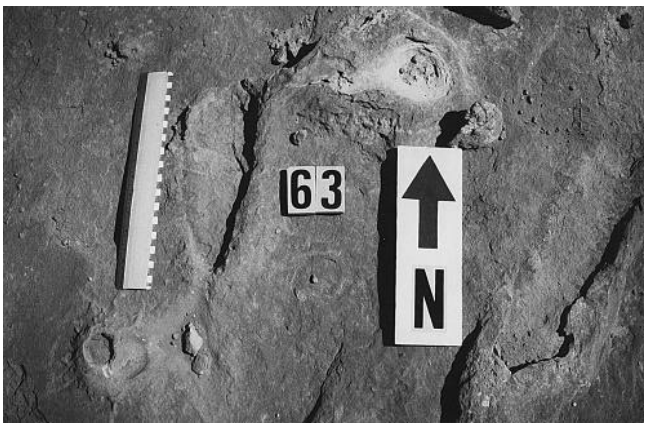

Figure 28. Isolated humanoid ichnite 63 surrounded by nodules.

Figure 31. An unmapped isolated quasihuman ichnofossil on a mound at Site 2.

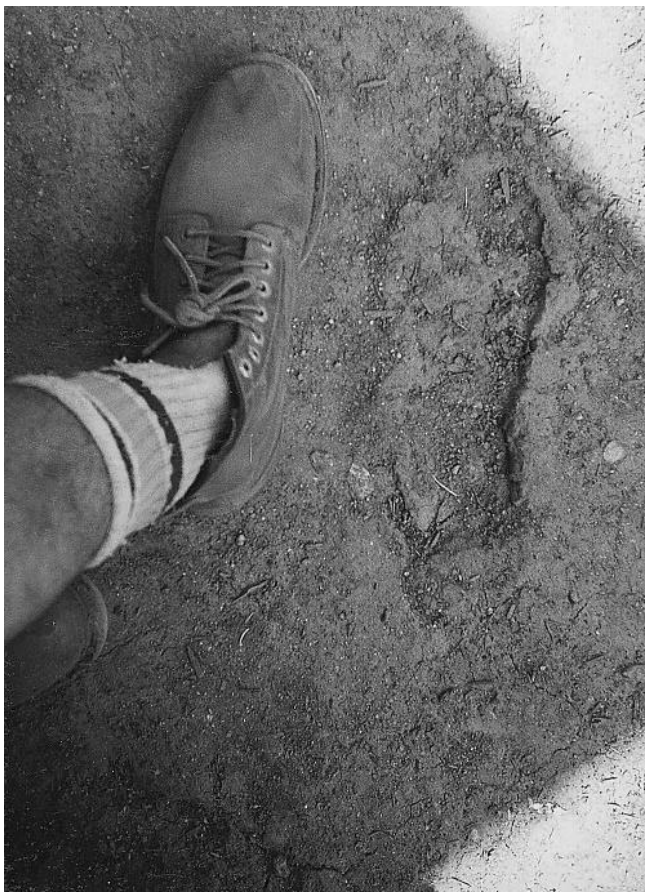

Figure 32. Another contemporary track made at the same time as that of Figure 30.

