

Indigenous worldviews in a Western setting: Experiences of place-based connection, culture and environmental responsibility in Ireland

Imogen O'Connor

University of Wales, Trinity St. David, Lampeter, Wales, United Kingdom.

First received: November 2025

Accepted for publication: February 2026

Abstract: This mixed method study employed survey and interviews to explore, in an Irish context, whether Indigenous perspectives on nature have persisted. It examined sixty-five participants' experiences of connection and communication with nature places, their place-based cultural influences, and their environmental beliefs and behaviours.

Employing a phenomenological perspective, findings revealed often strong connections, attachments and embodied communications with nature places, shaped by folklore and cultural traditions. These environmentally attuned relationships offered a wide range of benefits and prompted reciprocal responses toward nature places, including practical and spiritual care and broader engagement in pro-environmental behaviours.

Most participants connected with nature places through a lived relational worldview aligned with Celtic cosmology resonant with global Indigenous perspectives. This was characterised by beliefs in nature's sentience, sacredness, and corresponding requirements for ethical responsibility. Nature communications were frequently associated with transpersonal experiences including personifications of nature as calming or mothering and often accompanied by feelings of awe and wonder.

The findings indicate that despite Westernisation and the legacy of a colonial past, Indigenous lifeworlds and cosmologies grounded in attuned relationships with natural places, sustained and lived through religious/spiritual heritages, culture and folklore, persist and continue to inform contemporary ecological consciousness and behaviour in Ireland.

Keywords: *Place-based connection; Environmental attunement; Human/more-than-human relations; Cultural geography; Celtic and Indigenous ontologies; Environmental ethics; Pro-environmental behaviour; Ireland*

Introduction

Research undertaken by the Environmental Protection Agency (EPA) in Ireland (Leiserowitz *et al.*, 2021: 2) indicates that a majority of Irish people believe that climate change is a worrying reality caused at least in part by human activities. The severity of current and projected effects of climate change and its anthropogenic antecedents is substantiated in Ireland by a report issued by the EPA (Thorne *et al.*, 2023) and internationally by scientists such as Trenberth (2018) along with a recent review by Singh and Shindikar (2023) of one hundred articles on climate change. Many authors including Berry (2011), Mathews (1994), Artmann (2023). and Plumwood (1993) argue that the Western dualistic mindset which sets humans apart from nature to be objectified and manipulated accordingly, has significantly contributed to the current ecological crisis, and the responses to it. Indigenous scholars from non-Western Indigenous perspectives (Kimmerer, 2002, Mustonen *et al.*, 2022) and Blackie (2016) commenting on Celticism in the Northern hemisphere suggest that Indigenous non-dualistic practices, knowledge and beliefs might offer alternative pathways to healing the current ecological devastation.

There is a growing movement in Ireland focused on reclaiming Indigenous traditions through broadcasting,¹ educational programmes and collectives,² ecology centres³ and publications promoting Irish language, folklore and Indigenous spirituality as ways of reimagining more attuned relationships with nature (See, for example, Britton 2023; Magan 2018, 2022, 2024; Murray 2023).

Cronin (2017) suggests that in Ireland, wider issues pertaining to environmental threats have originated from concerns over their impacts on particular communities and place. Cronin suggests that this can lead us to ask what exactly was the nature of the Irish relationship to the environment in modern times.

This research investigates how a sample of people with interests in the natural environment, most of whom have lived or who are currently living in Ireland, describe their relationship with places that they feel connected to and in particular, their experiences of intercommunication with nature places. It also seeks to identify the cultural influences and spiritual beliefs informing these relationships and associated pro-environmental beliefs and behaviours.

The study attends to issues generally associated with cultural geography but extends its focus to include phenomenological and ethnographically informed approaches in order to examine the emplaced sensory and spiritual experiences, cultural beliefs, and environmental ethics articulated by the participants. While there is research in Ireland illustrating some places such as megalithic sites, mass rocks and holy wells are associated with the numinous or sacred (O'Brien, 2008; Ray & McCormick eds., 2023, White,

¹ For example, RTE, < <https://about.rte.ie/2024/08/30/rte-launches-new-season-of-unique-public-service-content-featuring-real-irish-stories-and-celebrating-irelands-landscape-culture-and-creativity/> >.

² For example, Scoil Scairte, [accessed 10th June 2025 at < <https://www.thetrailblazery.com/scoilscairte> > and Indigenous Ireland, < <https://Indigenous.ie/> >].

³ For example, An Tairseach < <https://antairseach.ie/> > and Brigit's Garden < <https://brigitsgarden.ie/> >

2020), the focus of this research is to explore how sensory and spiritual experiences arise in a particular cultural context through embodied relational engagement with place. It aims to offer another narrative to the widely cited human disconnect from nature, characteristic of Western modernist cosmologies (St Louise, 2019; Plumwood, 1993; Zylstra *et al.*, 2014). The intention is to uncover whether Indigenous worldviews described by writers such as Aikenhead and Ogawa (2007), incorporating relational, monistic and place-based ontologies, might exist in a Western setting. It seeks evidence for the presence of alternative cosmologies and behaviours in Western settings which evoke human experiences of self as relational and embedded in the wider self of the environment. Eisenstein (2018) and others (Macy, 2021, Naess 2007) have suggested that a sense of interconnectedness with nature guides humans towards a desire to love and protect the environment, with Cronin (2017: 111) suggesting that

In terms of scale and affectivity, engagement with the increasing urgency of anthropogenic climate change can only really begin to take effect when done from the ground up, starting with one's own sense of place in local communities, places, and regions, rather than working from the other way around.

Literature review

Landscape as context for sensory and imaginal experiences

The seminal work of Tim Robinson extended over forty years to map the physical, cultural and sensorial contours of the Burren, Connemara, and the Aran Islands. Duffy (2016) suggests that his contributions reflect the development of trends in geographical thinking on landscape from tangible material representations to explorations into how landscape is perceived and represented through to more recent considerations of their sensorial and imaginative aspects. Not only did Robinson's work highlight the central significance of an indigenous Gaelic language and storied landscape (Duffy, 2016, Cronin 2017), but also the importance of a slow and immersive sensorial engagement in these places that would be felt emotionally in the 'bones' (Duffy, 2016: 24). More recently, Magan (2024) has contributed to the discourse on how the Irish language is deeply connected with the landscape it arose from.

Research in Irish settings has begun to emerge that supports the importance of sensory and emotional connection with nature for health, wellbeing and enhanced learning opportunities (Carlin *et al.*, 2020, Whelan and Kelly, 2024) with one study exploring how human encounters with megalithic sites facilitated a sense of connection with nature, cultural heritage and the sacred (White, 2020). Cronin alludes to the contemporary leaning in ecocritical thinking towards the 'affective' aspects of how we live in places as opposed to the use value of place-based relations for people (Cronin, 2017). However, while Bell *et al.*, (2023) present a review in relation to sensory engagements with nature found in therapeutic landscapes literature, ethnographic studies exploring how people in Western settings describe personal experiences of their intersubjective sensory, emotional and spiritual experiences of nature are harder to locate.

A phenomenological approach to engagement with nature places

Founded by Husserl (1970), phenomenology offers an epistemological lens through which to view human experience with place as intersubjective and embodied (Abram, 2012) and intertwined with a co-creating of landscape (Tilley, 1994). Husserl described this intersubjective world of immediately lived experience as it is lived prior to all thoughts about it as the 'Lebenswelt' or lifeworld (Abram, 2012). It is the ground of all knowledge, theories and reflection. Husserl saw the human body as the subjective instrument for experiencing through an associative empathy, the bodies of other experiencing subjects (Abram, 2012: 35) and he applied the concept of *intersubjectivity* to describe this process of reciprocal perception (Lane, 2002). Embodied experiences occur through a variety of means: perception/senses, bodily movement, emotion and mental processes involving belief systems, decision-making and memories (Tilley, 1994). The phenomenal field can be '...seen to be inhabited by multiple subjectivities...a collective landscape, constituted by other experiencing subjects as well as by oneself' (Abram, 2012: 37). These co-created landscapes according to Tilley (1994: 26) are

... lived in and through, mediated, worked on and altered, replete with cultural meaning and symbolism...The place acts dialectically so as to create the people who are of that place.

