

ESSAY REVIEW

Disappointing “Documentary” about Loch Ness Monsters (“Nessies”) (Can Good Documentaries Be Made about Such Subjects?)

Loch Ness Monster: New Evidence. Travel Channel (USA), 15 September 2019; (in UK, Discovery Channel, also 15 September 2019). Credits: 1895 Films for Travel Channel; Scripps Network; Tom Jennings, Executive Producer; Julie Meisner Eagle, VP for Production & Development; Matthew Butler, General Manager.

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<https://doi.org/10.31275/2019/1705>
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“About the show: Professor Neil Gemmell uses cutting-edge environmental DNA science to unravel the mystery of the Loch Ness monster. Neil’s high-tech monster hunt opens a new chapter in the search for Nessie as he puts the leading theories to the ultimate scientific test.”¹

This description misleads in every important respect. The mystery is not unraveled; the leading theory is not even mentioned, and Gemmell’s reason for embarking on this project—namely, to spread awareness of the potential benefits that can accrue from research on environmental DNA (eDNA)—is not well-served, because there is no useful explanation of what eDNA science does, what it can and cannot accomplish, and why.² That lack is all the sadder because the results in this case with respect to Nessies are not only incomplete, they are inconclusive and probably even wrong in an important respect.

The significance of the “new evidence” claimed in the title of this film could surely be appreciated only in the context of the earlier evidence. That has been described in full detail in at least a dozen respectably sourced and documented books by both believers and disbelievers that Nessies are real animals.³ Of central importance is Constance Whyte’s (1957) *More Than a Legend*, which brought renewed attention to Nessies after a dozen-or-so years in which the media and the public had been preoccupied with World War II and its aftermath. An article by Whyte had led to a foray to Loch Ness by Tim Dinsdale, who was able to obtain in 1960 what remains the clearest objective evidence for the presence of a large animal in Loch Ness. Whyte also developed the explanation that has become accepted by almost all serious researchers: that Nessies are a population of originally marine creatures that used to visit the fjord, the arm of the North Sea that Loch Ness was for a time after the last Ice Age, before the land rose when freed from the heavy weight of mile-high ice and the erstwhile fjord became cut off from the ocean as Loch Ness. Ancestors of Nessies were trapped and led eventually to a population adapted to fresh water, as rain and run-offs from the surrounding hills slowly morphed a salt-water fjord into a fresh-water loch. That the Loch had indeed been part of the North Sea for a time after that Ice Age was proven much later by the fortuitous discovery of marine deposits on the floor of Loch Ness (Rines & Dougherty, 2003).

The producers of the Travel Channel piece⁴ appear to have been ignorant of these central and crucial facts. Thus the film declares as essentially disproved the “Jurassic hypothesis” of a lone plesiosaur resident in the Loch for a long time, a hypothesis not held by any serious Nessie fan or believer for half a century or more, if ever. The film displays further ignorance by calling plesiosaurs “scaly” reptiles; and by describing as “popular” explanations that Nessies might be catfish or sturgeons, each of which has been suggested by only a single individual without finding general support among believers or disbelievers alike. Smaller errors and deficiencies are so innumerable as to preclude individual mention. Still images, including some known fakes and mistakes, are flashed on and off without explanation, together with creative film-clips of plesiosaur-like images cruising in imagined waters.

The allegation is properly repudiated that the most famous, iconic photo of a Nessie, “the Surgeon’s photo”, was a hoax; but it was not Loren Coleman who repudiated it “for the first time” for this film, but most comprehensively Karl Shuker (1995, p. 87), who is as prominent a cryptozoologist as Loren Coleman.

Grossly misleading is the assertion that in the 1980s Adrian Shine “led the charge” to employ sonar. Mackal (1976, pp. 296–308) lists 16 pertinent sonar observations at Loch Ness between 1954 and 1972 and describes in detail the highly informative ones by the Birmingham University team in 1968 and by Love in 1969. The underwater photos, obtained by a team led by Robert Rines that included renowned flash photographer and Medal-of-Freedom recipient Harold Edgerton and which had been analyzed by the computer experts at the Jet Propulsion Lab, are described absurdly as “subjectively” interpretable by contrast to the objective evidence of DNA.

