



# Presenting Endangerment

## Peter Scott, Conservation, and the Loch Ness Phenomena

ZACHARY BAYNHAM-HERD

*School of GeoSciences, University of Edinburgh, UK*

**Abstract** Endangered species are not simply revealed but are *presented*. This process of presentation is shaped by conservation discourses that reflect how actors understand, categorize, and imagine nonhuman life. Such discourses combine to produce narratives of endangerment, which influence policy and conservation efforts. This article examines how particular physical, epistemic, and cultural geographies mediate the production of conservation discourses and narratives of endangerment. It explores an anomalous case in which the endangered species presented never physically existed: the story of the conservationist Sir Peter Scott and the Loch Ness phenomena (Nessie). By reinterpreting Scott's correspondence covering the Loch Ness Phenomena Investigation Bureau in the 1960s and 1970s, this article outlines the discursive production of Nessie as, first, a scientifically recognized species, and, second, an endangered creature warranting protection. Nessie's nonphysical existence is argued to reveal the ways in which living things are ancillary to the discourses through which they become protected. Specifically, this article demonstrates how Nessie's proposed endangerment was produced through ostensibly scientific discourses accessed through particular social networks, understandings, values, procedures, and imagery. In doing so it highlights the other physical and human geographies, including nationalism, landscape, media, and technology, that shaped this and likely other presentations of endangerment.

**Keywords** extinction, cultural geography, Scotland, endangered species, preservation, Loch Ness

[Scott's] primary concern with the putative Loch Ness monster, was to protect it [because] if indeed conclusive evidence was found that the creature actually existed, there would doubtless be those who would immediately wish to go and catch it. [Scott] thought that in these circumstances, the creature should have some form of legal protection.

—David Attenborough, 2016<sup>1</sup>

1. David Attenborough, letter to author, March 2016.

On 11 December 1975, an article was published in *Nature*, the preeminent scientific journal, formally ascribing a name to a new species: *Nessiteras rhombopteryx*, “the Ness wonder with a diamond fin.”<sup>2</sup> The lead author was the renowned British conservationist Sir Peter Scott, cofounder of the World Wildlife Fund (WWF) and originator of the International Union for the Conservation of Nature’s (IUCN) Red List of Threatened Species.<sup>3</sup> Scott’s description of the species was principally based upon sonar scans and two underwater automated flash-strobe photographs taken in Loch Ness—a large inland freshwater body in the Scottish Highlands—provided by the coauthor, Dr. Robert Rines of the Boston Academy for Applied Science. Unconventionally for *Nature* (and for zoological nomenclature in general), the article also included two artistic interpretations of the species. These depictions, drawn by Scott himself, clearly resemble the *Plesiosauria*—a clade of large marine reptiles last known from the Cretaceous Period, 65 million years ago (hereafter “plesiosaurs”). As Scott’s friend and fellow naturalist David Attenborough confirms in the epigraph to this article, Scott’s scientific description of the Loch Ness phenomena (Nessie) was principally motivated by his desire to secure its legal protection as an endangered species.

Like other subjects of conservation Nessie’s status as a potentially endangered species was not simply revealed but *presented* through Scott’s engagement with conservation discourses. Such discourses, defined as “a manner of perceiving and presenting a particular issue that is shared by more than one person,” are shaped by particular physical and human geographies that reflect the ways in which different actors understand, categorize, and imagine nonhuman life.<sup>4</sup> Combinations, or sets of discourses, produce conservation narratives that act to determine which things merit protection and which things have voices, thus mediating the extinction of both whole species of “ways of life.”<sup>5</sup> For instance, as Hinchliffe describes, to be conserved, living things are first presented (e.g., identified as existing) or made present (e.g., physically planted or restored) and then are imagined as representing something worth conserving.<sup>6</sup> But as demonstrated by the cases of the elusive water vole (*Arvicola terrestris*), and the returning osprey (*Pandion haliaetus*) in the UK, although living things do play an active role in becoming identified by conservationists and made present (e.g., through their interactions), this role is constrained by both the opportunity for physical encounter and the ways in which living things become understood and documented by people.<sup>7</sup> Indeed the

2. Scott and Rines, “Naming the Loch Ness Monster.”

3. Huxley, *Peter Scott*, 182.

4. Benjaminsen and Svarstad, “The Death of an Elephant.”

5. Rose, van Dooren, and Chrulew, *Extinction Studies: Stories of Time, Death, and Generations*, 1–10; Ladle and Jepson, “Toward a Biocultural Theory of Avoided Extinction.”

6. Hinchliffe, *Geographies of Nature*, 125.

7. Hinchliffe, “Reconstituting Nature Conservation”; Garlick, “Deceptive Landscapes.”

presence of such animals is often contested, and different techniques or forms of knowledge production can lead to different assessments.<sup>8</sup>

Particular understandings, methods, politics, and cultural geographies also shape the narratives through which individual animals are represented as having conservation value. Importantly, these processes act even more independently to the lives of individual animals than the processes through which their existence is established. For instance drawing upon Foucault's concept of biopower, recent scholars have outlined how in the mid-twentieth century the global conservation movement moved away from preservationist narratives, which promoted the general protection of nature from human influence, toward the narratives of species and environmental management, which draw on the ecological discourses of populations.<sup>9</sup> As described by Heise, central to the development of these new narratives of endangerment was the creation of procedures and lists—such as Scott's brainchild the IUCN Red List. These lists collect data from various sources to designate the status of different species and inform conservation laws and practices, but they too are subject to political and cultural influence.<sup>10</sup> For instance epistemic communities, which reflect networks of decision-makers and gatekeepers, act to shape this process of endangerment designation.<sup>11</sup> Indeed, species categorizations themselves are contested and evolve over time with changes in the physical and ontological production of knowledge. Where once species taxonomy relied upon the shooting, examination, and classification of dead specimens, classification today relies more on genetic analyses.<sup>12</sup> Similarly, national and international species listings can be influenced by lobby groups, knowledge contestations, and political processes.<sup>13</sup> For instance under the UK Habitats Directive local management of protected species is legally dictated by whether such activities are thought to have a detrimental impact on the favorable conservation status of the species in its natural range—two requirements that are subject to legal interpretations and contestations.<sup>14</sup> Moreover, classifications of nationally endangered, alien, wild, or natural species are all shaped by how we construct those imagined concepts, which are in turn shaped by the imagery and spectacle

8. Hinchliffe, "Reconstituting Nature Conservation"; Jepson, Barua, and Buckingham, "What Is a Conservation Actor?"

9. Yusoff, "Biopolitical Economies and the Political Aesthetics of Climate Change"; Castellano, "Anthropomorphism in the Anthropocene"; Srinivasan, "Conservation Biopolitics and the Sustainability Episteme"; Biermann and Mansfield, "Biodiversity, Purity, and Death."

10. Heise, *Imagining Extinction*, 15. For instance, the Red List currently lists 26,500 species as "threatened" with extinction and these designations inform international policy such as the Convention on International Trade in Endangered Species (CITES) that dictate which species can be subject to international trade.