Lane (2002) suggests that the study of sacred place in the American context, has developed in three different directions: the ontological, the cultural and the phenomenological. The first two approaches acknowledge a sacred/profane dichotomy. The ontological is associated with the work of Eliade who saw the sacred in place as something to be discovered, 'manifesting its own clithonic power and numinosity.' (Lane, 2002: 43). The cultural approach associated with Emile Durkheim views sacredness of place, as culturally bestowed and contested rather than discovered. Finally, the phenomenological approach allows one to look beyond the dichotomy of sacredness in place, as either discovered or bestowed by focusing on the dynamics of the experience encountered in relationship between human and place.

Indigenous ontologies and ways of being

The term indigenous, according to Johnson (2021), refers to those born in the land in which they live, and is associated with peoples who have long standing spiritual relationships with the land and its human and more-than-human beings and their descendants. The United Nations Permanent Forum on Indigenous Issues (2015) links indigeneity with characteristics such as self-identification, historical continuity to precolonial ways of life and strong links to territories surrounding resources. The term is complex with political, moral and legal connotations revealing the contested nature of its meanings and usages (Johnson, 2021). For example, while indigeneity is often associated as grounds for advocating the rights of the colonized-Indigenous, it can be used by state institutions in racist discourse to exclude others and outsiders (Johnson, 2021).

Ingold (2021) challenges these *genealogical* models of indigeneity rooted in ancestral lineage and territory, and proposes instead a *relational* model, located in

a phenomenological framework, whereby a person is continually coming into being through active engagement with the land and its inhabitants. He describes indigeneity as a process in which ‘...both cultural knowledge and bodily substance are seen to undergo continuous generation in the context of an ongoing engagement with the land and with the beings – human and non-human – that dwell therein.’ (Ingold, 2021: 133). From a cultural viewpoint, writers such as Aikenhead and Ogawa (2007), Hart (2010), Kovach (2021) and others (Wilson, 2020; Flanagan and O’Sullivan, 2016) suggest that Indigenous worldviews are associated with monistic ontologies, where matter/mind and sacredness are one reality arising out of an animistic philosophy of the world, experienced as intrinsically relational, place-based and carrying ethical responsibilities for the other more-than-human kinship relations of place. Ní Cassaithe and Kavanagh (2024) describe these cosmologies as encouraging spiritually imbued relationships of respect and care towards nature. Harvey (2005: xvii) views animism ‘...as being concerned with learning how to be a good person in respectful relationships with other persons.’ He places emphasis in animism on the personhood ascribed both to humans and more-than-humans, which comprehends all as subjects rather than objects, thus engendering consequences for promoting ethical behaviour and relational reciprocity. Broadly following Ingold’s *relational* approach but incorporating elements from research into Indigenous worldviews, I will refer to the term *Indigenous as a process of dwelling and knowing, rooted in embodied experiences of intersubjective relationships with place and its more-than-human habitants involving reciprocal ethical responsibilities, arising out of a lived cultural history and a sacred/mythical/monistic awareness.*

Irish Celtic ontology

The Celtic tradition in Ireland as described by Whelan (2010: 9-19) has a cosmology similar to other Indigenous traditions as described by Aikenhead and Ogawa (2007: 556-564) and Ní Cassaithe & Kavanagh (2024: 47). Whelan identifies five features of Celtic consciousness: its monistic cosmology, its animistic character, ethical responsibilities of living in right relationship with the earth, the seasonal, cyclical nature of time, and finally, the importance of story, mythology and ritual. Blackie (2016) views a sense of belonging to place as a central aspect of the Celtic identity which arises out of the common landscape and environment. Celtic relational ontology was reflected historically in the Irish legal system of Brehon Laws which included prescriptions for the treatment not only of people but for water, animals, trees and bees (Fields, 2020) and in ancient Irish kingship rites or *Bainis Rí* which included a ceremonial marriage by the king with the goddess of the land to ensure her protection (Blackie, 2016:5, Ó Duinn, 2000). The arrival of Christianity in Ireland in the sixth century began a process of assimilating the older Celtic pagan traditions and their sacred sites into Christian practices and places of worship (Harney 2017). However, there is evidence to suggest that these sacred places accommodate pre-Christian Indigenous spiritualities along with the Christian overlay, including the use of outdoor secluded spaces where mass was held during the colonial era of English oppression (O’Brien, 2008). In the seventeenth century, the implementation of the penal laws imposed legal, religious and cultural restrictions upon the Indigenous

Roman Catholic Irish and to a lesser extent on protestant dissenters (Connolly, 2008). Kiberd (1996: 5) articulates the complexity of the influence of British occupation and the unique position of Ireland as ‘...the first modern people to decolonise in the twentieth century.’ The Celtic revival cultural movement of the late nineteenth and early twentieth century, a reaction to British colonial cultural dominance, formed part the attempt of nationalists to strengthen a national identity through the reclamation and rediscovery of the Irish heritage – the language, mythology, folklore and music (Kiberd, 1996, Leerssen, 1996).

Environmental ethics and behaviours

Taylor (2010) has explored facets of modern environmentalism which include deep spiritual connection with nature and a sense of interdependence and kinship with and ethical responsibilities towards the rest of life, and which resemble what he coins a ‘dark green religion’. In the Western tradition, environmental ethics has opened the debate concerning the extension of intrinsic value and moral consideration – previously centred on anthropocentric rights – to other-than-human entities, not only to animals, but also to plants and sometimes ecosystems (Attfield, 2014; Curry, 2010). Deep ecologists such as Leopold (2020), Naess (2011), Macy (2021) and Seed (2007) encourage the development of an ecological self which embraces all life forms. Moreover, there has been a growing interest in granting legal rights to natural entities such as rivers in ways that recognise, in Western legal systems, the validity of Indigenous non-Western traditions (Cano Pecharroman, 2018, Gellers, 2021).

Articles by Whitburn *et al.*, (2020), and Gifford and Nilsson (2014) highlight research on the relationship between nature-connectedness, attunement to nature and pro-environmental attitudes and behaviours, and how culture and cultural worldviews influence pro-environmental concern and behaviour.

Methodology

More than human Participatory research and transpersonal paradigms

A more-than-human participatory research methodology (MtH-PR) was chosen as the guiding philosophical and methodological framework to reflect the nature-based subject matter under study here (O’Connor 2025). Noorani and Brigstocke (2018:10) describe more-than-human methodologies as ones ‘...that invite non-humans to participate actively in the research process, or that find ways of identifying and amplifying the role of non-human agency in the construction of research practices.’ The term *more-than-human* is employed rather than *non-human* in order to resist the hierarchical framing implicit in the latter, which positions the human as the ontological centre from which all else is derived. MtH-PR has included collaborations with both animals and plants (Bastian *et al.*, 2016). Part of this research project involved an exploration of whether it might be possible to include the collaboration on a more-than-human ecosystem within a Western academic research milieu. In this research, the more-than-human co-researcher was an acre and a half of woodland and meadow in north county Sligo

lived with, planted and tended by the researcher over a period of twenty-four years. A detailed account of the more-than-human methodological framework informing this research, including its theoretical grounding and practical application, is provided elsewhere (O'Connor, 2025).

The MtH-PR approach was enhanced by incorporating aspects of transpersonal research which extends the limits of human experience beyond the human self into connection with the wider material and spiritual environment (Braud and Anderson, 1998). Transpersonal methodologies also seek to provide transformative opportunities for researchers, participants and those engaging with the completed research (Braud 2004). Collaboration with the more-than-human co-researcher can be viewed as generating opportunities for inspiration and ideas which guided the methodological decisions concerning the construction of the survey, the selection of the participants and focus of the interviews in respectful ways which aimed to create potential opportunities to benefit all participants.

Methods

A mixed methods approach was chosen, utilising an online survey (Appendix 1) supported by nine semi-structured interviews with participants drawn from the survey sample. In order to ensure that participants could understand and speak to questions concerning experiences of intercommunication and connection with nature places, participants were sourced through eco-oriented social networks, custodians of selected eco-oriented centres, and social networks of practitioners involved with ecotherapy/mental health. They were invited to participate in the research and also to distribute the online survey to their own networks.⁴ A snowball sampling method supporting qualitative research of atypical experiences was employed (Hennink *et al.*, 2020). It was envisaged that the survey would collect qualitative information gleaned through open-ended questions, supported by quantitative data so that the combined information would strengthen validity (Golafshani, 2003), and guide the focus for the semi-structured interviews. The survey was worded in such a way as to encourage a mindful, time-rich engagement with the questions (O'Connor 2025:93–120). Reflexive thematic analysis (reflexive TA) associated with Braun and Clarke (2021; Braun, *et al.*, 2023) was applied to the data. This is a six-phase process that includes:

1) data familiarisation and writing familiarisation notes; 2) systematic data coding; 3) generating initial themes from coded and collated data; 4) developing and reviewing themes; 5) refining, defining and naming themes; and 6) writing the report. (Braun and Clarke 2021, p.4).

