

Institution: University of Plymouth		
Unit of Assessment: UoA27		
Title of case study: Nature Connections: relational engagement with nature through (co) creative practice		
Period when the underpinning research was undertaken: 2014-2018		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s): Dr Miriam Darlington	Role(s) (e.g. job title): Lecturer in English and Creative Writing	Period(s) employed by submitting HEI: September 2013-present
Period when the claimed impact occurred: 2015-2020		
Is this case study continued from a case study submitted in 2014? N		
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>Through her creative practice, which establishes immersive models of engagement with nature, Darlington's research has enabled an increase in pro-environmental behaviours. Specific benefits to charitable and environmental bodies are measured in relation to changes in the organisations' practices and operational delivery, with some businesses also evidencing an expansion of their business portfolio. The impacts demonstrated in this Case Study are:</p> <ul style="list-style-type: none"> (i) Changing attitudes and behaviours towards the natural world; (ii) Embedding creative methodologies in charitable and environmental organisations; (iii) Empowering women: female voices and participation. <p>A shift to more inclusive practice, specifically through social inclusion and gender, are notable features of points ii and iii of this case study.</p>		
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>Darlington is a leading, internationally recognised contributor to the genre of 'New Nature Writing.' <i>Owl Sense</i> (2018) [3.1], contributions to print media, specifically 'Nature Notebook' in the <i>Times</i> [3.3], and broadcast media [3.2], are a distinctive part of this contribution. Darlington's research and writing interests focus on the literature of animals, human-animal interaction, and connection to landscape and place. This work serves to interrogate and challenge anthropocentric discourses of nature writing that reinforce the culturally engrained, neoliberal western paradigm of human domination over the natural world, a paradigm manifest in western government nature conservation policy. Environmental social science critique identifies that this paradigm of human-nature relationships lies at the heart of global environmental challenges, which can only be addressed by a fundamental reframing to a relational engagement between humans and nature. Darlington's research, which proposes a radically new paradigm of human-animal-environment relationships, provides a unique platform to champion and secure relational engagement between people and nature, engendering empathy and action to support the future sustainability of the natural world.</p> <p>Darlington's work examines the tensions, overlaps and relationships between science, poetry, nature writing and the changing ecology of human-animal relations. How animals have been used to tell stories, to think with and to rethink notions of 'wildness' are explored in her book-length study, <i>Owl Sense</i>. The particular methodology has its roots in the meticulous, sympathetic immersion of 'dropping down'. <i>Owl Sense</i> is a creative non-fiction study of the tensions between the accumulation of mythology around Britain's owl species, and their ecological reality. It places a search for the animal at the heart of the narrative, revealing the part this creature plays in the ecosystem, as well as literary and cultural contexts.</p> <p>In recognising the fundamental interconnectedness between humans and nature, Darlington's work challenges the deeply embedded, knowledge-based relationship with nature, an epistemological position which has pervaded approaches to environmental education and behaviour change for sustainability. Critique from within the environmental social sciences has highlighted the need for a significant change in human attitudes and behaviours with regard to the natural world, based on this relational model, in order to safeguard the future wellbeing of human and non-human others. Darlington's research and creative practice provides an important counter to the perpetuation of human domination over nature evident in current</p>		