11. Peet and Watts, *Liberation Ecologies*, 3–10.

12. Meijaard and Rawson, "The Phylogenetic Species Concept and Its Role in Southeast Asian Mammal Conservation," 345.

13. Wyman, "Politics and Science in Endangered Species Act Listing Decisions"; Crifasi, "A Subspecies No More?"

14. Heydon, Wilson, and Tew, "Wildlife Conflict Resolution."

produced around them.<sup>15</sup> Instructively, subjects or beliefs not recognized by science—such as the mythical presence of Icelandic Huldufólk or the magical properties of the Madagascan aye-aye (*Daubentonia madagascariensis*)—can also shape narratives that dictate which living things are preserved.<sup>16</sup>

The purpose of this article is to analyze the Nessie anomaly to further explore the political, physical, epistemic, and cultural geographies that mediate the production of conservation discourses and narratives of endangerment. Like the Huldufólk, but unlike the aye-aye, Nessie never physically existed beyond discourse. Analyzing the Nessie anomaly is therefore helpful in highlighting further the extent to which living things can be ancillary to the production of the discourses through which they are listed and protected. Indeed, this anomaly can be used to further trace the procedures, methods, and networks that shape the discursive production of endangerment. Specifically, by reinterpreting the personal archive of Peter Scott's correspondence and the workings of the Loch Ness Phenomena Investigation Bureau in the 1960s and 1970s, I outline the discursive production of Nessie as, first, a scientifically recognized species, and, second, an endangered creature warranting protection. I demonstrate how the presentation of Nessie's endangerment was produced through engaging with primarily scientific discourses accessed through particular political and cultural means, involving social networks, understandings, values, procedures, and imagery. In doing so I also highlight the particular physical and human geographies, including nationalism, landscape, media, and technology that shaped this, and likely other, presentations of endangerment.

### Scott: The Patron Saint of Conservation

Sir Peter Scott was a renowned British conservationist, naturalist, and broadcaster. Like other prominent British conservationists both past and present Scott was a member of the British social elite and rose to fame through his BBC natural history programs and radio shows in the 1950s and 1960s.<sup>17</sup> Scott was also a leading figure in the development of species-specific management and conservation. He pioneered the creation of breeding programs to save some of the world's rarest birds from extinction, such as the Hawaiian goose (*Branta sandvicensis*), and set up a scientific research program as part of the Wildfowl and Wetlands Trust, which he founded.<sup>18</sup> Scott also served on the executive board of the newly founded IUCN, where he compiled the first Red Data book of endangered species, the precursor to the IUCN Red List.<sup>19</sup> Scott's conservation legacy is

15. Knudsen, "Multiple Sea Snails"; Ogden, "The Beaver Diaspora"; van Dooren, "Invasive Species in Penguin Worlds"; Igoe, "The Spectacle of Nature in the Global Economy of Appearances"; Lorimer, "Moving Image Methodologies for More-than-Human Geographies."

16. Holmes, Smith, and Ward, "Fantastic Beasts and Why to Conserve Them."

17. Adams, *Against Extinction*, 132–33.

18. Huxley, *Peter Scott*, 182.

19. Huxley, *Peter Scott*, 283–84.

well-documented and captured in the famed British conservationist Sir David Attenborough's description of him as the "patron saint of conservation."<sup>20</sup> However, Scott's role in cofounding the Loch Ness Phenomena Investigation Bureau (LNPIB) in 1962, and shaping the discursive production of Nessie, has received less attention.<sup>21</sup>

### The Discursive Production of the Nessie Species

#### *Nessie before Scott*

Prior to Scott's influence Nessie was created through cumulative interfacing discourses shaped by a combination of physical and cultural geographies related to Scotland, the media, and the scientific community. Nessie first came to public attention in 1933, following a series of sensational news article reports describing strange encounters with a "monster" at Loch Ness, a large freshwater body that connects to the sea near Inverness, northern Scotland. The phenomenon was swiftly married to the Scottish legend of the "Kelpie" (water horse), and it was subsequently alleged that the monster had been there for centuries.<sup>22</sup> In 1933, one couple claimed to have seen a large, long-necked, limbless creature lurching across the road toward the loch, and, most famously, in 1934 an apparent photo of a large plesiosaur-like creature was published in news articles around the world. Significantly, even by 1934 these purported photographs and eyewitness accounts depicted the two incongruous, but coexisting, imaginings of Nessie that remain today: that of the multi-humped serpent, and that of the long-necked plesiosaur.

The production of Nessie at this time appears to have been facilitated by the combination of spectacle related to the physical geography of the loch and popular culture as well as the development of local transport infrastructure and tourism. For instance, some authors contend that Nessie's incongruous combination of forms was influenced by the preceding spread of imagery related to dinosaurs and other prehistoric animals, which had recently been discovered and entered the popular media, and by the centuries-long histories of stories related to serpentlike sea monsters.<sup>23</sup> In particular, Adrian Shine and other authors point to the release of the hit film *King Kong* in 1933, which popularized the image of large, long-necked dinosaurs lurking in swamps, as being seminal in the creation of the plesiosaur-like imaginary of Nessie.<sup>24</sup> In later decades it is also possible that the discourses surrounding Nessie may also have coalesced with those around other monsters in popular culture, such as *Godzilla* in the 1950s.<sup>25</sup> However, as Watkinson notes, it is an oversimplification to simply claim that those seeking monsters find exactly that. Instead, he points to the murky materiality of both the loch and the proposed images of Nessie as acting to stage the subjective distortion

20. "Home of UK 'Patron Saint of Conservation' Opening to Public."

21. Most notably, this subject has also been explored in Williams, *A Monstrous Commotion*.

22. For an overview, see Williams, *A Monstrous Commotion*, 336

23. Loxton and Prothero, *Abominable Science*.

24. Personal communication with Adrian Shine, 2015.

25. Kalat, *A Critical History and Filmography of Toho's Godzilla Series*.

from which Nessie comes into being.<sup>26</sup> In this view the fact that Loch Ness is suitably accessible, suitably impenetrable, and prone to the creation of strange wave patterns is sufficient to create the kind of ambiguous space between objective and subjective reality that is needed for a monster to appear. Indeed, at over 200 meters in depth, 26.3 kilometers in length, and over 2 kilometers in width at points, even with modern technology exploring Loch Ness is a difficult undertaking. Hence in the early and mid-twentieth century, prior to the deployment of anything like a sonar scan in Loch Ness, it was conceivable that something unknown inhabited its deep, dark waters. Yet, unlike the purported habitats of other cryptids explored at the time, such as the vast expanse of the Himalayan plateau (Yeti), the Congo basin (Mokele-Mbembe), or the Pacific Northwest (Bigfoot), Loch Ness provided a fixed, discrete location to study.<sup>27</sup> Furthermore, and again, unlike those other cryptid locations, the development of convenient local transport infrastructure by the early twentieth century provided tourists, journalists, and scientists easy access to the loch. Indeed, accompanying the boom in domestic travel generally (facilitated by the motor car and rail networks), the main road on the northern side of the loch was completed in 1933, the same year the first sightings of Nessie were reported.<sup>28</sup>