⁴ Brigit's Garden and Education Centre, Co. Galway, <https://brigitsgarden.ie/> An Talamh, Skreen, Co. Sligo, <https://antalamh.weebly.com/movement-work.html> Cran Og Eco farm, Co. Galway, <https://www.cranogecofarm.com/> The Organic Centre, Co. Leitrim, <https://www.theorganiccentre.ie/> The Ecotherapy Network of Ireland <https://www.facebook.com/infoeeai/> Northwest Regional group of the Irish Association of Humanistic and Integrative Psychotherapy – WhatsApp group. Other mental health practitioners known to the author but not affiliated with the above networks.

They distinguish between small q and Big Q qualitative research. Small q describes qualitative techniques of data collection that are analysed within a positivist paradigm. Big Q describes qualitative techniques that are analysed within a qualitative paradigm. This study is concerned with not only attitudes and behaviours, but with relational ontologies, lived embodied place-based contextual relationships, and considerations of researcher positionality and reflexivity (O'Connor, 2025) and as such, is situated within the Big Q paradigm. The first question on the survey acknowledged the centrality of the participants' worldviews by asking them first to identify a nature place special to them. The proceeding questions followed lines of enquiry mainly based on their identified nature place.

Quantitative aspects were utilised to substantiate qualitative patterns rather than produce generalisable assertions. The analysis comprised both deductive and inductive elements. Deductive elements involved drawing on existing literature on relational ontologies, philosophy and environmental ethics to frame research questions and add to the analysis. However, the analysis itself was mainly inductive, 'dwelling with' the data over considerable time to notice repeated patterns and meanings, while attending reflexively to researcher engagement with the material (Braun and Clarke, 2021:5). This methodological approach facilitated a way of working with participants' reports pertaining to their subjective experiences of nature connection and in particular to the often-ineffable qualities of transpersonal or spiritual encounters which Braud (1998) notes is hard to convey in ordinary descriptive language. By presenting the unedited descriptions of participants (excepting correction of misspellings and removal of unintentional repetitions common in speech), it was hoped to stay as close as possible to their subjective experience while aligning with Braun and Clarke's contention that

...even TA with a descriptive purpose is an interpretative activity undertaken by a researcher who is situated in various ways, and who reads data through the lenses of their particular social, cultural, historical, disciplinary, political and ideological positionings. They edit and evoke participant 'voices' but ultimately tell their story about the data. (Braun and Clarke, 2021:12).

The Participants

Fifty-one of the sixty-five survey participants were female, thirteen male with one preferring not to say. Fifty-three were aged forty-five and above. The gender imbalance in this sample is commensurate with broader research showing that women are more likely than men to participate in surveys, particularly web-based surveys (Becker 2022). Research consistently indicates that women are more pro-environmental than men (Echavarren, 2023), with other studies suggesting that women are more likely than men to express stronger relational values defined as '...meaningful relationships that people form with nature and with each other through nature, including ethical responsibilities, cultural significance, and identity.' (Kleespies *et al.*, 2025.) The extent to which this research mirrors the findings in this study however is inconclusive. For example, while four of the only seven participants who reported not experiencing communications from a nature place they selected and identified as special to them, were male, the two

participants who reported the least engagement in pro-environmental behaviours were both female

Fifty-five participants were currently living on the island of Ireland, most in rural or mixed urban/rural settings, with forty-one residing in the same place for over ten years. Research is inconclusive as to whether living in rural areas increases a propensity for nature connectedness (Anderson and Krettenauer, 2021). The most frequently cited daily activities for participants from high to low were research and education, working with nature/outdoors, medical/healthcare/counselling, caring for others, community/social work and religious/spiritual work. This suggests that these participants had regular opportunities for relating not only with humans but with more-than-human places and their biotic and abiotic elements, and thus possibly experienced more practice in interpersonal and environmental attunement than might otherwise be the case.

Participants were assigned a pseudonym and quotes from the survey and interviews are identified by *S* and *I* respectively after the participant's name. All identifying information has been removed except where given consent by participants to include. The findings and analysis draw on both the survey and interview data.

Findings and analysis

The findings and analysis follow three lines of enquiry: first, whether participants experienced nature places that are special to them as animate, possessing agency, and communicative; second, whether they could identify aspects of their cultural and folkloric inheritance that informed how they relate to such places; and third, whether they perceived a connection between these place-based relationships and their descriptions of their broader environmental beliefs and behaviours.

The analysis concludes by presenting a meta theme extrapolated from the three lines of enquiry.

Experiences of connection and communication

All participants were able to identify a nature place they felt was special for them. Most felt connected to this place, many deeply. For almost all of the interviewees, remembering their visceral connection to and interactions with their chosen nature place was the most important aspect of their engagement with the survey. Research indicates that connection with nature is linked to pro-environmental concern and behaviour (Nisbet *et al.*, 2009). Most participants had associations with the place spanning more than three years, a quarter of these since childhood. Over half visited at least once a week, most of these more than once weekly, with fifteen participants living there. Association with place over time is associated with Indigenous knowledge (Aikenhead and Ogawa, 2007: 559) and frequency of visits have been cited by Williams and Vaske as indicators of place attachment, (2003: 836). Three themes were identified in relation to experiences of connection and communication with the nature places: first, nature places as conduits for experiences of belonging, nurture and connection with self, second, the primacy of the transpersonal/spiritual in place communications and third reciprocal engagement

as an important feature of place connection and communication. These themes were identified by combining a thematic analysis of the qualitative responses in the first section of the survey with interview data.

Nature places as conduits for belonging, nurturing and connection with self:

These nature place connections were in general experienced as nurturing, often involving physical, mental or emotional soothing and accompanied for many by feelings of belonging. Several participants referred to the importance childhood place-connection with others equating their nature places with a sense of safety and home. Others mentioned the importance of connection to the prehistoric landscape and ancestors. Many referred to the beauty and mysterious aspects of nature places which was often associated with an expanded sense of self ‘...beyond our usual identification with our limited biological and psychological selves’ (Braud and Anderson, 1998: xxi), to encompass the natural environment and/or its elements.

Childhood memories, I’m at home there, the beauty all around me, the inspiration, the diversity of life. (Síobhra-S)

I have a strong soul connection to Carrowkeel⁵ and visit these tombs as often as I can to mark birthdays, losses, and ‘the milestones of a year’s turning’. It’s a place where I feel connected to my ancestors, a place where I get to drink in the sacredness of this amazing landscape and history. (Patricia-S)

The sense of space it offers, uninhibited space, with the sky in all directions, and the sea in the distance, the brown and green of the mountain and the path inviting me onwards and providing me with a safe path back again. There is quiet except for the call of the birds and animal life around, and perhaps the breeze. It offers peace and connection to myself, in my physical, spiritual and emotional self, and quiet cognitions about being present in the here and now. (Ruby-S)

The sea and beach...encourage me to consider its habitats, its beauty, its wonder. And I feel part of it like it is now part of me, a part that I would be lost without. (Katie-S)

It brings a sense of calm when I visit or if it’s a particularly hard day it allows the space to step back and examine thoughts feelings and situations (Hannah-S)

For some, the wildness and solitude of nature places enhanced their sense of connection while for a few, the presence of humans in these landscapes were also important.

These relationships described the presence of attachment bonds similar to features of secure attachment in inter-human relationships described by Howe (2011) including their offering a haven and secure base through the development of affectional bonds, caregiving and receiving and regulation of emotional states, all of which offer a mirror

⁵ Carrowkeel megalithic cemetery built in the 4th millennium BC is situated in the Bricklieve mountains in south County Sligo, Ireland.

for the development of a sense of self. Human attachment theory has previously been identified by Chawla (2007) and Little and Derr (2018) as a useful construct to explore attachment to nature places. Perhaps the predominantly benevolent quality of the Irish landscape, with an absence of natural predators that pose a threat to humans, contributes to this secure experience.