<p>government policy and business practices, at a time when issues of anthropogenic climate change and biodiversity loss continue to escalate.</p>
<p>3. References to the research (indicative maximum of six references)</p> <p>3.1 Miriam Darlington, <i>Owl Sense</i> (London: Guardian Faber, 2018). Longlisted for The Wainwright Prize, 2018. Translated into Dutch by Rob van Moppes and published by Prometheus as <i>De Magie van Uilen</i>, in 2018.</p> <p>3.2 Abridged and serialized as BBC Radio 4 Book of the Week, 12-16 February 2018, read by Teresa Gallagher.</p> <p>3.3 'Nature Notebook': a monthly column in <i>The Times</i> (2014-present)</p>
<p>4. Details of the impact (indicative maximum 750 words)</p> <p>4.1 Changing attitudes and behaviours towards the natural world</p> <p>The reach of Darlington's research provides opportunities to evaluate changes in attitudes and behaviours. International sales figures <i>Owl Sense</i> across print and digital platforms are 11,618; the Times 'Nature Notebooks' column has an average monthly circulation, across print and digital platforms, national and international figures combined, of 11,503,000. During 2018 <i>Owl Sense</i> became a broadcast topic for three BBC Radio 4 programmes: on publication it was serialised as the 'Book of the Week' (February 2018), typically reaching an audience of 4.5 million listeners between January and March in 2018 [5.1]. This led to Darlington curating 'Tweet of the Day' (29th April and 6th May 2018) typically reaching 1.04 million listeners between January and March in 2018 [5.1], and appearing on Libby Purves' 'Something of the Night' programme (12th March 2018).</p> <p>Thematic analysis of media reviews and reader reviews of <i>Owl Sense</i> (n=97) evidence changes in attitudes and behaviours. The accessibility of the book to a wide readership has enabled Darlington's work to reach an audience beyond those who already have a keen interest in nature, vital in increasing the general public's engagement in the pressing environmental challenges that we face. <i>The Guardian</i> noted, "<i>Owl Sense bulges with alarming facts and figures – thanks largely to changes in habitats, there are now fewer than 5,000 pairs of barn owls in the UK...</i>", and the Sunday Times "<i>You learn a great deal about owls from Darlington's book, almost without noticing it. Her skill is to make it seem she is learning too</i>" [5.3]. Readers identified how <i>Owl Sense</i> reframed their engagement with nature in relational terms, with <i>The Baptist Times</i> noting: "<i>I find myself standing on the edge with them [owls], sensing their vulnerability to our mindless trampling of their home... As my eyes are opened, I begin to care for these creatures</i>" [5.3]. Increased awareness of, and changing attitudes towards, owls and the wider natural world, emerged as a key aspect of the thematic analysis of reader reviews: "<i>I think more carefully about the inter-connectedness of all creatures - how we need to be very careful about how we affect the environment for all our creatures</i>" [5.3].</p> <p>Between February and November 2018 Darlington contributed to 12 literary festivals (total audience numbers over 2000), and 11 other community-based literary and creative arts events (total audience numbers over 900; average audience 82), speaking about <i>Owl Sense</i> and her contribution to the new nature writing genre. A qualitative thematic analysis of audience feedback of sixty-four postcards (which simply asked the question 'this event has inspired me to...') from across these events indicates the significance of this activity and of <i>Owl Sense</i> more generally, in reinforcing and extending the impact of Darlington's knowledge, research and research practice in supporting attendees' relational engagement with the natural world. It inspired them to engage in pro-environmental behaviours in support of owls, other birds, and wider nature, specifically in four areas: (i) joining local and national wildlife charities (e.g. The Barn Owl Trust and RSPB) (25% of responses), (ii) volunteering for a wildlife conservation charity (10% of responses) - "<i>I joined the Barn Owl Trust! I know so much about owls and go volunteering now</i>" [5.3]; (iii) inspiring new creative writing practices as an expression of the reader's developing connection with nature - "<i>I joined a poetry group and always write about nature now</i>" [5.3]; and (iv) going bird watching or listening, and being outside engaging with wildlife (50% of responses), and taking others with them, including those with dementia, disabilities, and children. Women, in particular, highlighted how Darlington has acted as a role</p>

model, encouraging and giving them the confidence to experience nature first-hand, on their own and with others: *“Reading about her bold quest to see owls in the wild inspired me to start being more adventurous and begin regularly exploring a local bird sanctuary. I’ve also started inviting others in my community to join me, young women who like me sometimes don’t feel like we are ‘allowed’ to take up space or make time for ourselves”* [5.3]. These behaviour changes are also echoed in online reader reviews of *Owl Sense*, with one reader commenting *‘Now I listen and look [for owls] wherever I go’* (Facebook Review – 5.3), and another *‘I now feel ready to make my own journey to discover a new depth of understanding for our natural world’* (Amazon Reviewer, 5.3).

Owl Sense was also used by two nature campaigns i) **‘Owl Watch’** used the research to support the launch of a major campaign in March 2018. Local news coverage (*Harrowgate Advertiser*, 16/03/18) details the ways that Darlington’s work engaged the public in helping to detect and safeguard four of the owl species explored in *Owl Sense*, living within Nidderdale Area of Outstanding Natural Beauty. Between March and October 2018, 380 records were submitted by the general public, with 405 owls recorded in total (<https://nidderdaleaonb.org.uk/owl-watch/owl-watch-results-so-far/>). ii) **Herefordshire Wildlife Trust** invited Darlington to disseminate her research, through a public reading, as part of a fundraising event for conservation projects in the local area (2018, raised £1,900) [5.4].

4.2 Embedding creative methodologies in charitable and environmental organisations

Charitable and **environmental** organisations sought Darlington’s research and practice to develop bespoke creative methodologies to further their own aims and objectives. Some of the most profound changes that this case study demonstrates include working with partners who specialise in (i) social inclusion and (ii) nature conservation and behaviour change for sustainability. The following charitable and community organisations have benefited most from Darlington’s research in the development of **new models** of engagement with children, predicated on principles of **co-creation** and **creative relational engagement**.