One of the witnesses given considerable prominence is Gordon Holmes, and serious attention is given to the video he obtained, which any experienced observer at Loch Ness recognizes as not a wake but a puff of wind (or two puffs). Even more film-time is wasted on noting that some people offer supernatural “explanations” for Nessies, with much about the occultist Aleister Crowley who resided for some years at Boleskine House on the southern hillside above Loch Ness—all irrelevant to Nessies and to eDNA.

Throughout the film, the expected, indeed predicted outcome of Gemmell’s research is described in hyperbolic terms that nothing could possibly live up to, for instance that Nessie would not escape detection this time even though she remains “the world’s greatest mystery.” It is also absurdly wrong to claim that “scientists” have been searching for Nessie since the first reported sighting 1,500 years ago, or that people have been bringing “the best science of the day” to the hunt for Nessie for some 50 or 60 years.

After all the hype, in the last few minutes the film offers some actual results. Some 500 million DNA sequences were garnered from 250 samples of Loch Ness water. It is no disappointment, no surprise, that none of the DNA could be ascribed to what one would expect from a “Jurassic reptile”, since no serious fan considers Nessie to be a long-surviving plesiosaur: At most, a quite popular theory is that Nessies

are the result of tens of millions of years of evolutionary change from marine-living ancestors related in some way to the long-extinct plesiosaurs. What is intensely disappointing is to be told at the very end of the film that 25% of the DNA samples remain unidentified. Gemmell quite properly promises, as a scientist should, that these data will be made fully available and that other additional identifications may eventually follow.

Owing to the earlier-mentioned lack of even rudimentary background research by the film's producers, Gemmell had been badly let down as to the possible identity of Nessie: The copious prevalence of eel DNA is allowed to suggest that Nessies might in fact be very large eels. As Steve Feltham notes at the very end of the film, anyone who suggests that interpretation to an eyewitness would be simply laughed out of the room. No one has ever reported the sinuously side-to-side body-flexing motion by which eels move; moreover, the 5-foot-wide hump in the Dinsdale film is certainly not an eel; the underwater photographs of Robert Rines, of a long-necked creature with paddle-shaped fins, cannot be construed as showing an eel. That the bottom of Loch Ness harbors many eels has been known for a very long time, without any serious argument being offered for Nessies being eels.

Concerning new information about what Nessies might be, the silver lining (for this reviewer and Nessie fan at least) is the absence of catfish or sturgeon DNA, the latter being Adrian Shine's most recent attempt to pooh-pooh the possible reality of any kind of "monster."

CAN GOOD DOCUMENTARIES BE MADE ABOUT SUCH SUBJECTS?

Perhaps not. The judgment of what is good depends inevitably on the conscious beliefs and unconscious biases of those who judge; and on any controversial topic, it is rare to find truly uncommitted, open-minded individuals; and even if such rarities were to make a documentary, it would find no favor with the great majority of people, who are committed, wittingly or unwittingly, to one side or the other. On matters of knowledge just as in politics or religion, the open-minded moderate few are appreciated by neither of the opposing sides.

The inescapable trouble is that evidence does not speak for itself.



Figure 1. Neil Gemmell at Loch Ness.

As philosophers have long pointed out, “facts are theory-laden”: We are interested not in unadorned facts but in *meaningful* facts. The plain facts may be black lines and shaded areas on a white background, but our interest is in what those depict: facial silhouettes facing one another, or a flower vase? A pretty young girl or an old crone? (Bauer, 2017, p. 128, figure 3). Such ambiguity has been illustrated for Nessies by how the very same pieces of evidence are interpretable quite plausibly as “The monster is a myth” (Bauer, 1986, chapter 1) or “The monster exists” (Bauer, 1986, chapter 2).