Nature places as conduits for human/more-than-human intersubjective communication

Table 1: Features of nature places offering communications (see Appendix 1).

Section 1 – Relationship with the environment. Q.14: What element of the place did you feel was communicating with you? N=59	
The entire ecosystem of the place or part of it.	33
Non-living natural features (e.g. rocks, water, earth).	27
Flora (plants, trees, fungi).	17
Fauna (animals, insects, aquatic life).	11
Supernatural forces (e.g. fairies or sídhe, spirits, omens).	11
The weather.	9
Human-constructed structures.	5
Spiritual energy.	1
Symbolic item	1
The land	1
Other	
<i>All elements of the place represents hollowed ground</i>	
<i>'Christ energy' as understood by Teilhard de Chardin. An energy that is found throughout matter and spirit.</i>	
<i>Everything in relationship to each other in the now and in the past.</i>	
<i>I just feel it listens to me. The sea is so strong and could swipe me away but it doesn't. Although it has warned me.</i>	
<i>I mainly communicate with the water, the rock and the fauna, but also with fish and crustaceans</i>	
<i>I ticked all of these as I believe there are multiple levels of communication or 'resonance' due to the interconnectedness of all things, all creatures, built or site-chosen places of significance to mankind, and the "Unseen" – a numinous sense of presence, be it supernatural or intrinsic to a place.</i>	
<i>No fae here but I rejected outright another property because I had carefully researched the site of massacres during invasion and one property we looked at literally overlooked the site of a colonists's massacre of a local group of Biripi</i>	
<i>So I don't believe the rock water, sand etc are non-living.</i>	

Most participants reported experiencing nature places communicating with them and were able to identify the variety of ways these communications were experienced and interpreted. Most participants experienced communications from more than one aspect of the nature place, (Table 1) with the top three in descending order identified as: coming from the entire ecosystem, from elemental natural features such as water, rock, and through flora. Several referred to communications from the unseen transpersonal elements of place:

... I feel that it is an “in between place”, a threshold. The Goddess is close. I feel more creative here than ever have in my life. There isn’t a eureka moment but a sense of being part of something and acceptance by the land and the spirits (Annie-S)

Others availed of the ‘other’ category to convey the complexity of their visceral and spiritual engagement with not only the ecosystem, but also with the weather, with history and human constructions embedded in place:

I ticked all of these as I believe there are multiple levels of communication or ‘resonance’ due to the interconnectedness of all things, all creatures, built or site-chosen places of significance to mankind, and the “Unseen” – a numinous sense of presence, be it supernatural or intrinsic to a place. (Rachel-S)

Participants identified from a menu, the variety of ways these communications were received, and all selected a combination of these modalities: transpersonal/intuitive, sensorial, visceral, emotional and cognitive levels of awareness – listed in descending order of importance – (Table 1). Some research suggests that the more aware a person is of the connection between their bodily sensations and emotions, the more likely they are to be able to bond with nature (Branham, 2024). Onya-I described her instinctual experience of embodied intercommunication with place:

There was an instinct...inside...somehow it was connected to a message from the outside too. There was a sort of an interplay between your own instinct, or it felt like a ...communication from the place.

Figure 1 illustrates the complexity of articulating and presenting the variety of participants’ experiences of reciprocal intersubjective connection with nature places, comprising of sensory, emotional, cognitive and transpersonal experiences of communication and the behavioural or internal responses to these communications.

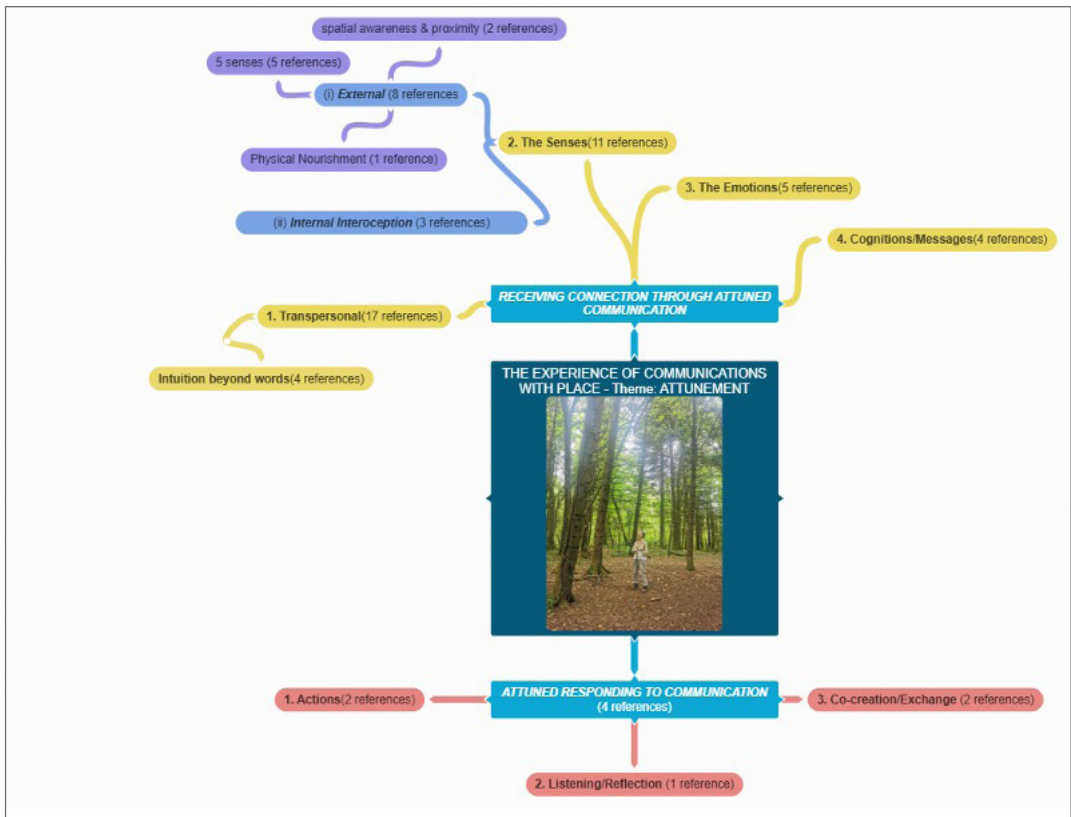


Figure 1: Varieties of experiences of communications with place.

Transpersonal and spiritual dimensions of nature communications experiences

These intersubjective experiences were most frequently interpreted as having a transpersonal dimension with an overwhelming majority of experiences being accompanied by feelings of awe or wonder. This had several manifestations: those involving connections with place through an expanded sense of self in interconnectedness with nature, those offering connection with a universal/collective consciousness including spiritual experiences of awe and wonder, dreams and soul connection and finally, those expressing connection with archetypal personifications. A majority of participants acknowledged they believed in the agency and consciousness of nature places and ecosystems and many of these also indicated belief in their intrinsic sacredness. The ubiquity of the transpersonal and/or spiritual experiences for the participants in their encounters with nature places indicates a leaning towards monism associated with Celtic and other indigenous ontologies.

... something “other”. And that connection is felt within body and mind, though not easy to express in words as one perceives it in the soul or consciousness, rather than with an overt sense like touch or taste or smell. I suppose one could call it a resonance with something “spiritual” – whether there are indeed spirits or spiritual forces or ‘spirits of place’, or if it is simply an acknowledgement of love and the life force and

power and wonder and beauty and melancholy of nature... something ancient and of that place and also “other” – not limited to that place but apparent in it. (Rachel-S)

Most participants indicated that they strongly agreed or agreed that their relationship to their chosen place was an important part of their self-identity and for most, these place-based experiences of connection extended beyond the specific to feeling connected or very connected with nature and the earth.

There are places I have a strong emotional connection to, love and awe...but anywhere that is wild nature I feel some connection, and a strong sense of wanting to protect that and feel grateful for existing, trees, rivers, lakes, a bird species under threat... (Ailsing-S)

The natural world is greater than the sum of its parts. I am one of the parts and when I fall into disconnection with nature I lose something essential in myself; I lose what makes me a contributing part of the ecosystem, rather than a consumer. Without connection I live on the earth rather than within it (Maria-S)

Maria's comment illustrates an alignment with existing research which found that spiritual/transpersonal experiences in nature can lead to increased environmental responsibility (Snell and Simmonds, 2012, Witt, 2013).

