



Book Review

Bigfoot Exposed: An Anthropologist Examines America's Enduring Legend. By David J. Daegling. Walnut Creek, CA: AltaMira Press. 2004. 276 pp. \$30.95 (paperback). ISBN 0-7591-0539-1.

The main title of this book misrepresents what could otherwise be considered a partially useful contribution to the discussion of the Bigfoot phenomenon. Dr. Daegling did not expose anything, nor did he attempt to do so. Far from proving that all of the evidence for the existence of an unrecognized higher primate in North America is fraudulent, he merely attempted to satisfy himself that it could all be explained away as either mistaken or the result of human activity. Since he makes no secret of the fact that he held that opinion firmly before he began, satisfying himself probably did not prove a difficult task. Whether he has made a case that could satisfy any of those who deal with the subject more objectively and with greater familiarity with the actual evidence is a very different matter.

A penchant for reaching conclusions with little knowledge of what he is talking about shows up as early as the second page of Dr. Daegling's preface. He states that who built a Bigfoot trap in an Oregon forest "is something of a mystery," and uses that as an example of "a problem one encounters in researching Bigfoot—specifically the issue of discovering facts with no apparent source and arguments whose authorship is uncertain." Later in the preface he expresses gratitude for the help of three of the people he calls Bigfoot "advocates" any of whom could have told him who built the trap if he had bothered to inquire.

Early on, Daegling also demonstrates what would seem, for someone writing as a

scientist, a curious fondness for dashing-off exaggerations that are just plain silly. Examples: "Its odor is so foul that people have been known to pass out from the stench," and "there has been enough Bigfoot hair collected to weave a few area rugs." What is not silly at all is his practice of stating as facts things that are just plain wrong. Some examples will follow in this review, but there are far too many to deal with them all.

His first major error is in the subtitle, asserting that he is dealing with a legend. Bigfoot is certainly the subject of legends, but so are many ordinary animals. What the Bigfoot investigation is dealing with is not a legend by any definition; it is matter-of-fact, testable, evidence plus contemporary eyewitness accounts. He then titles his first chapter, *Encounters with Monsters*, which is prejudicial enough, and goes on to trivialize the subject further by telling how he was once frightened by noises at a campfire and suggesting that if someone had not shown that it was deer making the noises that incident might have become a Bigfoot story. So much for Chapter 1.

In Chapter 2, *The Natural History of Bigfoot*, he sets out to discuss whether such an animal is biologically possible, which is a sensible approach, but then almost immediately raises (in slightly more elegant language) the neophyte's usual self-contradictory question, "How come no one ever sees one?" -- when in fact, the discussion is about a creature thousands of people tell of

seeing. He goes on to present the usual arguments why there cannot be a real animal involved and the usual unsupported claims that humans have some inherent need to imagine monsters, but in the end has to admit that “the existence of Bigfoot is not impossible but perhaps merely improbable.” That is a reasonable position to take, but falls far short of the promised “Bigfoot Exposed.” This chapter also introduces one of the most basic of Dr. Daegling’s mistaken assumptions: “Bigfoot advocates will tell you that most Sasquatches reside in the forests of the Pacific Northwest.” That would have been true a generation ago, but today most “advocates” are aware that a majority of reports come from the U.S. Midwest, East and South.

Chapter 3, *The Social History of Bigfoot*, is largely a retelling of familiar stories that are dealt with more extensively in later chapters. It also attempts to summarize the character and actions of some of the “advocates”, a presentation badly skewed because he has had considerable personal contact with a few of them and none at all with others. Errors in just this one chapter are far too numerous to mention.

Chapter 4, *Bigfoot Scrutinized*, finally gets down to the root of the matter, as he states: “We can formalize the study of Bigfoot into a series of testable hypotheses. In this book I am really only proposing one and focusing on that. The hypothesis is simple. Bigfoot is explicable entirely by human agency.”

There is not space in a review to comment on how he applies the hypothesis in all the cases he refers to in this chapter, so I will confine my observations to two important ones which involved testable physical evidence and about which, through personal investigation, I know a great deal more than he does. The first involves the tracks seen on and near a road construction project at Bluff Creek, California, in 1958, which put “Bigfoot” in the public eye. He quotes information from a number of people who

weren’t there, but none from any of the few remaining people who were there. I am a newspaperman, not a scientist, but I doubt that it is sound practice in science any more than it is in journalism to use only second-hand sources when first-hand information is available. Specifically, he relies on a couple of Eastern writers who dreamed up the notion that Ray Wallace, the road contractor, had faked all the tracks, and he even states, without qualification, “For whatever reason, when Wallace was away on business, Bigfoot lost interest in the road-building operation.” The fact is that tracks usually showed up when Ray Wallace was not there — for the simple reason that he wasn’t personally running that particular operation and was usually away on other business. He was never there when I was there.

