

<b>Institution:</b> University of Cambridge		
<b>Unit of Assessment:</b> 27 English Language and Literature		
<b>Title of case study:</b> Deep Time: Public and Media Impacts of Writing About Geology, Politics and the Anthropocene		
<b>Period when the underpinning research was undertaken:</b> 2003–2019		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>  Dr Robert Macfarlane	<b>Role(s) (e.g. job title):</b>  Reader in Literature and the Geohumanities	<b>Period(s) employed by submitting HEI:</b> October 2003–Present Day
<b>Period when the claimed impact occurred:</b> August 2013–October 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> N		
<b>1. Summary of the impact</b> (indicative maximum 100 words) <p>Dr Macfarlane's research concerning deep time, mountains and the 'geological imagination' has become influential in discussions of 'deep time awareness' and geological cultures. The influence and wider contribution of this body of research has shaped public discourse around the Anthropocene, intergenerational and ecological justice, and environmental responsibility. This research has inspired the public, landscape writers, policy makers and organisations, and advocacy groups. It has contributed to the creative economy by means of bestselling books, television/radio, and a globally successful film. It also resulted in substantial public interest in the Scottish writer Nan Shepherd (1889–1984), and this revival has challenged a heavily masculinised tradition of 'mountain literature' with a gender-balanced discourse.</p>		
<b>2. Underpinning research</b> (indicative maximum 500 words) <p>Macfarlane's research stems from the preoccupation that the living world is in crisis, characterised globally by anthropogenic climate change, habitat loss, pollution and mass extinction. These unfolding events will leave legacies of harm that persist far into the (post) human future. The crisis exists in part due to narratives of human mastery over the natural world, which treat it as passive 'standing resource'. 'Deep time' refers to the immensities of geological time as it extends into the Earth's past and future. For seventeen years Macfarlane has been researching and publishing on questions of 'deep time' in relation to geology and mountains.</p> <p>In 2003 Macfarlane published <i>Mountains of the Mind</i> (Granta/Pantheon; London/New York; translated into 10 languages [R1]), which explored the 'revolution of perception' concerning mountainous landscapes that occurred across Britain and Europe between the late 18th and early 20th centuries. <i>Mountains of the Mind</i> connected this 'revolution' to geology's emergence as a science in the late 1700s, and the revelation of the Earth's 'deep time' histories and futures accompanying its discoveries. In 2011 Macfarlane produced a new edition (with a substantial introductory essay) of Nan Shepherd's account of the ecological and deep-time existence of the Scotland's Cairngorm Mountains, <i>The Living Mountain</i> (1977) [R2]. This is unusual among works of mountain literature because it is by a female writer, and also because it does not fetishise the summit as the main goal of mountaineering. It rather celebrates pilgrimage and meditation as an approach to mountainous landscapes. In 2014 Macfarlane edited a new edition of Shepherd's poems, <i>In The Cairngorms</i> (1934), again contributing a foreword essay [R3].</p>		

In 2019 Macfarlane published *Underland: A Deep Time Journey* [R4], the writing of which was funded by a British Academy Mid-Career Fellowship. *Underland* represented the capstone of the larger body of work by Macfarlane, undertaken between 2003 and 2019, concerning the relationships of geology, ontology, deep time, and politics. It is based on a series of deeply-researched journeys into underground spaces, from ice caves to burial chambers, and reflections on the literature of such spaces and of deep time more generally. The ethical question at its heart is that posed by the immunologist Jonas Salk: 'Are we being good ancestors?' *Underland* explores the practice of 'good ancestry' in light of the ecological crisis ('The Anthropocene'), and argues for an increased 'deep-time' awareness of inter-generational justice and geological cultures [R4 and R5]. In 2019 it became a national bestseller in both the UK and the USA, won the Wainwright Prize for Nature Writing, and was reviewed/discussed in more than 200 print and broadcast venues worldwide.

### 3. References to the research (indicative maximum of six references)

[R1] Robert Macfarlane, *Mountains of the Mind: A History of a Fascination* (Granta: London, 2003), ISBN: 1862075611.

[R2] Robert Macfarlane, *Underland: A Deep Time Journey* (Penguin: London, 2019), ISBN: 9780241143803.

[R3] Nan Shepherd *The Living Mountain*, edited by Robert Macfarlane (Canongate: Edinburgh, 2011), ISBN: 9780857861832.

