

Comment

THE PATTERSON-GIMLIN BIGFOOT FILM RECONSIDERED: IS THE PROOF OUT THERE?



The notion that mysterious monsters lurk among us is alluring. When I was a kid, I became fascinated by snakes and other animals. I read every book and magazine on animals in my school's library and I yearned to become a wildlife biologist. I recall reading a few articles in *National Wildlife* magazine about the ongoing search for "Bigfoot." And after reading a book on "Nessie" the *Loch Ness Monster* (Dinsdale, 1972), I wrote a book report on it for one of my homework assignments. I appreciated the author's seemingly objective and scientific evaluation of the evidence and I became a believer in both Bigfoot and Nessie.

As I progressed in my education, I gradually realized to my dismay that humans have an enormous capacity for imagination and fabrication, and that some humans are much more gullible than others. As a consequence, I became increasingly skeptical of the existence of large cryptid beasts. While

in graduate school, I read a book on Bigfoot, although I don't remember its title. Some of the accounts seemed credible but the vast majority, if not all, appeared to be imagined or fabricated. If so many alleged eyewitness accounts and photos were hoaxes, how could I trust any to be true? More importantly, if Bigfoot actually existed, why hadn't one been shot by a hunter or struck by a vehicle and its corpse, or at least some body part, delivered to a museum for scientific scrutiny and verification? Disappointed with the book, I became a skeptic of both Bigfoot and Nessie.

During subsequent decades my dreams of becoming a wildlife biologist and studying animals around the world became true. I spent 13 years living and working as a biologist, mostly as a college professor, in several foreign countries. I traveled extensively, conducting research on a variety of invertebrate and vertebrate critters, while specializing on Neotropical birds.

In recent decades, a few fairly large and taxonomically unique animal species have been discovered, such as the Saola (*Pseudoryx nghetinhensis*)—a deer-sized animal, representing a new genus, discovered in Vietnam in 1993 (Dung et al., 1993). And there is a growing number of species considered to be extinct for decades, centuries, millenia, or even millions of years, until they were recently documented to be extant (currently living), usually in remote areas seldom explored by scientists. Referred to as "Lazarus species," most of these species are small and

secretive, but some are fairly large and surprisingly conspicuous, such as the Collared Peccary (*Catagonus wagneri*)—a pig-sized animal known from pre-Columbian fossils and found alive in Paraguay in 1974 (Wetzel et al., 1975). Given the success of science in discovering and rediscovering the existence of many small and secretive species, why couldn't an animal as large as Bigfoot, if it actually exists, be adequately documented by scientists?

In 2005, the world was jolted by the announcement that one such Lazarus species, a large and gaudy woodpecker inhabiting forests of the southeastern USA and considered extinct since the 1940s by most scientists, had been documented by a video in Arkansas. The evidence for the persistence of the Ivory-billed Woodpecker (*Campephilus principalis*) was convincingly described by prominent ornithologists (Fitzpatrick et al., 2005), but it was quickly questioned by skeptics who claimed the bird was a misidentified Pileated Woodpecker (*Dryocopus pileatus*; e.g., Sibley et al., 2006). Considerable debate ensued in public forums. Additional blurry photos and videos were subsequently offered as evidence and a few unscrupulous individuals seeking fame and fortune provided photos later proven to be hoaxes. Curious to know how the evidence for the continued existence of the Ivory-billed Woodpecker was perceived by birders and ornithologists, my brother and I conducted an online survey in 2006, with 506 participating respondents. Our survey also included questions about the existence of Bigfoot and Nessie.