These transpersonal experiences also involved in varying degrees a sense of receiving support, care and information from an environment experienced as having personhood. This support was experienced as having direct relevance to the humans involved. Such experiences illustrated the regulation associated with attachment relationships between human caregivers and infants in which the infant receives soothing and also upregulation as a result of the attunement of the caregiver to the infant's needs (Siegel, 2013: 65-66).

Visiting when very stressed, I felt it reassured me, soothed me, a kind of the ‘archetypal loving mother’ type feeling of being embraced...(Aisling-S)

When visiting after the passing of my Mum as I sat at the lake which is surrounded by a mountain, I felt like the mountain was wrapping around me in a big hugs the lake gathered my tears. (Alannah-S)

Conversely, several participants alluded to their awareness of when the environment was not inviting them to engage or where something was out of alignment –

Not verbal, but I experience a sense of calmness, belonging, safety. Once I arrived and for an unknown reason I turned around and went away again. Something wasn't right and it let me know this. Usually, it lets me know all is well. It's quite isolated, I swim alone here. (Onya-S)

Maureen (I), when considering personal resonance with place, alluded to potential experiences of somatic clenching in the stomach when environments are out of alignment and ‘... places kind of don't feel right down the middle’.

Five interview participants made unsolicited references to feeling uncomfortable about discussing issues in public pertaining to spiritual aspects of relationship with place, imagining that they might be ridiculed in some way or that it was a 'sensitive' issue:

I find I have to be quite careful about who I talk to about spiritual relationships with nature basically because not everybody kind of understands that or you know, or maybe we're too, maybe people in general are too cautious. You know that we don't want to be regarded as a bit odd. (Breedge-I)

There is research to support the reticence in Western settings to share transpersonal or spiritual experiences (Davis *et al.*, 1991, Hunt, 2003), and perhaps this cultural silence might in part account for the general narrative concerning the demise of Indigenous connectedness to nature and culture in Ireland.

From this analysis, it appears that while transpersonal interpretations were frequently bestowed on experiences, the centrality of the emotional and sensorial aspects of experience align with Merleau-Ponty's (Merlieu-Ponty, 2012) conception that perception, rather than being a cognitive process is fundamentally sensorially embodied with emotions as integral to bodily existence (Roald *et al.*, 2018). Finally, it became apparent from the analysis that while it was possible to thematise participants' experiences, the rich complexity of the embodied experience of intersubjective communication might be collapsed by so doing. Ursula's account illustrates this:

I have felt answers from how my body responds when being in this space. I may ask myself a question and my body responds in a clear way when in this space. For me, what the forest directly shows me without using my body as a gauge feels most deep. I have found myself naturally drawn to look, stop, touch, smell something in the forest e.g. recently a part of a tree that was damaged, had broken from the main. I felt moved when I saw all the life that that part of the tree was sustaining. I was moved by the beauty in how it was still part of the life of the forest, although it was decaying in itself. The naturalness at which this happened, made me challenge my thinking around injury and decay. (Ursula-S)

Nature places as conduits for receiving and giving

Most participants valued their nature place for what it offered them. This might reflect a wider issue in the Western tradition where nature is viewed primarily as a resource for human beings (Wolloch, 2016: 3). Maureen-I illustrates this when describing the experience of relationships with nature being less complicated than those with humans: '...it's how you feel when you're there and...you'll never feel indebted to a place, or like you owe a place something. You're just there to enjoy it...'. When asked did she ever feel a place needed something itself she replied that she had never thought about it, but on consideration, added: 'Maybe it wants me to feed back into it. I suppose that's why you pick up rubbish when you're down the beach, isn't it?' In this instance, the question itself led to more consideration of the personhood of place having needs, illustrating the

link between the significance of relatedness between humans and the more-than-human environment and pro-environmental behaviours.

A lesser theme, expressed by four survey participants and significant by virtue of it being a minority expression, was the valuing of a relationship built upon giving rather than receiving, through the custodianship and tending of a nature place:

I live on the edge of this space, and it means more than the house...I mean I won't move...because I want to care for this space. I maintain and nurture this space and all the other than human elements therein...There is building and development going on near to my house and recently a whole copse of wild area adjacent to this space was felled. This has made me more determined to protect and maintain. (Jim-S)

While there was a tendency for participants to view nature places primarily as sources of benefit or support, all experiences of nature communication involved participants engaging in a variety of responses to these nature places. These included emotional, ritual/spiritual, somatic, physical, verbal and creative (Table 2).

Table 2: Types of responses to nature communications (see Appendix 1)

Section 1 – Relationship with the environment Q: 16. Did this communication result in you responding spontaneously in any of the following ways? N=58	
Emotional response (e.g. joy, sadness, awe, fear).	48
Ritual/Spiritual (prayer, meditation, offering).	25
Somatic/body response (e.g. crying, sighing, shaking).	16
Physical movement (e.g. walking, running, dancing).	15
Verbal response (e.g. singing, sighing, chanting).	15
Avoiding disturbance/withdrawing (e.g. leaving the place alone, avoiding disturbance of wildlife).	10
Creative expression (drawing, writing, composing).	9
Tending action (cleaning up, repairing, gardening).	7
Other	
<i>A sense of being “plugged in” to something ancient and of that place and also “other” – not limited to that place but apparent in it. At this point in time, in December 2024, the image of this place is constantly in mind, as though being ‘called’ by it. There is a need or urge to visit.</i>	
<i>I left, calmly, and trusted my instinct.</i>	
<i>Just accepted it.</i>	
<i>Moving into action to purchase this place.</i>	
<i>Not actually other, but the emotional response was one of calmness.</i>	
<i>Total stillness and confirmation of something I kind of knew.</i>	
<i>Well I just communicate back. It's like downloading info from the land and asking questions, getting answers.</i>	

Participants described various personal responses including twenty-five participants who reported a spiritual/ritualistic response:

It helps me restore a sense of order within myself, and that somehow, I'm able to give a bit of that order back to the place. (Katie-S)

... I felt strongly that I was welcomed and held. The place was aware of me and allowed my ritual and was part of it. (Maria-S)

.... I came to visit this place with a friend ... I envisaged going together and playing music there as I had on other occasions by myself. Once we both arrived the level of stillness was immensely deep, and any sound felt disturbing to that atmosphere that felt utterly sacred. We abandoned our plan of music making and spent much quieter time there. It was divine and felt appreciated by the place too. (Eve-S)

Árón-I described engaging in regular ritual practices with the land he was connected with through a daily morning greeting of the mountain visible from his house as a way of showing appreciation, gratitude and acknowledgement for the land in its own right. Onya-I spoke about instigating a healing ritual with a piece of land in family ownership that she valued, where she sensed 'stuck energy' which she attributed to historical intergenerational trauma with roots in the great famine of the 1840's. This involved consulting with a land healer and practically intervening by putting '...two bits of copper into the land' located on what they ascertained was a leyline⁶. These two participants along with the four whose valuing of particular nature places had arisen from their custodial and caring interventions with these places, illustrate Kimmerer's (2013) reference to the centrality of reciprocity in the cycle of gift giving between humans and nature in American indigenous cultures. In this way, gifts from nature imply responsibilities to reciprocate through care and support and likewise activities of care and support bring benefits to humans:

With others I restored these meadows and they have become very special places that I love to spend time in, watching the succession of plants and insects through the yearly cycle. (Breedge-S)

These examples illustrate the building up of reciprocal relationships over time, with opportunities for repeated observations often associated with indigenous cultures and ways of knowing (Aikenhead and Ogawa, 2007).

Cultural influences

In the survey, participants were asked to identify any spiritual beliefs, cultural traditions or folklore that influenced their relationship with nature places and with the wider environment in general. Most participants answered this long question, and many offered significant and sometimes detailed replies. Through the thematic analysis,

⁶ A non-material linkage or alignment between points of historical or sacred importance (Thurgill, 2015).

three recurring motifs were identified: First, the importance of the Celtic and pre-Celtic heritage, second, the influence of folklore and myth in place relations and connection, and, third, the role of the Christian and other religious heritages in keeping alive spiritual connection with pre-Christian sacred places and traditions. Most interviewees made spontaneous reference to the interweaving of cultural-folkloric traditions with their nature place relationships.