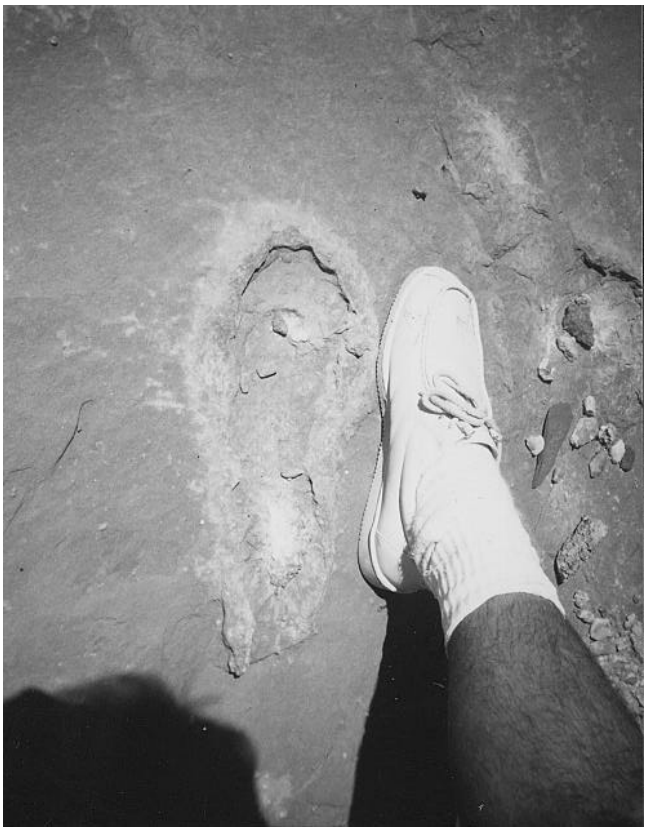

Figure 33. One of three quasihuman ichnofossils we identified together as Track 58.

Figure 34. Week-old contemporary track.

Figure 35. Track 55, the quasihuman ichnofossil closest in distance to a tridactyl dinosaur-like ichnite. See also figures 22 and 23.

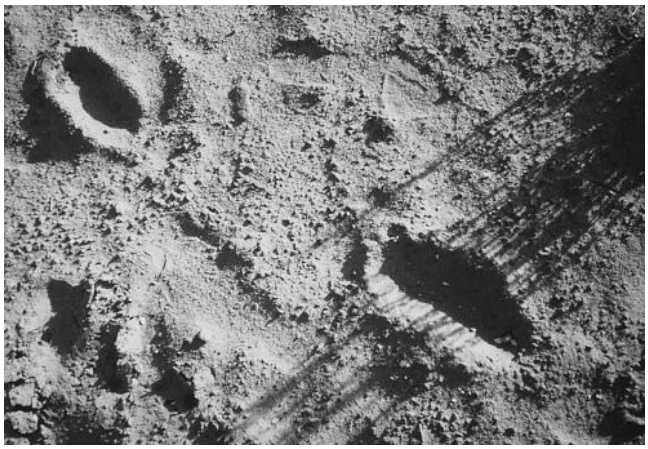

Figure 36. Tracks made by a Navajo in loose wet sand in a wash several meters south of Site 2.

Figure 37. Trackway of unmapped quasihuman ichnofossils several meters east of track 39. Notice all face the same direction, unlike random nodule impressions.

LETTER TO THE EDITOR

Deep Dwelling Bacteria

It seems that someone should have a field day from the creationist viewpoint, by reviewing the article called "Deep Dwellers" in *Science News*, March 29, 1997 (Monastersky, 1997). The article describes bacteria trapped 2.7 kilometers below the ground and possibly 3.5 kilometers or more. The bacteria are 10 times larger than the pores in the rock, meaning bacteria cannot make their way into the rock and neither can they make their way out. The article says "The organisms survive by living on a spare diet of petroleum and other organic compounds dissolved in the groundwater. Because these nutrients are so dilute, the microbial colonies do not receive enough food to grow or reproduce, nor do they have room to spread through the rock. They simply live in a sort of suspended animation." (Monastersky, 1997, p. 193). The article also says these are "anaerobic organisms which die when exposed to oxygen" (p. 192).

Is not that amazing! Since they cannot get in or out, it would seem not to matter if they were created/evolved 10 years ago, 6000 years ago, 80 to 160 million years ago (as the article suggests), or 1000 zillion years ago. Furthermore, it would seem they could not have been trapped or untrapped in the past because oxygen would have killed them. If you accept evolution, it follows that they all would have evolved with the ability to survive indefinitely and independently, and yet they all would appear to be virtual copies of one another! Mother Grimm's Fairy tales are becoming more credible all the time (especially if time includes millions of years)!

Reference

Monastersky, Richard. 1997. Microbes thrive far below the ground. *Science News* 151:192-193.

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On Kingdom Science

When God's own children stay at lab
or in the fields to work with skill,
their fresh devotion spent so that
their minds with science fill;
this pleases One who six days toiled
and then pronounced His own work "good"-
Father, Spirit, Sacred Son
well made that flesh and wood.

When faithful folk with scale or scope
probe God's good work of plant or stone,
they worship and see facets of
His mind - elsewhere unknown.
Between research and Scripture true
no conflict final does endure,
For Christians find from Nature's lore
God's written Word is sure.

No eagle flies, no lily blooms
outside His watchful eye and care;
yet Solomon full well arrayed
was not at all so fair.
So let us cast our widow's mite
of scientific thoughts full run,
and we will thrill at last to stand
and hear Him say "Well done!"

George F. Howe