4.2.1 Social Inclusion- Effervescent: Based on her own research regarding the **therapeutic benefits** of time spent with owls (R1, R3), Darlington was the catalyst for, and led the development of, a unique, pilot partnership project with: (i) **Effervescent**, a creative, community-based, social change collective and (ii) **Hack Back CIC**, a social enterprise based in Cheshire, which uses animals to help people to lead more fulfilled lives. This pilot was part funded by Plymouth City Council (£1,000), Barnardos (£2,500), Children in Need (£9,640) and Arts Council England (£5,376). These financial resources were to the direct benefit of **Effervescent** and its local, social development work.

The pilot was a **creative** and **progressive intervention**, for children (9-10 years) displaying indicators of socio-emotional vulnerability to exploitation. Through twenty days of intensive work, delivered between May and September 2016, the intervention built empathy, understanding and trust between these vulnerable children, mediated by the presence of owls. As a result, the social isolation and conduct problems in the participating children were reduced by 28-30% - considering that most of these children face structural disadvantage and repeated trauma throughout their lives, this improvement in just 20 days contact was an important finding for the pilot project and its regional and national partners. Barnardos stated: *“this completely inspired us to rethink the way we approach social care...I was challenged to think differently about how we [at Barnardos] approach social care projects going forward. We believe that we put children at the centre of the work we do; Effervescent challenged us to rethink that and to do that more”* (E5).

Effervescent and **Hack Back** note changes in their practice and **expansion** of their **business** as a result of this pilot project.

1. For **Effervescent**, this work led directly to **further investment** of £120k from the Esmée Fairbairn Foundation to **extend research into how creative practices** can support young people with their **mental wellbeing** and social relationships. Working with a further 60 young people, this enabled the methodology co-created with Darlington to be fine-tuned, and *“resulted*

in many of these young people reporting not only that it made a significant difference to their wellbeing, but that this intervention was the only intervention that they believed had had a significant positive effect” [5.7].

2. **Hack Back CIC** noted significant changes and refinements in **working practices** as a result of this project, as well as an **expansion** of their business into **new sectors**: Hack Back developed further collaborative creative projects with a local school for **austistic young people** in partnership with Wigan Council; in the **business sector**, Hack Back worked with KPMG in the City of London to improve mental health and wellbeing for their employees [5.6].

4.2.2 Wildlife conservation – The Wild Planet Trust @Paignton Zoo: Darlington’s research methods and research practice have instigated a change in the methodological approach underpinning **The Wild Planet Trust’s** schools-based **conservation education programme**. Previously this programme was (i) grounded in a knowledge-based, rather than a relational approach to the natural world; (ii) did not include bird life; and (iii) did not provide opportunities for the children to have first-hand encounters with animals or birds. In 2018 the Trust developed a new Interpretation and Education Strategy: **‘Love, Care, Protect Together’**, based on a relational approach to engaging people with animals. Darlington’s expertise was sought to **co-create** a new educational experience, with creative practice at its centre, to showcase this **new strategy** in action. Over a period of ten months from July 2018 to May 2019, Darlington led a **three-way collaboration** between herself, the Wild Planet Trust’s Education Team based at **Paignton Zoo**, Devon, and a **storyteller**, to **co-create** a new creative learning experience. The target audience was Key Stage 2 pupils (7-9 years). From this process a ‘Birds and Literacy Education Pack’ was developed for delivery at the Zoo, which: (i) develops a relational engagement between children and birds; (ii) develops confidence and curiosity in working with creativity as a way of exploring birds and nature; (iii) uses language and development of literacy (written and spoken); and (iv) enhances learning and understanding about bird ecology, adaptation and conservation. To reinforce and develop emotional connection and literacy skills, a follow-up writing pack was also co-created, centred on creative writing activities, to be used by school teachers involved in the programme as a follow-up to the day spent at the Zoo. While the project could not be launched in Spring 2020 due to the Covid-19 pandemic, testimonials from the remaining Education Development Co-ordinator at the Zoo and a KS2 teacher set out the ways in which adopting a creative approach would enable the anticipated change [5.7].