Our results revealed that 20.8% of the respondents believed that the Ivory-billed Woodpecker definitely existed, 3.6% believed it definitely did not exist, and the remaining 75.6% felt uncertain about its continuing existence (Hayes and Hayes, 2007). In contrast, only 0.6% believed that Bigfoot definitely existed and 0.4% believed that

Nessie definitely existed. Unsurprisingly, belief in the continued existence of the Ivory-billed Woodpecker was positively correlated with belief in the existence of Bigfoot and Nessie. Our respondents at the time were considerably more skeptical of the existence of Bigfoot and Nessie than physical anthropologists in 1978 (13% and 23%; Greenwell and King, 1981), university students in 1983 (3% and 5%; Feder, 1984), teens in 1985 (24% believed in Bigfoot; Gallup, 1985), and the general public in 2006 (18% believed “creatures like Bigfoot and the Loch Ness Monster will one day be discovered”; Adams et al., 2006).

The inherent skepticism of birders and ornithologists is unsurprising given the carelessness with which some ambitious birders mistakenly or fraudulently identify and report rare species, eager to discover rarities and add them to their life lists. Such birders are regarded with disdain by most birders, who detest wasting time, energy, and money searching for misidentified or fabricated birds. Birders and ornithologists have established many local bird record committees that routinely scrutinize submitted reports of rare species within their jurisdiction. Such committees are very conservative, accepting only records sufficiently documented by either a specimen, diagnostic photos or sound recordings, or detailed written descriptions from experienced observers. Having served on one such committee, I found it essential to be skeptical of bird records lacking credible documentation. Maintaining a high standard for evidence, especially for any new distributional record, is crucial for scientific integrity.

Carl Sagan popularized the phrase “extraordinary claims require extraordinary evidence,” which Tressoldi (2011) described as “at the heart of the scientific method, and a model for critical thinking, rational thought and skepticism everywhere.” I embraced the philosophy. I hoped the Ivory-billed Wood-

pecker still existed but concluded that the evidence was insufficient to be a “believer.” As for Bigfoot and Nessie, given the lack of extraordinary evidence I remained extremely skeptical about the existence of both.

In 2021, the producers of History’s *The Proof Is Out There* television series invited me to analyze bizarre photos and videos from the perspective of an “expert” biologist. Several of the stories assigned to me included new photos, videos, and sound recordings of alleged Bigfoot encounters. I didn’t believe any of them depicted a genuine non-human, hominoid creature. Then I was asked to preview an analysis by Jeff Meldrum (anatomist and physical anthropologist), Bill Munns (Hollywood creature-effects specialist), and Isaac Tian (computer vision engineer), of a computer-optimized and stabilized version of the 1967 Patterson-Gimlin Bigfoot film, which revealed new details previously undetected or difficult to discern in existing copies of the film. I had previously assumed the Patterson-Gimlin film was a fake, so I watched their analyses with great interest. I was pleased to see the film being subjected to objective, scientific scrutiny.

The episode, titled “Bigfoot Revealed,” first aired on 3 December 2021. The trio of analysts described eight lines of evidence for a genuine hominoid creature instead of a man in an ape costume typical of the period: (1) flexing of the midfoot; (2) five distinct toes in the sole of the foot; (3) contracting calf muscles, which would be unexpected in tube-shaped legs of an ape suit; (4) torso and limb proportions unlike any human; (5) a crack separating the buttocks; (6) large shifting breasts of a female; (7) smooth surface texture on the back of the neck, with no hint of separation between the head and the torso as would be expected in a costume; (8) and the shape of the head and the neck, consistent with *Australopithecus* spp. and great apes. I did not find all of their arguments convincing

(e.g., flexing midfoot and shifting breasts), but I was very impressed with the sum of their arguments. I could not detect any evidence of a hoax.

Patterson and Gimlin either created a stunningly realistic hoax or they filmed a genuine Bigfoot. The creature sure looks genuine to me. As I stated in the episode, the new version of the film “makes it more difficult for skeptics like me to remain skeptical.” Nevertheless, the proof isn’t quite there. Although I still remain skeptical of the existence of Bigfoot, I am now more open to the possibility. I fully concur with Jeff Meldrum’s conclusion that “the prospect of such a creature existing is one worthy of our scientific investigation.”

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