Nevertheless, documentaries useful to a wide range of interested parties as well as to the general public could be produced even by somewhat biased or previously ignorant production teams provided that they supported their script writers with reasonably accurate information about relevant written sources and appropriate contacts with contemporary individuals who might have pertinent expertise. The present film does mention such properly knowledgeable and relatively unbiased individuals as Loren Coleman, Steve Feltham, and Gary Campbell. Unfortunately, the production was also heavily influenced by Adrian Shine; quite understandably so, since he runs the prominent

Loch Ness Centre in the village of Drumnadrochit which is the traditional center of Nessie seeking. But for most people, “Loch Ness” means “Loch Ness Monster”, and they expect a “Loch Ness Centre” to inform fairly neutrally about Nessies. Shine and the Centre, however, discount anything that cannot be explained in terms of what is already known. Over the years, Shine morphed from courageous and innovative monster-hunting researcher at Loch Morar into a dogmatic denier of anything like a “monster”; and he has converted Tony Harmsworth’s highly informative early-1980s exhibition about Nessie matters into a case for disbelief.

What led to Shine’s change of heart is hard to fathom, since in 1982 he wrote that “having established that there is nothing impossible about ‘Loch Ness Monsters’ from a scientific point of view”; and he reported that his team had “made no less than 40 [sonar] contacts of interest . . . stronger and deeper than the known fish” (Loch Ness & Morar Project, 1983), thereby confirming earlier work by others.

In earlier days, Shine had displayed considerable insight with the accurate as well as pretty observation that conducting a surface watch for Nessies amounted to “a war of attrition against the laws of chance”; and he had also made an important point that should inform all eyewitnesses, that any phenomenon at Loch Ness that exhibits periodicity, somewhat regular recurrence, most likely is owing in some way to wave or wake disturbances. Yet nowadays Shine dismisses sonar observations as artefacts, and insists that the Surgeon’s photo was hoaxed, that Rines’s underwater photos were of rocks and debris and shadows on the Loch’s bottom, and that the 5-foot-wide hump filmed by Dinsdale could only be a boat disguised by unusual circumstances of lighting and weather—no matter that the hump produced a broad wake with no sign of the propeller wash that would inevitably have been made by any of the fishermen’s boats on the Loch. I’m reminded of the Christian who claimed to have been converted because the arguments offered against Christianity were so self-evidently absurd: If the best way that debunkers can find to discount the Dinsdale film is to say that the hump was a boat,⁵ then Nessies most certainly are large, unidentified animals.

NOTES

- ¹ <https://www.travelchannel.com/shows/loch-ness-monster-new-evidence>
- ² That eDNA work is not easy or infallible is pointed out in a comment on Roland Watson's informative and reliable blog:

“ . . . as with any tests that involve biologicals, there are error rates. And eDNA is not immune to these errors. . . . eDNA testing is also affected by seasonal changes—of how creatures operate in their environment, as well as the quality of the effluent at different times of the year, and so on. . . . [F]or eDNA testing to detect creatures properly there would have to be such testing throughout Loch Ness on a quarterly basis over probably at least two years, and probably have close to 350 to 450 sampling points—and doing this at least at five or six different consistent depths.” <http://lochnessmystery.blogspot.com/2019/10/looking-back-on-edna-results.html?showComment=1571098925729#c7083682203925655134>

I think that Roland correctly pointed out that nothing was taken way down deep, and there probably should have been. Also, eDNA actually lasts much, much longer in soils than in water. So taking samples off the Loch bottom might be a fruitful endeavor. Indeed, there are several clues indicating that Nessies spend most of their time down deep, possibly in the two basins known to be deeper than 200 m (Shine & Martin, 1988).

- ³ See the bibliography, comprehensive up to the early 1980s, of books, chapters, articles, and news media reports in Bauer (1986, 201–233). Significant books tending to imply belief that Nessies are real include those by Dinsdale (1961, 1966, 1975), Rupert Gould (1934), Roy Mackal (1976), and Constance Whyte (1957); the disbelieving viewpoint is expounded for instance by Binns (1983), Burton (1961), and Steuart Campbell (1986).
- ⁴ I much prefer not to call it a documentary.
- ⁵ The Dinsdale film, with extract stills comparing hump and reference boat, can be viewed at <https://www.themanwhofilmnessie.com/tims-nessie-film.html>

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