Cultural geographies related to narratives of Scottish “wildness,” folklore, and nationalism may also have been formative in Nessie’s production. For instance, in 1933 so intense was the burgeoning interest in Nessie that the Scottish Office opened a file on the Loch Ness phenomenon and the Secretary of State for Scotland was pressured to push a bill through parliament to ensure its protection. The bill never materialized, but a police constable was asked to warn locals “not to shoot the thing,” and the Keeper of Zoology at the National Museum in Edinburgh was particularly determined that any monster remains should not leave Scotland.<sup>29</sup> These concerns were not unfounded. Zoologists from the British Natural History Museum (NHM), and numerous trophy hunters frequented the loch hoping to catch evidence of the monster, if not the thing alive.<sup>30</sup> These accounts add to the suggestions that during this time Nessie had been appropriated as a symbol of Scottish nationalism, much as charismatic and endemic species were being appropriated as national symbols across the world.<sup>31</sup> According to Shine this narrative of a Scottish Nessie, also embodied the uniquely Scottish cultural narratives of the Highlands as a place of wilderness and mystery.<sup>32</sup> Moreover, from the

26. Watkinson, “On Appearance.”

27. Buhs, *Bigfoot*; Regal, *Searching for Sasquatch*.

28. Sheail, *An Environmental History of Twentieth-Century Britain*, 177–217.

29. Clarke, *Britain’s X-traordinary Files*, 183.

30. Williams, *A Monstrous Commotion*, 48. Casts of footprints taken from the loch were duly investigated by zoologists from the NHM who much to their embarrassment, publicly identified them as left by the cast of a hippopotamus’s (*Hippopotamus amphibious*) foot.

31. Clarke, *Britain’s X-traordinary Files*, 183; Schwarzenbach, *Saving the World’s Wildlife*, 45; Quintero, “Trading in Birds”; Ogden, “The Beaver Diaspora.”

32. Adrian Shine, personal communication, 2015.

earliest media reports until today, Nessie has commonly been gendered as female, but the reasons for this remain underexplored. For instance it is possible that Nessie's gendering reflects the common positioning of monsters as females in Anglo-Saxon mythology.<sup>33</sup> However, this contrasts with the typically male depiction of the Scottish Kelpie.<sup>34</sup> Alternatively it is possible that Nessie's female status reflected British maritime gender norms, in which vessels and other subjects were commonly feminized.<sup>35</sup> For instance an early 1933 newspaper headline covering Nessie adopted characteristically maritime language with its "There She Blows."<sup>36</sup> It is also conceivable that the narratives of Nessie, as a possible relic of prehuman life, became interwoven with the narratives of mother earth or simply with an implied assumption of reproductive femininity as necessitating life.<sup>37</sup>

Narratives surrounding Nessie may have also been shaped by epistemic communities of scientists and related discourses. From the outset interest in Nessie among scientific circles was high, and numerous expeditions were undertaken.<sup>38</sup> However, after a series of initially unsuccessful expeditions, scientific interest in Nessie would not be ignited again until after the Second World War, led in Britain by two scientists at the NHM. Dr. Maurice Burton, keeper of zoology at the NHM, first advocated a theory that the monster was a giant eel (*Gymnothorax javanicus*) and then a plesiosaur, and the NHM's principal scientific officer, Dr. Denys Tucker, also claimed to have seen a plesiosaur-like monster himself.<sup>39</sup> Such interest in Nessie within the zoological community mirrored the burgeoning exploration of other unknown or mysterious cryptid species elsewhere, such as presented by French zoologist Bernard Heuvelmans in his *On the Track of Unknown Animals* (1955).<sup>40</sup> Such imagery may have also shaped Scott's imagination of Nessie. According to Dendle it is the apparent wildness of cryptids such as Nessie, and the longing to find a new frontier of exploration, that drove the zoological fascination in them.<sup>41</sup> However, unlike Nessie, none of these other cryptids came anywhere near being formally recognized by science.<sup>42</sup> Hence I argue that Nessie's unique position can also be largely attributed to Scott's unique influence and network.

33. Morgan, "Mothers, Monsters, Maturation."

34. Westwood and Kingshill, *The Lore of Scotland*, 424

35. Ransley, "Boats Are for Boys."

36. Gallagher, *Loch Ness*, 39.

37. Leach, "Earth Mother Myths and Other Ecofeminist Fables."

38. Williams, *A Monstrous Commotion*.

39. Burton, *More Animal Legends*. Correspondence from Gavin De Beer to Ethelwynn Trewavas, 29 October 1959, DF933/3/6, Natural History Museum Archive (hereafter "NHM"). Memorandum issued by Gavin De Beer, "Loch Ness Phenomena," 21 October 1959, DF1004/510, NHM.

40. Heuvelmans, *On the Track of Unknown Animals*.

41. Dendle, "Cryptozoology in the Medieval and Modern Worlds."

42. See Buhs, *Bigfoot*.

### Scott and the Loch Ness Phenomena Investigation Bureau

I argue that Scott was principally able to enter Nessie into serious scientific discourses through the combination of his elite network and his understanding of the scientific method. However, it was through Scott's association with the BBC that he first became involved with Nessie. In March 1960 a Loch Ness enthusiast, Tim Dinsdale, wrote to Scott. In his letter he requested the chance to make his case on television for the existence of Nessie.<sup>43</sup> In his reply Scott admitted that he "for a long time thought it more than probable that an undescribed animal lives in Loch Ness," and so he agreed to meet Dinsdale. Scott was left unenthused by their first meeting, but his interest was captured later by an "extremely impressive" short grainy film, taken by Dinsdale in April 1960, depicting a dark object moving rapidly through the water of Loch Ness.<sup>44</sup> Having then read the series of eyewitness accounts published by Dr. Whyte in her book *More than a Legend*, Scott declared the need to set up an investigation.<sup>45</sup> Although Scott claimed he had "no scientific reputation to lose," he understood the importance of the scientific method, having undertaken pioneering bird ringing and monitoring techniques, which underpinned his conservation efforts.<sup>46</sup> He also corresponded with many of the world's leading zoologists.<sup>47</sup> Renowned scholar of animal behavior Konrad Lorenz once remarked on Scott's extraordinary eye for bird behaviors: "It's a pity we can't squeeze him for his potential as a zoologist."<sup>48</sup>

Once determined to investigate Nessie, Scott therefore identified the need for any study to have the endorsement of the scientific community and appeal ostensibly to the scientific method. Indeed, in his words, any investigation must be conducted "on the highest possible scientific plane."<sup>49</sup> Accordingly, Scott proceeded to draw upon all of his strongest connections in the scientific community and governing class to help conduct an investigation that would ideally be funded by the Royal Society—of which Scott was a member.<sup>50</sup> To this end, Scott first recruited the conservationist Richard Fitter and his friend, Antarctic explorer and Conservative member of Parliament, David James. Scott's next idea was to form a scientific committee—the Loch Ness Study Group—to sanction and oversee investigations.<sup>51</sup> Although he did not receive any institutional support, he did manage to secure a committee of expert referees to review evidence, which included Sir Alister Hardy (professor of zoology, Oxford), Dr. Leonard Harrison

43. Correspondence from Tim Dinsdale to Peter Scott, 12 March 1960, C.658, Peter Scott Papers: Nature Conservation and Research, Cambridge University Library (hereafter "Scott").