Dr. Daegling even presumes to explain why Ray Wallace did it, suggesting that he faked the tracks because, “there existed a regional monster legend (historically established),” and because “things could get pretty slow at the end of a long summer far from the city (a reasonable inference)”. The local Indians did, of course, have such a “legend,” but no one involved at the time showed any sign of having heard of it. One of the most striking aspects to someone coming from British Columbia, where Sasquatch tales were well known, was that none of the Californians’ speculations about what could have made the tracks showed any awareness of Indian stories of forest giants. As to Ray Wallace feeling bored because the job took him away from the city, the inference is not at all reasonable. He didn’t choose to live in a city, then or later, and Bluff Creek was very near his home.

And then Dr. Daegling abandons any notion of scientific rigor, treating as established fact every hysterical aspect of the media frenzy when members of Ray Wallace’s family “confessed” after his death that he had faked all the big tracks, everywhere, with pairs of wooden feet. “They even produced sets of

bogus feet for the reporters that matched the tracks found in the Bluff Creek area from 1958 to 1967.” With very little investigation he would have learned that the family produced no bogus feet that bore any resemblance to the original “Bigfoot” tracks found on the Bluff Creek road, and that while they did have one pair resembling other tracks that had been seen and cast in that area many times, including in 1958 and 1967, they were crude and inaccurate copies. And worse than accepting without question the Wallace claims, Dr. Daegling even takes seriously, and displays in his book, crude carvings by a Wallace associate, Rant Mullens, which one would think could not possibly fool anyone, not even the most credulous and prejudiced anthropologist. (p.74)

Oddly, this is the one part of Dr. Daegling’s hypothesis that is easily and completely testable. He believes that all the footprints which have been preserved in film and plaster can readily be reproduced using strapped-on carved wooden feet, yet he makes no attempt to see if it can actually be done. He believes, from a third-hand tavern tale, that tracks can be made by “weighted-down bogus feet being hauled up and down the rough terrain with cables used conventionally in logging operations.” He believes also that “Some of the pranks were accomplished by simply planting the tracks while an accomplice drove a vehicle slowly along the new roads. This method can account for impossibly large strides and puzzlingly deep impressions.” Really? If he believes these things why did he not test his hypothesis properly before he wrote a book? Not his “little experimentation in a compliant substrate” but in something resembling the real conditions that are documented and recorded?

As he mentions in a later chapter, there is \$100,000 waiting for the first person that can match those tracks--by the methods Dr. Daegling naively believes were used, or any others. Is it acceptable for a scientist to hide

behind the excuse that the conditions specified to claim the \$100,000 must be wrong because if they were right Ray Wallace couldn’t have faked the tracks? I know that the specifications are correct. I wrote them, and they describe accurately the observed facts that led me to spend the past 46 years not as an “advocate” for some “monster” about which I am a “true believer”, but as an investigator trying to establish how those tracks were made.

The second case which produced testable evidence and about which I have personal knowledge is that of the Skookum cast, which records forever a large impression left by some hair-covered object in a patch of “compliant substrate” beside a gravel road at a place in the mountains of southwest Washington called Skookum Meadows. I was not there when it was made, but I have seen it at every stage from the beginning of the task of removing the dirt that adhered to it, and have been present when highly-qualified scientists have examined it, two of whom, contrary to Dr. Daegling’s insinuations, later gave a favorable presentation about it at a scientific meeting. I also have in my basement an exact copy not of the cast, which is a reversed image, but of the actual impression in the ground. Dr. Daegling tells his readers that the cast was made in a “mud bath” in which the maker supposedly lay down while retrieving some fruit that had been left there, and he reflects that in similar circumstances he himself would not choose “to lie down in the mud.” It is plain from photographs that the impression was made in a large area of dried dirt, one small patch of which was still in the process of drying out. The clear hair patterns in the cast establish that while the dirt in that patch was soft it was no longer sticky. The imprint is only partial, since most of the ground was hard, but it obviously was not made by anything lying down. There are areas where the soft ground is shapelessly disturbed, while other impressions

have been interpreted as the marks of a huge, hairy, buttock and thigh, and of a hairy lower arm which the maker is presumed to have leaned on while reaching to one side to pick up the fruit. There are also several indentations such as seated human would make if pushing with his heels, one of which shows clearly not just the back of heel but several inches of a hair-covered Achilles tendon. All of the imprints are half again the size of those of a large human.

Dr. Daegling makes a point that a request by a professional “skeptic” to examine the cast was rebuffed, yet notes at the same time that access is available for study by individuals with appropriate scientific credentials. He has those credentials, but did not go to the trouble of examining the cast before he wrote about it. Instead he quotes with approval the claim by an amateur “advocate”, who also had not seen the cast, that the impression was made by an elk, the supposed heel prints being the marks of an elk’s wrist. This is an easily testable hypothesis, and it has been tested.