4.2.3 Wildlife conservation – British Trust for Ornithology (BTO): In March 2020 Darlington worked with the BTO’s Communications team to co-create a ‘Connecting with Birds of Conservation Concern Education and Literary Pack’, aimed at extending the reach of their Red Sixty Seven project to Year 6 pupils (aged 10-11 years) in all of the **16,769 primary schools** in England. This education pack builds on Darlington’s work with The Wild Planet Trust, and was adapted to focus on UK birds of conservation concern, and to fit with the curriculum post SATS. The education pack: (i) raises awareness of the threats to UK bird species from human activities; (ii) develops a relational engagement between children and birds; (iii) increases understanding of bird ecology and conservation work; (iv) builds confidence and curiosity in working with creativity as a way of exploring; and (v) enhances the use of language and development of literacy (written and spoken). Adopting this **creative practice** though this resource is a major step change in the BTO’s work, enabling the Trust to implement a key goal of its new public engagement strategy ‘An Agenda for Change’ (2019) (delivery and implementation, delayed due to COVID) (E8).

4.3 Empowering women: female voices and participation

Embodied experience is understood as an important element in supporting the development of a more relational engagement with nature. For **women**, the issue is further exacerbated, as scholarship has identified the gendered aspect of access to the natural world, as women encounter far more constraints to participating in outdoor leisure pursuits. Therefore, mechanisms and approaches, such as Darlington’s first-hand research and writing, which support and enable women to explore and enjoy time in the natural world, are of particular significance.

4.3.1. Enabling female experiences of nature: Darlington's research and practice has enabled a shift in the ways that **women's voices** are perceived within the field of nature writing, in terms of (i) engendering a relational engagement between humans and nature, and (ii) providing a role model for other women writers. Leading critics in this field note: i) *"Darlington's work has been a significant contribution towards altering this [male] narrative to shift the gaze from the inward self-centred, often oppositional proving ground in which the male writer assumed central and commanding role in his relationship with the place and species,"* and ii) *"In a field dominated by able-bodied white men, both past and present, Darlington is an important role model for emerging female writers"* [5.2]. This important shift in perspective, and the relative absence of female voices in this field, led *The Times* editor to re-evaluate their 'Nature Notebooks' column, with Darlington becoming one of the first women to contribute to the column. Previously this column had only male authors [5.9]. Six years on, Darlington still holds this position and has produced over 70 individual pieces. Appreciating the value of these contributions, and the importance of amplifying female voices in trade and media publications, a publisher in this area notes, in relation of Darlington's work, that the more *"examples we have of **women going fearlessly out**, and ways that women can do it.... are illuminating light for other women who might want to also have access to the wild and encounter the wild around them in different ways"* [5.2].

4.3.2: Barn Owl Trust: Written feedback on *Owl Sense* demonstrates that it motivated readers to join the RSPB, the Barn Owl Trust and other environmental charities (as above, 4.1, 5.3). Darlington worked in partnership with the **Barn Owl Trust** (BOT) to develop a new approach to the Trust's **public engagement practice**, centred on encouraging women to participate in bird watching.

Darlington trained and supported a **female member** of the **Trust's staff** to become the first woman from the BOT to be a **leader** of a series of **women-only** bird watching events. The first event, held on 9th March 2020 at a BOT reserve in South Devon, involved women aged 40-70 years. A post-activity **questionnaire** identified that: 100% of participants valued the experience of birdwatching with other women, as it provided a social, supportive and encouraging environment; 82% of participants felt more confident about going birdwatching in the future; 73% reported an increase in feelings of care towards birds; 82% reported an increased interest in caring for birds; 100% of participants increased their knowledge and awareness of birds and their conservation challenges; and 100% of participants expressed a desire to participate in similar events in the future. The results from this questionnaire are indicative of the significance of this gendered approach in supporting **women's engagement** in bird watching and bird conservation [5.10].

The BOT confirm that they plan to continue the intervention post-Covid-19 restrictions [5.10].

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

- 5.1 Sales and circulation figures (Guardian Faber, BBC)
- 5.2 Trade and media testimonials (Lacey, Woofson and Aalto)
- 5.3 Thematic analysis and data for media, reader reviews and testimonials of *Owl Sense*
- 5.4 Summary data sheets: Literary festivals, events, conferences, Herefordshire Wildlife Trust
- 5.5 Effervescent Summary Report and follow-up testimonial (PDF)
- 5.6 Hack Back CIC testimonial
- 5.7 Education Development Co-ordinator at Paignton Zoo and a KS2 teacher, testimonials
- 5.8 Mike Toms, Head of Communications, British Trust for Ornithology, Testimonial.
- 5.9 Audio recording and transcript of interview with former Times Deputy Comment Editor Birdwatching questionnaires and analysis, and testimonial from David Ramsden, Head of Conservation at the Barn Owl Trust