44. Correspondence from Peter Scott to Martin Charteris, 9 May 1960, SCOTT, C.658.

45. Whyte, *More Than a Legend*.

46. Correspondence from Peter Scott to Tim Dinsdale, 23 May 1960, SCOTT, C.658.

47. Notable correspondents include Nikolaas Tinbergen, Julian Huxley, and W. H. Thorpe.

48. Huxley, *Peter Scott*, 182.

49. Correspondence from Peter Scott to Tim Dinsdale, 23 May 1960, SCOTT, C.658.

50. Memorandum to "London Zoo Panel," 11 May 1960, SCOTT, C.659.

51. Correspondence from Peter Scott to Tim Dinsdale, 22 May 1960, SCOTT, C.659.



Mathews (director of London Zoo), zoologists Dr. Desmond Morris and Dr. Gwynne Ververs, anatomist Professor Richard Harrison and Cambridge's professor of zoology Carl Pantin.<sup>52</sup> The evidence panel first met in London at the Linnaean Society in April 1961 and concluded that there was indeed a *prima facie* case for an investigation. However, lacking sufficient institutional backing, Scott instead joined Richard Fitter, David James, and Constance Whyte to pursue their own exploration, forming the Loch Ness Phenomena Investigation Bureau (LNPIB) in March 1962.<sup>53</sup> The LNPIB's remit was to carry out annual field expeditions to the loch supported by a committee of other interested parties and an open membership.<sup>54</sup>

It is clear that the networks and reputations of Scott, Fitter, and James preceded them and garnered them audiences with scientists and governing officials. Indeed, Scott even kept the Queen informed of his investigations. For the first expedition Scott also managed to persuade the navy to donate two ex-wartime searchlights that beamed over the loch each night for two weeks.<sup>55</sup> David James had similar leverage. In one instance, through correspondence with Prince Phillip, he was put in touch with the defense minister to the Royal Air Force, who ordered the Joint Air Reconnaissance Intelligence Centre to analyze the Dinsdale film on James's behalf.<sup>56</sup> Then defense minister Eddie Shackleton was the son of Ernest Shackleton, the Antarctic explorer whose life was so inextricably bound up with that of Scott's father, fellow explorer Robert Falcon Scott. Likely as a consequence of these connections, the LNPIB operated successfully from 1962 to 1972, enjoying a wave of publicity, private finance, and public donations.<sup>57</sup> By 1969 the bureau had more than one thousand members paying an annual subscription charge; at its peak it attracted more than fifty thousand visitors to its field station annually.<sup>58</sup>

The LNIB also acted as a hub for other individuals conducting scientific research at the loch, which continued even after the LNPIB formally closed down. Some interested scientists, such as Scott's friend Professor Richard Harrison, an expert on cetacean anatomy, were keen to obtain a specimen required for formal identification.<sup>59</sup> Others however had more novel ideas, including the use of sonar technology, an autogyro (resembling a miniature helicopter), chemical lures, hydrophones, biopsy darts, diving equipment, and even the deployment of two trained dolphins in one instance.<sup>60</sup> Most significantly, in

52. Correspondence from Alister Hardy to Peter Scott, 24 June 1960, Scott, C.659; Correspondence from Carl Pantin to Peter Scott, 15 July 1960, Scott, C.660; Correspondence from Peter Scott to Francis Charles Fraser, 27 June 1960, Scott, C.660.

53. Minutes, "First LNPIB meeting of Directors," 31 March 1962, Scott, C.684.

54. Correspondence from Richard Fitter to Peter Scott, 26 July 1961, Scott, C.678.

55. Correspondence from Peter Scott to Martin Charteris, 9 May 1960, Scott, C.658.

56. Correspondence from Eddie Shackleton to David James, February 1966, Scott, C.696.

57. Report, "Operation Loch Ness 1962," October 1962, Scott, C.685. ATV sponsored the 1963 expedition, contributing £3000.

58. Bauer, *The Enigma of Loch Ness*, 77.

59. Correspondence from Peter Scott to Richard Harrison, 22 June 1960, Scott, C.659.

60. Witchell, *The Loch Ness Story*, 186.

1975, a number of compelling sonar traces and underwater photographs supposedly capturing the flipper of an animal were presented to Scott by the American Dr. Robert Rines. Scott was able once again to draw upon his elite contacts to organize a scientific symposium on Nessie, hosted by the Royal Society of Edinburgh, to consider the findings.<sup>61</sup> Scientists were invited from all the major zoological institutions in the UK, along with many from the United States and elsewhere. A provisional agenda for the symposium was drafted, the press conferences were planned, and the venue was booked.<sup>62</sup> In addition *Nature* accepted Scott and Rines's article describing the new species and agreed to ensure its release coincided with the symposium. Unfortunately, however, the new evidence was leaked to the press, who leapt on the story with such sensationalism that the academics at the NHM—who were among the symposium's planned attendees—balked en masse, leading to the symposium's cancellation.<sup>63</sup> Nonetheless, in its place a presentation took place at the House of Commons (under the auspices of the All Party Conservation Committee) that attracted an audience of two hundred scientists, politicians, and journalists. Scott was still able to present on his description of the species in *Nature* and his newfound belief in a population of "prehistoric creatures in Loch Ness."<sup>64</sup> However, the press claimed *Nessitteras rhombopteryx* was an anagram for "Monster Hoax by Sir Peter S," and his article was heavily criticized in subsequent issues of *Nature*.<sup>65</sup> Furthermore, the legitimacy of the photographs and Rines's results were soon placed under harsh scrutiny. The sonar traces held no relation in time to the images, which themselves, it turned out, were most likely computer-enhanced depictions of debris on the loch floor. Nevertheless Scott's faith in the Loch Ness Monster did not wane. Despite warnings, he championed the Rines photographs and continued to campaign for the monster even after the legitimacy of the photos were questioned by a member of Rines's own team.<sup>66</sup> In the face of such criticism and the risk it did to his reputation, I suggest that the reason that Scott was so ready to prematurely present Nessie as a new species has much to do with his great passion: the conservation of endangered species.

### The Discursive Production of Nessie's Endangerment

Scott's correspondence, private notes, and public addresses clearly demonstrate his dedication to Nessie's conservation and desire to ensure the protection of a potentially

61. Agenda, "Provisional Agenda for Symposium" by Peter Scott, 28 October 1975, Scott, C.658. Scott was not aware of the photos until he saw them in Witchell's *Loch Ness Story* in early 1975. Correspondence from Peter Scott to Robert Rines, 17 May 1975, Scott, C.707.