Celtic and pre-Celtic heritage

Fifty-five participants were able to identify cultural traditions, beliefs and folklore that they saw as influencing their relationship with specific nature places and the wider environment. A majority of responses alluded to the importance of Celtic and pre-Celtic heritage,

I remember also the fascination when in school of how trees were sacred in the ways of the druids and bards Through the Celts the sacredness of places, of wells I remember my father referring to different places and the energy that was to be found in them. (Árón-S)

These included references to cyclical nature of time, through ‘...the eight spoked wheel of the year...’, (Ron-S) and ‘[t]he Celtic cycle of the seasons, traditions of Brigit and the Cailleach’ (Breedge-S). Some responses directly alluded to animistic orientations in terms of nature holding sacred consciousness with consequent relational duties towards these conscious elements.

Thus, for John-S,

Celtic spirituality and mythology, both of which have been strong influences, have strong elements of animism and the belief that there is no division between sacred and mundane. This leads me to view nature and place as both conscious and sacred and makes it important to me to develop a sense of relationship.

Others alluded to the importance of folklore and myth in informing relationship to place.

If there is a folklore story or a poem that is set in a place I know or go to that is of interest to me and informs my knowledge of the place. (Ann-S)

...Connection with place was informed for me through knowing the Gaelic name of a location. My vicinity now is Ballintrillick, in Gaelic this is Béal Átha an Trí Liag. Translated this is the ford mouth of the three flagstones Irish mythology, stories of the salmon of knowledge, places where legendary figures like Diarmuid, Grainne, Fionn and others inhabited the landscape... (Árón-S)

I have always been moved by stories and associations e.g.: that spirits can appear to us through birds e.g.: the robin often associated with a soul that has passed coming back to communicate with us using the being of a bird or butterfly (Jenny-S)

Rachel-S described a less benevolent aspect of this agency –

...We had a smallholding of land and one of the fields contained an energy known as the foidin meara. In this field a person could lose their sense of direction and be led astray through confusion....’.

Maureen-I spoke about the historical mythic connections she identified in her family’s relocation from the North East of Ireland to their new location in the West linking it to Queen Medb’s legendary journey to steal the sacred bull, Donn Cúailnge, from Ulster, (O’Cathasaigh and Boyd, 2014) and her sense of rootedness in the geography of the ley lines, and prehistoric monuments in her local area: ‘...it gives you, maybe a sense of your history...’. Áróin-I referred to the importance of the role language plays in connecting to place:

Remembering the importance of Irish language connecting them to ancestors and the land and a sense of oneness and place in history....and then [it] kind of brought me back remembering people gone before me...or the rocks that are there, the trees that are there...

Some alluded to personal memories of traditions or beliefs gained in childhood and often conveyed through parents or grandparents. For example, Annie-S recalled that

My Nanny (Grandmother) was very pious in a traditional sense but also very connected to the Otherworld, folk wisdom and also my father was immensely connected to the environment and encouraged us and his students. He would bring the classroom into nature nearly 40 years ago.

Finally, one participant referred to the legacy of music as a conduit for connection with place

My sense of musical ancestry & its traditional legacy can lead me to hear the moods & melodies resonating from places & people that I remember. (Ben-S)

Christian and other religious heritages

Existing literature suggests that both childhood experiences of nature (Wells and Lekies, 2006, Rosa *et al.*, 2018) and pro-environmental beliefs of childhood caregivers shape environmental attitudes and behaviour in adulthood (Chawla, 2007). It is notable in this study that while forty-eight participants described their childhood religious affiliation as Roman Catholic, only eight identified this as their current religious affiliation. Table 3 illustrates the changing nature of religious/philosophical affiliations over the lifetime, pointing also to the increased diversity of affiliations currently described by participants. However, the influence of the religious/philosophical milieus experienced by participants where it pertains to nature connection can be seen to have persisted. For example, twenty-seven references were made to the influence of Christian spirituality/mysticism, other religious traditions and new age beliefs, and shamanistic/animistic beliefs in shaping relationships with favourite nature places and the wider natural

environment. Three participants made direct reference to the influence of St. Francis of Assisi – the Roman Catholic patron saint of ecology (Catholic Climate Covenant, ND).

I recognise the heart filling experience as a child when reading about Francis of Assisi and how he addressed nature as family, the moon as sister, the sun as brother, the natural world as community (Árón-S)

Table 3: Religious affiliation (see Appendix 1)

Section 4 – About You Q10&11: Which best describes your religious or philosophical affiliation? N=65		
Affiliation	Childhood	Current
Spiritual.	2	24
Roman Catholic.	48	9
Other Christian (e.g., Protestant, Anglican, Orthodox).	5	1
Jewish	1	
Humanist.		4
Agnostic.		4
Indigenous/Shamanic.	1	3
No affiliation	8	
Other		
Not sure where I fit in with these categories – Celtic shamanic?		1
A blend of humanist and shamanic		1
Celtic pagan.		3
My impulse is to choose both Roman Catholic and Celtic Pagan and Christian.		1
Celtic Christian.		1
Existential		1
A combination of Christian & Buddhist		1
A mix – culturally Catholic background, Celtic-Christian by interest and perhaps 'pagan' by some practices and beliefs.		1
I don't know		1
No particular worldview.		7
Prefer not to say.		2
	65	65

Rachel-S points to the historical overlaying of religious cultural influences informing contemporary spiritual practice:

...In more contemporary folklore and folk practice, we have veneration at holy wells, rag trees, respect given to cairns and raths and lone-bushes (hawthorn) in wild places, pilgrimages to places important in both mediaeval Christian religion and 'pagan places' from much earlier times – one overlain on the other, such as the annual Garland Sunday pilgrimage to Croagh Patrick – people have been ascending that mountain for spiritual significance since the Neolithic...

Pro-environmental beliefs and behaviours

Three quarters of survey participants indicated that they believed that their environmental behaviours were directly influenced by the emotional bond they had with nature places they were connected with. All these participants reported holding biocentric or ecocentric ethical stances towards environmental protection and to engaging in a wide range of pro-environmental behaviours. These links between their pro-environmental behaviours and relationships with nature places is supported by previous research (Martin *et al.*, 2020; Gen *et al.*, 2015; Pereira and Foster, 2015). The results from the survey section pertaining to pro-environmental behaviours fall into three subject categories. First, the ability of and means by which participants ascertained the interests of the natural environment, Second, the beliefs and values informing their ethical relationship with the wider environment and third, their identified proenvironmental behaviours.

Ways of ascertaining the interests of the natural environment

Notwithstanding that some did not indicate experiencing direct communications from nature places, sixty-four participants indicated how they were able to ascertain the interests of the natural environment (Table 4). The results indicate a cultural acceptance for the validity of various ways of knowing including observation, intuition, scientific knowledge and direct nature communications. Kimmerer (2020) suggests that indigenous traditional ecological knowledge involves both empirical and intuitive – left and right brain – approaches when assessing the needs of a natural environment. In addition, observation and intuition ranked higher than scientific knowledge for participants when assessing the needs of the natural environment. Kimmerer (2002: 433) describes observational knowing as occurring out '...of long intimacy and attentiveness to a homeland and can arise wherever people are materially and spiritually integrated with their landscape.'

Table 4: Ways of ascertaining the needs of the natural environment (see Appendix 1).

Section 2 – Beliefs about the relationship between humans and nature Q5: I mostly ascertain the interests of the non-human environment through... N=64	
Observation and practical experience.	38
Intuition.	37
Scientific knowledge.	33
Cultural traditions and folklore.	29
Direct experience of communication from the environment.	29
Spiritual guidance/prayer.	17
Reasoning or logic.	14
Religious or spiritual teachings.	8
Biological connection	1
Other	
<i>I cannot ascertain the interests of the non-human environment.</i>	
<i>I'm not sure. Instinctively I would say intuition but it doesnt mean I respond to that or translate it into action. Its more observing and appreciating what is within the limits that exist</i>	
<i>Moving in the environment and receiving place through this movement</i>	

Environmental Beliefs

In relation to their worldviews regarding ethical human relationships with the natural environment, most participants viewed the earth's systems or aspects of the natural environment as interconnected and sharing a common life force, imbued with intrinsic value, engendering duties to care and protect these systems and elements. Thirty-nine of these attributed a spiritual or sacred intelligence, or personhood to earth as a whole or to its constituents. Fifty-eight participants believed that they had a deep or reasonably deep understanding of how their actions affected the natural world. In addition, presented with a menu relating the main ethical positions identified within the environmental ethics tradition (Attfield 2014: 12, Curry, 2010: 2), a majority identified with dark-green or mid-green ethical stances. Thirty-nine identified with an ecocentric, dark-green approach – 'the entire ecosystem, including non-living components, possesses intrinsic value, where humans should prioritise the well-being of the Earth as a whole over individual species or human interests' – and eighteen with a biocentric or mid-green stance – 'all living beings, regardless of their capacity to think and feel, have an innate value of their own, and should be protected'.