Chapter 5, *The Patterson Film*. This chapter differs markedly from the others, in that Dr. Daegling has done some worthwhile research on the subject and with expert help. Before the reader gets to that, however, he has to wade through examples of how far Dr. Daegling, perhaps misled by information from questionable sources, manages to twist things to convince himself that his hypothesis is not seriously challenged. In the course of summarizing the findings of the few qualified scientists who have studied the film creature, he dismisses the Russian, Dr. Dmitri Donskoy, as one of the “ringleaders” of a group at the “Moscow Academy of Sciences” whose aim was to discover relict populations of extinct human forms. Hence Dr. Donskoy’s conclusion that the film showed an unknown biped with a walk completely different from that of a human “seems born of faith rather than any particular observation of incontrovertible fact.” The incontrovertible

fact is that Dr. Donskoy was the chief of the Chair of Biomechanics at the U.S.S.R. Central Institute of Physical Culture in Moscow, an expert student of human locomotion who had no prior interest in cryptozoology. He told me that he had studied the film only as a favor to the two young men who asked him to do it, (no one involved had anything to do with the Russian Academy of Sciences) and that what he saw completely changed his understanding of bipedal walking. The film creature, he said, walks in a far more efficient way than humans do.

Dr. Daegling also fudges what was done with the film at the Disney studios to the point of making it seem meaningless. Like him I don’t know how they first got a look at it, but what does that matter? When I took a copy there in 1969 a vice-president, Ken Peterson, told me they had already studied the film and they were not capable of producing anything that walked free as the creature in the film does, all their animated figures in Disneyland had to be anchored to a power source. He did not say, as Dr. Daegling misquotes from one of my books, that “they would rather draw one than build one,” he said they did not have the ability to build one.

Things get better after that. Dr. Daegling mentions some of the conflicting claims as to who made the supposed ape suit or who wore it, but does not endorse any of them the way he did the Ray Wallace track nonsense, and what he writes regarding the people involved, the event itself and the steps taken to investigate it afterwards seems to me an acceptable effort. I have no quarrel as well with his contention that the various attempts, including my own, to establish the creature’s actual dimensions or the exact route that it walked are only fallible estimates. There is one glaring anomaly, however. He ridicules an assertion by Dr. Grover Krantz that the width of the creature’s chest in relation to its height is outside the maximum human range, quoting measurements of men in the German air force

which, he says, establish that by Dr. Krantz' standards 5% of them "were in need of zoological re-classification. The 'impossible' dimensions of the film subject were anything but." After Dr. Daegling had made that assertion in a 1999 article Dr. Jeff Meldrum pointed out to him that he had used the wrong width measurement, one called "interscye" a tailors' measure of the curve of the back from armpit to armpit, instead of the correct measurement "chest breadth" which is listed in the same source and which supports Dr. Krantz' conclusion. Dr. Daegling mentions this, but only in a note at the end of the chapter, while persisting with the error, and the ridicule, in the main text.

It is in dealing with another claim by Dr. Krantz, that the way the creature walks can not be duplicated by a human, that Dr. Daegling made a major contribution to actual research, persuading Dr. Dan Schmitt of the Vertebrate Movement Laboratory at Duke University to participate in a thorough investigation which established that humans can indeed duplicate the walk. Considering the things that gymnasts, dancers and contortionists can do with the human body that conclusion should hardly be surprising, but it is of value to have it established. Drs. Daegling and Schmidt did further good work with experiments demonstrating the inaccuracy of two methods that have been used to estimate the film creature's height by comparison with an object of known length. To get a reliable result using a vertical object that object would have to be placed exactly the same distance from the camera, as the creature was, which can't be done because that distance is unknown. The second method did not have that problem, since it involved measuring a stick the creature is seen to step on or over in the film (if it was the same stick), but it would be accurate only if the stick was filmed lying exactly square-on to Patterson's camera, and that is both unknown and unlikely.

Dr. Daegling then goes on to state that differing angles to the camera make it impossible to compare the length of the film creature's arms with the length of its legs to establish whether that ratio is within the human range, and that as to the position of the joints, "trying to locate the landmarks through a fur coat is a lousy proposition." Those observations are certainly true regarding individual frames, but with the creature swinging and flexing its limbs through more than 100 frames, determining the position of the joints is certainly possible, as attested by disinterested bioengineers. Assuming that experts in computer animation cannot also compensate for camera angles seems to me a doubtful presumption.

What comes next is another false note. Just after commenting on the impossibility of making precise observations of the joints from a blurred film, Dr. Daegling displays a drawing of a frame from the film which supposedly proves that the creature's Achilles tendon does not attach as far back on the heel as it should. The drawing is precise but the image on the frame it is copied from is not, so something speculative is deliberately made to appear certain. And while there are a couple of other frames that could support the same interpretation there are a dozen that don't.