62. Correspondence from Peter Scott to Ritchie, 27 October 1975, Scott, C.713; Correspondence from, Peter Scott to Robert Rines, 28 October 1975, Scott, C.713.

63. Press notice, "Loch Ness," by John Gordon Sheals 24 November 1975, Scott, C.749.

64. Miscellaneous news article cuttings: "Gotcha!" *Sunday Mirror*, 20 July 1975; *Sunday Telegraph*, 3 Aug. 1975; *Scottish Sunday Post*, 3 Aug. 1975; and *Sunday Mail*, Australia, 3 Aug. 1975, Scott, C.708.

65. Halstead, Goriup, and Middleton, "The Loch Ness Monster."

66. Correspondence from Dick Raynor to Peter Scott, 6 Jan 1976, Scott, C.751; Scott, "Why I Believe in the Nessie," *Wildlife*, March 1976, Scott, C.750

extraordinary and endangered species. Nonetheless, as his daughter suggests, Scott's interest in Nessie was also motivated by his curiosity about natural history, and he never personally claimed to have seen Nessie or any physical signs of its existence.<sup>67</sup> Indeed, Scott remained open-minded and critical to the existence of Nessie throughout the operations on the LNPIB.<sup>68</sup> However, as the quotation provided by David Attenborough at the start of this article suggests, the main reason Scott sought to describe the species formally was to protect it legally. Such anxieties were not unfounded. Following the press coverage of the Rines photographs, one concerned individual even wrote to Scott urging that the monster not be "hunted, captured, and dissected in the name of science."<sup>69</sup> Furthermore, by 1960 Scott was made aware that prospectors were common arrivals to the loch; individuals appeared, in one instance, with a car boot full of sawn-off shotguns and other armaments, and in another armed with a harpoon.<sup>70</sup> As already mentioned, many scientists were also keen to obtain a specimen.<sup>71</sup> Immediately before the publication of the Rines photographs in 1975, Scott was also warned of the likely influx of bounty hunters.<sup>72</sup> To protect Nessie from such possible threats, Scott therefore drew upon a variety of means to help present the narrative of Nessie endangerment, all of which shed further light on the geographies and processes shaping the production of endangerment narratives during the period and our understanding of how political and cultural geographies shape conservation efforts.<sup>73</sup>

Scott's presentation of Nessie to the scientific community highlights how only certain forms of knowledge and ways of categorizing the world were able to enter into conservation discourses and narratives of endangerment. As already described, Scott drew upon his contacts and particular methods of knowledge production to appeal to the scientific community and establish Nessie's status as a species. However, he did so principally because he knew that scientific recognition was required to establish Nessie endangerment, which meant presenting Nessie as a scientifically accepted unit of conservation.<sup>74</sup> For instance, when discussing the potential pitfalls of a description based upon an illustration, Scott further elaborates on his conservation mission: "The procedure seems justified by the urgency of comprehensive conservation measures."<sup>75</sup> Likewise one of the five objectives in Scott's draft agenda for the cancelled Edinburgh symposium was "to discuss the advisability of giving a scientific name to animals as the

67. Personal communication with Dafila Scott, 2015.

68. Correspondence from Peter Scott to Martin Charteris, 9 May 1960, Scott, C.658

69. Correspondence from A. Chiltern-Hunt to Peter Scott, 7 October 1975, Scott, C.711.

70. Correspondence from Denys Tucker to Peter Scott, 22 September 1960, Scott, C.660; Correspondence from P. O'Conner to Peter Scott, 6 July 1960, Scott, C.662.

71. Correspondence from Peter Scott to Richard Harrison, 22 June 1960, Scott, C.659.

72. Correspondence from Nicholas Witchell to Peter Scott, 10 September 1975, Scott, C.711.

73. Ladle and Jepson. "Toward a Biocultural Theory of Avoided Extinction."

74. Srinivasan, "Conservation Biopolitics and the Sustainability Episteme."

75. Correspondence from Peter Scott, to Robert Rines, 28 October 1975, Scott, C.713.

only practicable way of including them in existing conservation legislation.”<sup>76</sup> In particular, Scott knew that scientific descriptions of species usually relied upon a type specimen that in most cases was a dead animal. In an early draft of his *Nature* article, Scott’s concerns are clearly apparent:

The ethical implications of collecting specimens of a species in danger of extinction have been raised by certain recent examples. To what extent if any does scientific curiosity justify risking that most irrevocable biological occurrence—the extermination of a species . . . when this fact [Nessie’s existence] becomes more generally accepted, the problem of protecting a limited population of very large creatures from ill-conceived capture attempts or other ignorant interferences will become the responsibility of British Conservationists. Official protection may only be possible . . . if the animals are formally described and given a scientific name.<sup>77</sup>

Consequently Scott’s scientific description of Nessie was based upon the seemingly scientific (but ultimately misleading) underwater photographs and sonar traces provided by Rines. However, Scott also personally interviewed large numbers of eyewitness and collated myriad individual accounts sent to him via post, of which more than two hundred were considered by his Loch Ness committee to be bona fide.<sup>78</sup> From these personal accounts Scott recorded information such as the size of the supposed animal, its number of humps, and the location and time of the sighting in an attempt to construct a picture of its likely appearance and behavior. Yet, none of this personal, experiential, and intimate knowledge was used as the basis for the scientific description. This is important, as prioritizing different sources of knowledge can inform different species assessments and conservation narratives.<sup>79</sup>

Throughout the presentation of Nessie’s endangerment Scott also leveraged his elite contacts and social circle within the conservation and scientific communities to pursue his objectives. In doing so Scott’s presentation of Nessie adds to our understanding of how particular networks, gatekeepers, and epistemic communities can shape the designation of endangerment.<sup>80</sup> For instance, Scott regularly discussed Nessie endangerment with leading zoologists and conservationists and floated the idea for a Loch Ness nature reserve.<sup>81</sup> In a letter to Professor Wynn-Edwards dated June 1960 Scott suggested that the population (if it existed) was probably “precarious and not likely to survive indefinitely.”<sup>82</sup> It is no coincidence that Scott also recruited Richard Fitter, a director

76. Agenda, “Provisional Agenda for Symposium” by Peter Scott, 28 October 1975, Scott, C.658.

77. Correspondence from Peter Scott to Robert Rines, 28 October 1975, Scott, C.713.

78. Report, “Report of an examination of certain witnesses and exhibits relating to phenomena in Loch Ness,” by David James, November 1962, Scott, C.686.

79. Roberts, Elphick, and Reed, “Identifying Anomalous Reports of Putatively Extinct Species and Why It Matters”; Tengö et al., “Weaving Knowledge Systems in IPBES, CBD, and Beyond.”