[R4] Nan Shepherd, *In The Cairngorms*, edited by Robert Macfarlane (Cambridge: Galileo, 2014), ISBN : 9781903385319

[R5] Robert Macfarlane, 'Generation Anthropocene', *Guardian*, 1 April 2016. <<https://www.theguardian.com/books/2016/apr/01/generation-anthropocene-altered-planet-for-ever>>

Robert Macfarlane, *Underland*, British Academy Mid-Career Fellowship, January 2018 – December 2018, RG87261, GBP110,107.42.

R1 and R2 are peer-reviewed works of scholarship; the former was submitted to RAE 2008, and the latter is being submitted to REF2021 (double weighted). The reception of R2 especially (reviews and commentary; the Wainwright Prize) demonstrates its substance and significance. R3 (which was submitted to REF 2014) and R4 are scholarly editing projects bringing important nature writing to a scholarly and wider audience. R5 resulted directly from the research and promoted its findings and proposals to a large readership.

### 4. Details of the impact (indicative maximum 750 words)

#### Commercial and social impacts

*Mountains of the Mind* and *Underland* have had 'big commercial impact' in the publishing economy, nationally and internationally (noted by Macfarlane's literary agent) [E1]. *Mountains of the Mind* (2003) 'continues to sell steadily in the UK' [E1], and 'since reissuing *The Living Mountain* as part of [the] Canons series in 2011, the book has gone on to be a perennial bestseller on the Canongate list, [text removed for publication]' [E2]. *Underland* (2019) has been translated into 24 languages (Arabic, Catalan, Complex Chinese, Simplified Chinese, Croatian, Czech, Danish, Dutch, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Slovak, Spanish, Swedish, Turkish) [text removed for publication] [E1]. The popularity of these publications led to collaborations with film-makers, conservationists, television/radio producers, and musicians on cross-media projects, which have contributed to the work of organisations and communities, especially concerning climate emergency and cultural representations of landscape.

A reader's published response to Macfarlane's 'Generation Anthropocene'[R5] noted: '[the essay] made a huge splash among environmental academics, but its appearance in a popular newspaper also brought it to the forefront of public consciousness [...] It struck a chord with me in a way that other literature on climate change had not [...] I began to make changes to my life'[E3]. Another reader of *Underland* comments: 'It made me finally become active in the fight against climate change'[E3].

Whilst researching and writing *Underland*, in 2018, Macfarlane co-edited (with Patrick Barkham and Chris Packham) *A People's Manifesto For Wildlife* (PMW), 'an independent report prepared by 20 leading environmental thinkers' [E4] (p1). The Manifesto recommended 200 measures 'that would immediately improve the status or outlook for wildlife in the UK' (p1); one of its co-authors notes that Macfarlane's contribution 'undoubtedly broadened the appeal and relevance of the document' (p2) [E4]. The PMW, supported and endorsed by the Soil Association, was delivered to the Department for Environment, Food and Rural Affairs (DEFRA) at 10 Downing Street in person by a 10,000-strong march of supporters in September 2018 [E4] (p. 3). As a direct result of engagement with the PMW, one of the co-authors of the manifesto was approached by the CEO of the 9000-acre privately-owned Castle Howard estate in Yorkshire to establish an advisory board to oversee an initial rewilding of 500 acres of the estate, with further wilding efforts planned [E4] (p. 2). In December 2019, the Green Party released their 'New Deal for Nature' proposals for a national policy, which declared that 'Some of the ideas behind our policy recommendations were inspired by *A People's Manifesto for Wildlife* (Packham *et al.* 2018)' [E4] (p. 64).

### Impact on national and international creativity and culture

The *Wall Street Journal* wrote: '[Macfarlane] is the great nature writer, and nature poet, of this generation' [E1], and the contribution of his research to culture is further demonstrated in the continuing impact of *Mountains of the Mind*. Its wide reach is evinced by its adaptation into the film *Mountain* in 2017, with an international release by IMAX in 2018 [E5] (p. 8). The film was directed by Jennifer Peedom, and Macfarlane's script was voiced by Willem Dafoe. It premiered at the Sydney Opera House in June 2017 with a live performance by the Australian Chamber Orchestra, 'The audience creates an additional, parallel, soundtrack, with collective gasps, sighs of relief and, when the feats of daring verge on implausible, incredulous laughter' [E5]. The film travelled with a live-score performance from the ACO in Australia and New Zealand, and had substantial international release across Europe, Japan and North America. *Mountain* received several awards, for example, at the eighth Australian Academy of Cinema and Television Arts Awards [E5]. Federal agency Screen Australia lists *Mountain* as having achieved the third highest box office revenue of all time for documentaries, grossing AUD 2,030,290, with 87% approval rating on the leading film review site rottentomatoes.com [E5].