Chapter 6, *Further Musings on Footprints*. There isn't much point to some of the *musings*, since they are based on shaky or false assumptions. No one is contending that tracks are found in places where humans can not go, just that some are encountered in places where humans would be very unlikely to find them. The tracks made by the same foot in the same trackway do not always look the same, far from it. The claim that certain persons "with their confessions of running through the woods with fake feet strapped to their boots effectively ended all argument that the size of Bigfoot tracks ruled out their fabrication" is just nonsense—and anyway no one contends that great size rules out fakery, it

just rules out human feet. Dr. Daegling does muse productively about the extreme depth of some prints compared to the prints humans make beside them. Those at the film site, for instance, do indeed seem to require a weight out of proportion to the estimates of the creature's size. He is also right that there have been proven hoaxes where the resourcefulness of the hoaxer was initially underestimated—and it is a safe assumption that there are hoaxers even more resourceful who are still laughing because their fabrications are being taken seriously. On the other hand there are tracks that were cast and/or photographed many years ago which still defy any effort to reproduce them. When it comes to commenting on individual footprints Dr. Daegling suffers from the handicap of never having seen any, and it shows. He displays a photo of a track showing an unusual pressure ridge going right across the middle of the foot and one where a human footprint shows disturbed material on one side under the arch and apparently thinks that they are the same. He also shows a photo of the underside of a Wallace carved foot and proclaims it to be identical to a drawing of a track photograph when a simple overlay would have shown him that it isn't—and he seems unaware that the other foot of the carved pair is dramatically different from the track it imitates. Imagine the scorn he would have expressed had he been pointing out similar blunders made by one of the "advocates."

Chapter 7, *Three Red Herrings*. There are more musings in this chapter, some of them valid, as the extreme unlikelihood of such creatures existing without their bones ever being found certainly is. There is nothing, however that contributes support to any claim to have "exposed" Bigfoot. Perhaps the author needed a few more pages.

Chapter 8, *A Science of Sasquatch*. Again a chapter that seems to have no bearing on the book's theme, yet contains the unsupported statements, "Skeptics are finally at a point

where they can say with a high degree of confidence that the details of the film were well within the human capacity for fabrication," and "Skeptical inquiry into the film has made significant strides since 1967." Skeptics, of course have been saying the same things with the same degree of confidence all along, and the only progress they have made is in countering some of the "advocates" claims. As to producing evidence that the film is a hoax, if this book does anything it is to make clear that as new skills have been developed they have uncovered no such evidence. In contrast, support for the film's authenticity has grown fairly steadily over the years as these skills have been applied to the study of it. The skeptics, of course, dismiss each new supporter, be they a biomechanic, specialist in the evolution of bipedalism, computer animator, or forensic examiner, as just another "advocate," but where are their opposite numbers on the skeptics' side? Dr. Daegling seems able to find support only from "skeptical" scribblers who possess no special skills or qualifications and disaffected "advocates" who are also without such credentials.

Chapter 9, *The Eyewitness Problem*. Here Dr. Daegling goes right off the rails. His problem has been to explain away three main elements of evidence for the existence of huge bipedal primates, the tracks, the film and the eye-witness accounts. For the first two he has at least made an effort, but regarding eye-witnesses all he does is to avoid talking to any of them and dismiss them all as liars, hallucinators, or the victims of the well-documented fallibility of human memory. Among the thousands of people who have come forward with reports there are certainly plenty in all three of his categories, as well as others who had only a partial or fleeting glimpse of what they describe, but there are also many who can not be so lightly dismissed. Among those who tell of being able to make significant observations are scientists, naturalists, law officers on duty,

loggers and other woods workers, and even plenty of the people that Dr. Daegling thinks seldom report such things, experienced hunters. Perhaps the most detailed of all recent sighting reports was by a hunter who is also a professor of psychology at a major university. Human memory is certainly less reliable than most people think or than the court system pretends, but if it were as useless as Dr. Daegling assumes humans would long since have been extinct. That so many people tell of seeing creatures suitable to make the big footprints and similar to the one shown in the movie is a major phenomenon for which scientists should be seeking an explanation, whether the creatures exist or not. To dismiss it without any investigation is the opposite of scientific endeavor.

Chapter 10, *The Bardin Booger*. Merely an irrelevant tale about a local mascot.

Chapter 11, *The Phenomenon*. In conclusion, we are met with more musings and unsupported assumptions, devoid of a shred of evidence, and the foolish claim, “The important question is no longer who is making the footprints, because there are plenty of people up to the task.” In almost 50 years since the Bigfoot tracks turned up at Bluff Creek, of all the “plenty of people” not one has yet come forward to even attempt the task—not even Dr. Daegling.

John Green
*Harrison Hot Springs, British
Columbia, Canada*