80. Pooley, “Endangered.”

81. Correspondence from Peter Scott, to Tim Dinsdale, 24 June 1960, Scott, C.661.

82. Correspondence from Peter Scott to Vero Wynne-Edwards, 8 July 1960, Scott, C.663.

of the UK governmental conservation agency Council for Nature and chairman of the international conservation organization Fauna Preservation Society (now Fauna and Flora International), to his LNIPB. Scott made sure to invite the leading figures and organizations in British conservation to the Edinburgh Nessie symposium. He also drew upon public advocacy, another key driver of the production of conservation discourse in the mid-twentieth century and beyond.<sup>83</sup> For instance in his 1960 *Sunday Times* article Scott outlined the case for Nessie's protection, affirming that "conservation comes before curiosity."<sup>84</sup> Furthermore, as mentioned previously, Nessie isn't the only so-called cryptid species to be subject of investigations. Searches for other prominent cryptids—which all happen to be large and charismatic, remained very much on the scientific periphery, despite some advocates having conservationist motivations similar to Scott's.<sup>85</sup> For instance the International Wildlife Conservation Society conducted a Bigfoot investigation in 1972,<sup>86</sup> and the prominent conservationist Gerald Durrell was a keen advocate in the search for cryptids.<sup>87</sup> However, none of these other prominent cryptids were ever formally ascribed scientific names. One reason may be that those who searched for them lacked the powerful influence and network of people like Scott, who held large sway in the international conservation movement of the mid-twentieth century. Indeed at the time most international projects were dominated by only a few large Western-originated international conservation organizations—a number of which Scott had directly founded.<sup>88</sup>

When coproducing the narrative of Nessie's endangerment, Scott also drew upon a number of other processes typical of the conservation community at the time, including the use of military-style narratives, spectacle, and appeals to nationhood. For instance, following the Second World War, wildlife management efforts adopted both new surveillance technologies and the militaristic language of operations, campaigns or projects, targets, goals, and logistics that reflected the military experience and outlook of those pioneering conservation at the time.<sup>89</sup> The activity of Scott's LNPIB at least mirrored this trend and was perhaps directly influenced by it. For instance, as noted, in addition to taking a military approach and deploying militaristic technology, the bureau also sought real military expertise in analyzing its evidence.<sup>90</sup> Scott also actively drew upon spectacle to gain traction for Nessie's plight, just like many other conservationists at the time and since.<sup>91</sup> Most revealingly, in 1975 Scott drafted some striking artwork for

83. Adams, *Against Extinction*; Brockington, "Powerful Environmentalisms."

84. Scott, "The Loch Ness Monster," *The Sunday Times*, August 14 1960, Scott, C.663.

85. Buhs, *Bigfoot*; Regal, *Searching for Sasquatch*.

86. Report, "Notes of the work and finding of the International Wildlife Conservation Society Inc. in its investigation of the Bigfoot/Omah Phenomena of the Pacific N.W.," by Byrne, April 1972, Scott, C.705.

87. See Gerald Durrell, "Foreword," in Shuker, *The Lost Ark*.

88. Adams, *Against Extinction*, 56.

89. Adams, *Against Extinction*, 132–33.

90. Correspondence from Eddie Shackleton David James, Feb 1966, Scott, C.696.

91. Igoe, "The Spectacle of Nature in the Global Economy of Appearances"; Goodman, Littler, Brockington, and Boykoff, "Spectacular Environmentalisms."

a rather unique WWF “Save One Species” appeal, depicting Nessie (in the form of two large underwater plesiosaur-like creatures) in the characteristic fashion that WWF had previously presented charismatic endangered species to donors.<sup>92</sup> The draft poster seems not to have made it to print but is further evidence of how Scott sought to align Nessie with wider conservation imagery and other narratives of endangerment. Furthermore, in the draft of his *Nature* article and in other correspondence, Scott refers to Nessie as the responsibility of British conservationists.<sup>93</sup> It appears, therefore, that during this period Nessie was reimagined (at least by Scott) as a symbol of British, rather than Scottish nationalism, which itself might reflect the ways in which Scottish nationalism had somewhat been usurped by renewed Unionism following the Second World War.<sup>94</sup> It also reflects the ways in which narratives of nationhood and native-ness were also being woven into conservation discourse.<sup>95</sup> Indeed, not far away, at another Scottish loch, Loch Garten, the Royal Society for the Protection of Birds’ “Operation Osprey” (note the militaristic language) marked the return of the once persecuted raptor to Scotland and a reimagining of these migrant birds as native British birds.<sup>96</sup>

Lastly, the fact that Scott explicitly reproduced the narrative of Nessie as a plesiosaur-like creature (rather than anything else) is significant and perhaps points to how personal motivations and imaginaries of wilderness may shape the production of conservation narratives. For instance, in the text and artistic impressions of Nessie provided in his *Nature* article, Scott makes clear his imagination of Nessie as a plesiosaur. Furthermore, as demonstrated by the personal sketches within his archive (dating back to 1960), the image of Nessie as a plesiosaur was very much firmly constructed in Scott’s mind prior to seeing the Rines underwater photographs and appears to have been somewhat shaped by the eyewitness accounts and other reports he encountered.<sup>97</sup> Moreover, even when evidence was presented to contest this image (of a plesiosaur), the image persisted. Scott’s friend David Attenborough pointed out to Scott how the flipper in the Rines photograph appeared to lack the pentadactyl bone structure common to all other plesiosaurs.<sup>98</sup> Likewise, in a letter to Scott, Professor Wynne-Edwards was wholly dismissive, relegating Nessie to “the category to ghosts and fairies” and listing numerous zoological reasons for why the existence of any kind of monster—in particular a plesiosaur—was fanciful.<sup>99</sup> Furthermore, Scott himself was skeptical of many of the purported Nessie photographs, such as the “Surgeon’s photograph,” in which the

92. Artwork, draft artwork for WWF’s “Save One Species” campaign 30 November 1975, Scott, C.738.

93. Correspondence from Peter Scott to Robert Rines, 28 October 1975, Scott, C.713.

94. Vines, “A Common Appeal.”

95. Ogden, “The Beaver Diaspora”; Quintero, “Trading in Birds”; Garlick, “Deceptive Landscapes.”

96. Lambert, “Strangers in a Familiar Land”; Garlick, “Cultural Geographies of Extinction.”

97. Correspondence from Professor Pantin to Peter Scott, 15 July 1960, Scott, C.660; Multiple sketches, Peter Scott, October 1975, Scott, C.713.

98. Correspondence from David Attenborough to Peter Scott, 7 Jan 1976, Scott, C.751.

99. Correspondence from Vero Wynne-Edwards to Peter Scott, 30 June 1960, Scott, C.662.

wave sizes depicted did not match up to the estimated size of the animal. Hence despite Scott's own analysis and that of others he respected, the image of the plesiosaur still took precedence in his mind. This might be because of what a plesiosaur-type Nessie represents. As Dendle notes, the quest for monsters in the twentieth century may have sought to recreate perceived lost wilderness and channel a form of environmental guilt by attempting to re-wild human-dominated environments with creatures that had resisted human devastation.<sup>100</sup> It is therefore possible that Scott's endangered Nessie took the form of the prehistoric, endangered plesiosaur rather than something less spectacular, in part due to a desire to rediscover wilderness in Britain and for the country to have its own charismatic species.