Environmental behaviours

Fifty-eight indicated engaging in many different pro-environmental behaviours including recycling, reducing energy consumption, repairing and reusing and avoiding single use plastics (Table 5).

Table 5: Range of pro-environmental behaviours (see Appendix 1).

Section 3. Environmental ethics and behaviour Q3: What types of environmentally friendly behaviors or actions do you engage in? N=65	
Recycling and waste reduction.	63
Reducing energy consumption.	60
Repairing and reusing rather than discarding and replacing.	53
Supporting fairtrade, eco-friendly businesses and ethically sourced products and services.	50
Buying local, sourcing organic products.	46
Conserving Water.	43
Avoiding single use plastics.	38
Reducing or refraining from meat or animal product consumption.	32
Using sustainable transportation	29
Environmental activism, including animal welfare.	15
Choosing ethical banking and investment options.	13
Education in our community related to indigeneity	1

The results however, also revealed some incongruence between participants' environmental beliefs and aspirations and their current lifestyles embedded as they are in a neo-capitalist economy, which echoed previous research in an Irish setting (O'Connor, 2023). Rachel-S articulated the practical and emotional difficulties of attending in a meaningful way to pro-environmental behaviour within a Western setting:

I try but need to try harder. I do recycle carefully, I compost, I try to grow my own including efforts (limited by garden space!); I try to buy local things rather than consumables "with air-miles" where possible, I do occasionally lobby the government ministers and senators to enhance and expand laws for animal and environmental welfare ... I eat a mainly plant-based diet though sometimes do consume animal products and I feel guilty about that. I think to be mindful and adhere to the philosophy of 'Take more than you need' and have respect for a life given or milk or eggs taken...I try to nurture nature in any way I can ... in saving seed and planting...I feed birds, ... and I leave food for animals that need it... I pick up rubbish and... [t]here is so much more I and everyone can do ... always maintain gratitude for the life we have ... and to be mindful that we are not unique or special, we are but one species among many, and the onus is on us to reduce our negative impact on others and to leave place for them in the world, respect their lives, habitats and right to life in a clean, pollutant free, natural environment.

Environmental attunement

Drawing together all data from survey and interview responses pertaining to the three lines of enquiry already presented, a meta theme of *environmental attunement* was generated. This encompassed attunement through direct experience of nature connection involving reciprocal relations of giving and receiving which extended to their wider pro-environmental beliefs and behaviours, and to cultural influences. In addition, it facilitated environmental attunement through reflection and learning from engagement with nature and the research (O'Connor, 2025).

Attunement is the medium through which experiences of relational connection and attachment arise both in human settings (Lasher, 1998) and between humans and nature (Branham, 2024). Drawing on sources in the literature (Miller, 2024, Welch *et al.*, 2021) the following definition of environmental attunement was developed for the purposes of the study as: *an embodied relational process involving an awareness of and receptivity towards the human and more-than-human environment and its cultural context which supports reciprocal intersubjective engagement accompanied by a sense of harmony and belonging, along with the formation of ecological identities and responsibilities*. Both Branham (2024: 22) and Abram (2012: ix-x) suggest that capacity for attunement with the ‘other’ of the natural environment through embodied sensual awareness is required in order to experience engagement in relationships with the more-than-human. Underpinning the theme of attunement were ways of relating with the more-than-human others of place reminiscent of Indigenous ontologies – firstly place and

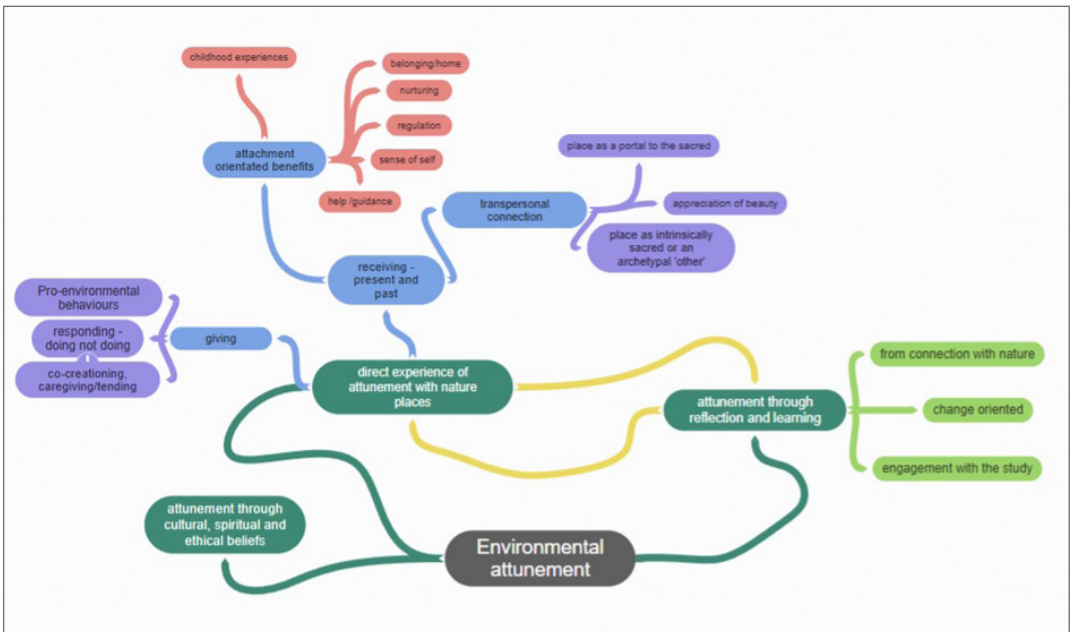


Figure 2: Meta theme: Environmental Attunement

its constituents were often related to as animate and intentional beings. Secondly, experiences of the sacred which expanded conventional boundaries between self and other were often intrinsic to this relating, and thirdly, these relationships inspired a sense of duty of care both to specific places and the wider environment. In summary, Figure 2 offers a schematic of some of the constituents of this meta theme.

Conclusion

This study has explored how people in Ireland experience connection and intersubjective communication with nature places, and how these communication experiences intersect with cultural influences and pro-environmental behaviours.

The deficit identified in Western cultures concerning embodied connection with nature appears not to be present to any great extent for a majority of participants in this study who showed a capacity for environmental attunement at three levels: in their relationships with nature, through their cultural heritage and in their pro-environmental beliefs and behaviours. A definition of environmental attunement was presented which reflected the complexity of the concept and the myriad ways participants experienced embodied, intersubjective and frequently transpersonal connection and communication with nature places, often steeped with personal and cultural legacies. Participants described experiences of attuned attachment relationships with nature places often experienced as animate beings offering perceived benefits which fostered reciprocal responses and responsibilities towards the wider environment. I suggest that ability to be environmentally attuned holds increasing relevance as climate change leads to unravelling of existing ecosystems.

Notwithstanding Ireland's position in the global North along with its colonial legacy, participants indicated that their connection with nature places and the wider environment had been informed by their cultural and spiritual heritage. This included pre-Celtic and Celtic spirituality, Christianity, Irish culture, folklore and Irish language. That many identified their encounters as having a spiritual dimension and most described these encounters as imbued with wonder, suggests the possibility that transpersonal experiences in nature were an integrally 'ordinary' part of life for many participants with most indicating that the natural environment was part of their self-identity. A majority of participants acknowledged they believed in the agency and consciousness of nature places and ecosystems and many of these also indicated belief in their intrinsic sacredness. These responses challenge the cultural stereotype of Western peoples as disenchanted and disconnected from nature. It appears that Ingold (2021:6) may be correct in suggesting

...that once we get to know people well – even the inhabitants of nominally Western countries – not one of them turns out to be a full-blooded Westerner, or even to be particularly modern in their approach to life and that the Western tradition of thought, closely examined, is as richly various, multivocal, historically changeable and contest-riven as any other.