Macfarlane 'was the first writer to champion Nan Shepherd' [E6], and now her work has become a powerful source of inspiration for creative artists. The 2011 reissue of *The Living Mountain*, with a long introductory essay by Macfarlane, was brought to national attention through a BBC film (*The Living Mountain: A Cairngorms Journey*) about the Cairngorms and Nan Shepherd, authored and presented by Macfarlane. The film aired on BBC Scotland in November 2014, capturing a 5% audience share, and first aired on BBC4 in February 2015, with three repeats and a total audience of at least 475,000 [E7]. In May 2014, Nan Shepherd's only collection of poetry, *In the Cairngorms*, was published with an introductory essay by Macfarlane. 'The Living Mountain', a BBC4 radio documentary about Shepherd and her landscapes, was featured as 'Pick of The Week' on Radio 4 in January 2014, and broadcast again on Radio 4 Extra in January 2019 [E7]. This public exposure then led to Macfarlane's *Upstream* (2019), a BBC4 film about the Cairngorms, with an epigraph from Nan Shepherd's work. It was reviewed in *The Guardian* as 'stunning... a timely reminder of Britain's natural beauty amid the climate crisis' [E8].

The ensuing revival of Shepherd's work 'has sprinted round the world: readers in China, France, Slovenia, Germany, Korea, Catalonia, the Netherlands, Italy, Spain and Taiwan are now aware of the Scottish author's existence to a degree unimaginable a few years ago' (literary executor of Nan Shepherd, who credits Macfarlane with 'haul[ing] her out of oblivion') [E9]. Macfarlane's writing and broadcasting on Nan Shepherd's *The Living Mountain* amplified underrepresented voices in creative writing practices, and in particular women writers. In 2019 Canongate launched the Nan Shepherd Prize, supported and promoted by Macfarlane, to provide 'an inclusive platform for new and emerging nature writers from underrepresented backgrounds' [E2]. In March 2020, Macfarlane launched his Twitter Book Club which selected *The Living Mountain* as the first pick (with over 3,700 likes); 'he has played a significant role in helping Canongate to revive mass interest in Shepherd and all her books' [E2].

As a direct result of this revival, Nan Shepherd's literary executor describes how the reissue of *The Living Mountain* has 'a specific link to the 2016 decision of the Royal Bank of Scotland to feature Nan on their £5 note. A member of the selection committee put Nan's name forward after he took the stand-alone edition on a canoe trip. RBS directors were given copies' [E9]. She thus became the first female author to feature on a British banknote.

#### 5. Sources to corroborate the impact (indicative maximum of 10 references)

- [E1] Literary agent, David Higham Associates testimonial 02.10.2020 and updated *Underland* languages information 19.10.2020 and sales figures 21.10.2020,
- [E2] Publishing Director, Canongate testimonial 14.10.2020 including sales figures and impact on Nan Shepherd's Prize.
- [E3] Reader responses: Bowden, *The Guardian*, *The article that changed my view ... of humanity's impact on the planet* 25.11.2017, Twitter response to *Underland* 14.08.2019
- [E4] Letter from environmental campaigner and contributor to *A People's Manifesto For Wildlife* 28.12.2019 (p. 1-2); Wilson-Powell, *Pebblemag*, *Will you help stop the war on wildlife?* 24.09.2018 [link](#) (p. 3); *A People's Manifesto For Wildlife* [link](#) (pp4-58); *200 ideas to make a difference in UK Conservation* pamphlet (p59); Busby, *The Guardian*, *Thousands march on Whitehall to call for end to 'war on wildlife'* 22.09.2018 (pp 60-62); *A New Deal for Nature: Proposals for a National Policy* 22.11.2019 (pp 63-86).
- [E5] *Mountain* reception and data: Rotten Tomatoes ratings [link](#); Screen Australia, *All-time top 10 Australian documentaries at the box office*, 26.03.2020; *Mountain* Wikipedia page; Stranger Than Fiction Films, *Mountain* webpage [link](#).
- [E6] Ramaswamy, *The Scotsman*, *Ascent to greatness: the charmed afterlife of Nan Shepherd*, 09.01.2017; Wounded Knee, *In the Shadow of the Good Shepherd*, album page which cites Macfarlane and Shepherd 10.12.2013 [link](#).
- [E7] Emails confirming BBC viewing figures for *The Living Mountain: A Caingorms Journey*, 23.07.2020; BBC Radio 4 Pick of the Week 05/01/2014 [link](#).
- [E8] *The Guardian*, *TV Tonight*, review of *Upstream* 29.09.2019 (p. 2).
- [E9] Testimonial from literary executor of Nan Shepherd, 21.10.2019.