### Conclusion

Central to preventing extinctions are the ways conservation-related actors understand, categorize, and imagine nonhuman life as reflected in conservation discourses and narratives of endangerment. Of particular importance to contemporary conservation efforts are the scientific practices of species designations and list making, as enshrined in the IUCN Red List of threatened species and the political, cultural, and epistemic networks within which conservation actors reside. Recent scholarship has sought to highlight the importance of these relationships and the roles of particular actors in the production of conservation discourses, narratives, and policy.<sup>101</sup> Complementing these, other works have established how more-than-human geographies also shape the production of these discourses, including the pivotal roles of animal agency and particular human-animal interactions.<sup>102</sup> In this article I have contributed to these literatures by further exploring the political, physical, epistemic, and cultural geographies that mediate the processes by which species are first identified and then presented as endangered. In particular, to isolate the human-geographical factors from any potential animal agency or influence, I have considered an anomalous case in which the species in question never physically existed. I argue that if Scott had not appealed successfully to ostensibly scientific understandings, procedures, methods, and discourses and weren't so well-connected within the scientific and conservation communities, Nessie would not have come as close as she did to being formally recognized by science and thus protected. However, I also argue that the physical geography of Loch Ness as a murky, impenetrable yet accessible location and particular cultural geographies—such as nationalism, pop culture, myth, tourism, and the imaginary of wilderness—each also acted to shape both the presentation of Nessie as a species and associated narratives of

100. Dendle, "Cryptozoology in the Medieval and Modern Worlds."

101. Ladle and Jepson. "Toward a Biocultural Theory of Avoided Extinction"; Wyman, "Politics and Science in Endangered Species Act Listing Decisions."

102. Jepson, Barua, Buckingham. "What Is a Conservation Actor?"; Garlick, "Cultural Geographies of Extinction"; Hinchliffe, "Reconstituting Nature Conservation."

endangerment. These findings contribute to our understanding of the geographies of extinction by further elucidating how certain forms of knowledge, the networks of key actors, and conservation imaginaries all act to influence the process through which species become designated as endangered.

ZAC BAYNHAM-HERD is a PhD student in the School of GeoSciences at the University of Edinburgh. His is interested in the directions and drivers of both contemporary and historical conservation efforts. He previously studied history and philosophy of science at the University of Cambridge, where he undertook this research.

### Acknowledgments

Thank very much to the editors of this special section, Ben Garlick and Kate Symons, for their support in developing the manuscript for this article. My deep thanks also go to the two anonymous reviewers and Thom van Dooren, who provided expert feedback to help improve the manuscript, and to Helen Anne Curry for her supervision and comments on an earlier version. Last, I would like to thank Dafila Scott for kindly responding to my requests and questions and to the staff at the University Library Cambridge for providing me access to the archive.

### References

- Adams, William M. *Against Extinction: The Story of Conservation*. London: Earthscan, 2013.
- Bauer, Henry H. *The Enigma of Loch Ness: Making Sense of a Mystery*. Chicago: University of Illinois Press, 1986.
- Benjaminsen, Tor A., and Hanne Svarstad. "The Death of an Elephant: Conservation Discourses versus Practices in Africa." *Forum for Development Studies* 37, no. 3 (2010): 385–408. doi.org/10.1080/08039410.2010.516406.
- Biermann, Christine, and Becky Mansfield. "Biodiversity, Purity, and Death: Conservation Biology as Biopolitics." *Environment and Planning D: Society and Space* 32, no. 2 (2014): 257–73. doi.org/10.1068/d13047p.
- Brockington, Dan. "Powerful Environmentalisms: Conservation, Celebrity, and Capitalism." *Media, Culture, and Society* 30, no. 4 (2008): 551–68. doi.org/10.1177/01634437080300040701.
- Buhs, Joshua Blu. *Bigfoot: The Life and Times of a Legend*. Chicago: University of Chicago Press, 2009.
- Burton, Maurice. *More Animal Legends*. London: Muller, 1959.
- Castellano, Katey. "Anthropomorphism in the Anthropocene: Reassembling Wildlife Management Data in Bear 71." *Environmental Humanities* 10, no. 1 (2018): 171–86. doi.org/10.1215/22011919-4385516.
- Clarke, David. *Britain's X-traordinary Files*. London: Bloomsbury Publishing, 2014.
- Crifasi, Robert R. "A Subspecies No More? A Mouse, Its Unstable Taxonomy, and Western Riparian Resource Conflict." *Cultural Geographies* 14, no. 4 (2007): 511–35.
- Dendle, Peter. "Cryptozoology in the Medieval and Modern Worlds." *Folklore* 117, no. 2 (2006): 190–206. www.jstor.org/stable/30035486.
- Gallagher, Patrick. *Loch Ness: From Out of the Depths. Original News Article Accounts of the Rise of the Loch Ness Monster 1933–1934*. Scotts Valley, CA: CreateSpace Independent Publishing Platform, 2015.
- Garlick, Ben. "Cultural Geographies of Extinction: Animal Culture among Scottish Ospreys." *Transactions of the Institute of British Geographers* 44, no. 2 (2018). doi.org/10.1111/tran.12268.
- Garlick, Ben. "Deceptive Landscapes: Ornithological Hide Work and the Perception of Ospreys on Speyside, 1957–1987." *Geohumanities* 5, no. 1 (2019): 1–22. doi.org/10.1080/2373566X.2019.1580600.
- Goodman, Michael K., Jo Littler, Dan Brockington, and Maxwell Boykoff. "Spectacular Environmentalisms: Media, Knowledge and the Framing of Ecological Politics." *Environmental Communication* 10, no. 6 (2016): 677–88.



- Halstead, L. B., P. D. Goriup, and J. A. Middleton. "The Loch Ness Monster." *Nature* 259 (1976): 75–76.
- Heise, Ursula K. *Imagining Extinction: The Cultural Meanings of Endangered Species*. Chicago: University of Chicago Press, 2016.
- Heuvelmans, Bernard. *On the Track of Unknown Animals*. London: Kegan Paul International, 1995.
- Heydon, Matthew J., Charles J. Wilson, and Tom Tew. "Wildlife Conflict Resolution: A Review of Problems, Solutions, and Regulation in England." *Wildlife Research* 37, no. 8 (2011): 731–48. doi.org/10.1071/WR10006.
- Hinchliffe, Steve. *Geographies of Nature: Societies, Environments, Ecologies*. London: Sage, 2007.
- Hinchliffe, Steve. "Reconstituting Nature Conservation: Towards a Careful Political Ecology." *Geoforum* 39, no. 1 (2008): 88–97. doi.org/10.1016/j.geoforum.2006.09.007.
- Holmes, George, Thomas Aneurin Smith, and Caroline Ward. "Fantastic Beasts and Why to Conserve Them: Animals, Magic, and Biodiversity Conservation." *Oryx* 52, no. 2 (2018): 231–39. doi.org/10.1017/S003060531700059X.
- "Home of UK 'Patron Saint of Conservation' Opening to Public." *The Guardian*, February 10, 2016. www.theguardian.com/environment/2016/feb/10/home-of-uk-patron-saint-of-conservation-opening-to-public.
- Huxley, Elspeth Joscelyn Grant. *Peter Scott: Painter and Naturalist*. Golden, CO: Fulcrum Publishing, 1993.
- Igoe, Jim. "The Spectacle of Nature in the Global Economy of Appearances: Anthropological Engagements with the Spectacular Mediations of Transnational Conservation." *Critique of Anthropology* 30, no. 4 (2010): 375–97. doi.org/10.1177/0308275X10372468.
- Jepson, Paul, Maan Barua, and Kathleen Buckingham. "What Is a Conservation Actor?" *Conservation and Society* 9, no. 3 (2011): 229–35. doi.org/10.4103/0972-4923.86993.
- Kalat, David. *A Critical History and Filmography of Toho's Godzilla Series*. Jefferson, NC: McFarland, 2017.
- Knudsen, Ståle. "Multiple Sea Snails: The Uncertain Becoming of an Alien Species." *Anthropological Quarterly* 87, no. 1 (2014): 59–91. www.jstor.org/stable/43652721.
- Ladle, Richard J., and Paul Jepson. "Toward a Biocultural Theory of Avoided Extinction." *Conservation Letters* 1, no. 3 (2008): 111–18. doi.org/10.1111/j.1755-263X.2008.00016.x.
- Lambert, Robert A. "Strangers in a Familiar Land: The Return of the Native 'Aliens' and the (re)Wilding of Britain's Skies." In *Invasive and Introduced Plants and Animals: Human Perceptions, Attitudes, and Approaches to Management*, edited by Ian Rotherham and Robert Lambert, 169–184. London: Earthscan, 2011.
- Leach, Melissa. "Earth Mother Myths and Other Ecofeminist Fables: How a Strategic Notion Rose and Fell." *Development and Change* 38, no. 1 (2007): 67–85.
- Lorimer, Jamie. "Moving Image Methodologies for More-than-Human Geographies." *Cultural Geographies* 17, no. 2 (2010): 237–58. doi.org/10.1177/1474474010363853.
- Loxton, Daniel, and Donald R. Prothero. *Abominable Science: Origins of the Yeti, Nessie, and Other Famous Cryptids*. New York: Columbia University Press, 2013.
- Meijaard, Erik, and Benjamin Rawson. "The Phylogenetic Species Concept and Its Role in Southeast Asian Mammal Conservation." In *Taxonomic Tapestries*, edited by Alison Behie and Marc Oxenham, 345. Canberra: ANU Press, 2015.
- Morgan, Gwendolyn A. "Mothers, Monsters, Maturation: Female Evil in Beowulf." *Journal of the Fantastic in the Arts* 4, no. 1 (1991): 54–68. www.jstor.org/stable/43308100.
- Ogden, Laura A. "The Beaver Diaspora: A Thought Experiment." *Environmental Humanities* 10, no. 1 (2018): 63–85. doi.org/10.1215/22011919-4385471.
- "Papers of Sir Peter Scott." Cambridge University Library Special Collections, June 3, 2019. specialcollections-blog.lib.cam.ac.uk/?p=17510.
- Peet, Richard, and Michael Watts. *Liberation Ecologies: Environment, Development, and Social Movements*. New York: Routledge, 2004.
- Pooley, Simon. "Endangered." *Environmental Humanities* 7, no. 1 (2016): 259–63. doi.org/10.1215/22011919-3616470.

- Quintero, Camilo. "Trading in Birds: Imperial Power, National Pride, and the Place of Nature in US–Colombia Relations." *Isis* 102, no. 3 (2011): 421–45.
- Ransley, Jesse. "Boats Are for Boys: Queering Maritime Archaeology." *World Archaeology* 37, no. 4 (2005): 621–29. doi.org/10.1080/00438240500404623.
- Regal, Brian. *Searching for Sasquatch: Crackpots, Eggheads, and Cryptozoology*. New York: Springer, 2011.
- Roberts, David L., Chris S. Elphick, and J. Michael Reed. "Identifying Anomalous Reports of Putatively Extinct Species and Why It Matters." *Conservation Biology* 24, no. 1 (2010): 189–96.
- Rose, Deborah Bird, Thom van Dooren, and Matthew Chrulew. *Extinction Studies: Stories of Time, Death, and Generations*. New York: Columbia University Press, 2017.
- Schwarzenbach, Alexis. *Saving the World's Wildlife: WWF—The First Fifty Years*. London: Profile Books, 2011.
- Scott, Peter, and Robert Rines. "Naming the Loch Ness Monster." *Nature* 258 (1975): 466–68. doi.org/10.1038/258466a0.
- Sheail, John. *An Environmental History of Twentieth-Century Britain*. Basingstoke, UK: Palgrave, 2002.
- Shuker, Karl P. N. *The Lost Ark*. New York: HarperCollins, 1993.
- Srinivasan, Krithika. "Conservation Biopolitics and the Sustainability Episteme." *Environment and Planning A: Economy and Space* 49, no. 7 (2017): 1458–76. doi.org/10.1177/0308518X17704198.
- Tengö, Maria, Rosemary Hill, Pernilla Malmer, Christopher M. Raymond, Marja Spiereburg, Finn Danielsen, Thomas Elmqvist, and Carl Folke. "Weaving Knowledge Systems in IPBES, CBD, and Beyond—Lessons Learned for Sustainability." *Current Opinion in Environmental Sustainability* 26 (2017): 17–25. doi.org/10.1016/j.cosust.2016.12.005.
- van Dooren, Thom. "Invasive Species in Penguin Worlds: An Ethical Taxonomy of Killing for Conservation." *Conservation and Society* 9, no. 4 (2011): 286–98.
- Vines, Emma. "A Common Appeal: AngloBritish Nationalism and Opposition to Europe, 1970–1975." *Australian Journal of Politics and History* 61, no. 4 (2015): 530–45. doi.org/10.1111/ajph.12117.
- Watkinson, Philip. "On Appearance: Or What the Loch Ness Monster Can Teach Us about Contemporary Performance." *Performance Research* 23, nos. 4–5 (2018): 251–55.
- Westwood, Jennifer, and Sophia Kingshill. *The Lore of Scotland: A Guide to Scottish Legends*. London: Random House, 2009.
- Whyte, Constance. *More than a Legend: The Story of the Loch Ness Monster*. London: H. Hamilton, 1957.
- Williams, Gareth. *A Monstrous Commotion: The Mysteries of Loch Ness*. London: Hachette, 2015.
- Witchell, Nicholas. *The Loch Ness Story*. London: Corgi, 1989.
- Wyman, Katrina Miriam. "Politics and Science in Endangered Species Act Listing Decisions." In *Institutions and Incentives in Regulatory Science*, edited by Jason Scott Johnston, 99–130. London: Lexington Books, 2010.
- Yusoff, Kathryn. "Biopolitical Economies and the Political Aesthetics of Climate Change." *Theory, Culture, and Society* 27, nos. 2–3 (2010): 73–99.