While there was a tendency for participants to view nature places primarily as sources of benefit or support, all participants described responding to experiences of nature communications in environmentally attuned ways. This included the uncomfortable awareness articulated by several participants concerning the disparity between their environmental ideals and their behaviours. Local encounters with place were seen as informing their wider pro-environmental beliefs and behaviours, with all participants reporting holding biocentric or ecocentric ethical stances towards environmental protection and engaging in a wide range of pro-environmental behaviours.

Although participants identified with a diverse range of religious/philosophical orientations, commonalities were evident in their worldviews and behaviours regarding human-nature relations. Together these suggest the presence of an Indigenous ontology, not ‘held’ but rather lived out in participants’ embodied relationships with more-than-human nature places and persons of place. These lifeworlds and lifeways were nestled however, within the wider context of a dualistic Western socio-economic system and sometimes concealed by the participants themselves from general discourse. While it has yet to be ascertained if these beliefs and experiences represent those of other demographic and cultural groups in Irish society, they demonstrate that when engaged with nature places, these participants inhabited a lifeworld experienced as emplaced, embodied, sentient, sacred and demanding of ethical responsibility. In keeping with the participatory nature of this study, the conclusion closes with the words of a participant:

... I do believe very strongly that in Western society we need to be made to rethink our relationship with the natural world...and what we need to do is to get back to our own Indigenous wisdom, which sees us as a part of the natural world and gets us off the arrogance that we have in the modern world; the arrogance ...that we're above nature, that nature's there to serve our needs, that we can exploit it, extract it, get what we want out of it without any kind of reciprocity – turning that on its head and returning to our rightful place, which is a part of the greater web of life. And the point about that it's not only good for nature – it's good for us...that's what makes us spiritually and emotionally whole. (Breedge-I)

Acknowledgements

I acknowledge with gratitude the contribution of my more than human co-researcher, whose participation inspired the direction and outcomes of many aspects of the research, and I thank all who participated directly and indirectly in this research. I also pay tribute to all beings who are suffering as a result of the privilege I enjoy at every level of my lifestyle, which I recognise contributes to local and global inequalities including the current ecological degradation and climate crisis.

I would like to thank in particular, my supervisor Dr. Dawn Collins, for her wisdom, guidance and kindness, and to Dr. Jackie O'Toole for her invaluable comments in relation to the methodology. A big thanks also to my son Ben for his precise proof-reading and insightful corrections.

References

- Abram, D., 2012.** *The spell of the sensuous: Perception and language in a More-Than-Human world*. New York: Vintage Books.
- Aikenhead, G.S. and Ogawa, M., 2007.** 'Indigenous knowledge and science revisited', *Cultural Studies of Science Education*, 2, pp. 539–620. DOI 10.1007/s11422-007-9067-8 [accessed 10 September 2025].
- Anderson, D.J. and Krettenauer, T., 2021.** 'Connectedness to nature and pro-environmental behaviour from early adolescence to adulthood: A comparison of urban and rural Canada', *Sustainability*, 13(7), 3655. DOI: <https://doi.org/10.3390/su13073655> [Accessed: 9 July 2024].
- Artmann, M., 2023.** 'Human-nature resonance in times of social-ecological crisis—a relational account for sustainability transformation', *Ecosystems and People*, 19(1), 2168760 pp 1-15. DOI: <https://doi.org/10.1080/26395916.2023.2168760> [Accessed 10 October 2025].
- Attfield, R., 2014.** *Environmental Ethics: An Overview For The Twenty-First Century*, 2nd edn Cambridge, UK Polity.
- Bastian, M., Jones, O., Moore, N. and Roe, E. (eds.), 2016.** *Participatory research in more-than-human worlds*. London: Routledge.
- Becker, R., 2022.** 'Gender and survey participation: An event history analysis of the gender effects of survey participation in a probability-based multi-wave panel study with a sequential mixed-mode design', *Methods, data, analyses: a journal for quantitative methods and survey methodology (mda)*, 16(1), pp.3-32. DOI: 10.12758/mda.2021.08 [accessed 1 February 2026].
- Bell, S.L. Hickman, C. and Houghton, E., 2023.** 'From therapeutic landscape to therapeutic 'sensescape' experiences with nature? A scoping review'. *Wellbeing, space and society*, 4, 100126. DOI: <https://doi.org/10.1016/j.wss.2022.100126> [Accessed 11 October 2025].
- Berry, T., 2011.** *The great work: Our way into the future*. New York: Crown.
- Blackie, S., 2016.** *If women rose rooted*. Tewkesbury: September Publishing.
- Branham, L., 2024.** 'Embodied earth kinship: interoceptive awareness and relational attachment personal factors predict nature connectedness in a structural model of nature connection'. *Frontiers in Psychology*, 15, pp 1-24. DOI: 10.3389/fpsyg.2024.1400655 [Accessed 11 October 2025].
- Braud, W., 1998.** 'Integral Inquiry' in Braud, W. and Anderson, R. (1998) *Transpersonal research methods for the social sciences: Honoring human experience*. Thousand Oaks, CA: Sage, pp.35-68.
- Braud, W. and Anderson, R., 1998.** *Transpersonal research methods for the social sciences: Honoring human experience*. Thousand Oaks, CA: Sage.
- Braud, W., 2004.** An introduction to organic inquiry: Honoring the transpersonal and spiritual in research praxis. *Journal of Transpersonal Psychology*, 36(1) [accessed on 28.02.2026 at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/<https://www.sacredsciencecircle.org/wp-content/uploads/2017/01/AnIntroductionToOrganicInquiry.pdf>].
- Braun, V. and Clarke, V., 2021.** 'One size fits all? What counts as quality practice in (reflexive) thematic analysis?', *Qualitative research in psychology*, 18(3), pp.328-352. DOI: <https://doi.org/10.1080/14780887.2020.1769238> [Accessed 30 January 2026].
- Braun, V., Clarke, V., Hayfield, N., Davey, L. and Jenkinson, E., 2023.** 'Doing reflexive thematic analysis', In *Supporting research in counselling and psychotherapy: Qualitative, quantitative, and mixed methods research* (pp. 19-38). Cham: Springer International Publishing.
- Britton, E., 2023.** *Ebb and Flow: How To Connect With The Patterns And Power of Water*. National Geographic Books.
- Carlin, C., Kindermann, G., Britton, E., Cormican, M., Domegan, C., Gormally, M. and O'Donovan, D., 2020.** *Nature and environment to attain and restore health*. NEAR Health project team, NUI Galway, Environmental Protection Agency Report No. 348 [accessed 11 October 2025].
- Cano Pecharroman, L., 2018.** 'Rights of nature: Rivers that can stand in court', *Resources*, 7(1) 13. DOI: <https://doi.org/10.3390/resources7010013> [Accessed: 11.10.2025].
- Catholic Climate Covenant (no date).** *Pope Francis: Catholic Teaching on Climate Change*. Available at: <https://catholicclimatecovenant.org/learn/teachings/pope-francis/> [Accessed: 30 June 2025].
- Chawla, L., 2007.** Childhood experiences associated with care for the natural world: A theoretical framework for empirical results. *Children, Youth and Environments*, 17(4), pp.144-170. Available at 10.1353/cye.2007.0010 [Accessed: 12 October 2025].

- Connolly, S. J., 2008.** 'New Lights and Old Faiths', *Divided Kingdom: Ireland 1630-1800*, Oxford History of Early Modern Europe (Oxford, 2008; online edn, Oxford Academic, 1 Sept. 2008). DOI: <https://doi.org/10.1093/acprof:oso/9780199543472.003.0007>, [Accessed: 12.10.2025].
- Cronin, N., 2017.** 'Writing the natural world: ecocriticism and environmental humanities in contemporary Ireland', *The Canadian Journal of Irish Studies*, 40, pp. 94–119. Available at: <https://www.jstor.org/stable/26333460>, [Accessed: 28 January 2026].
- Curry, P., 2010.** *Ecological Ethics: An Introduction*. Cambridge: Polity Press.
- Davis, J., Lockwood, L. and Wright, C., 1991.** 'Reasons for not reporting peak experiences', *Journal of Humanistic Psychology*, 31(1), pp. 86–94. DOI: <https://doi.org/10.1177/0022167891311008> [accessed 12 October 2025].
- Duffy, P., 2016.** 'Genius loci: The geographical imagination of Tim Robinson', in *Unfolding Irish landscapes* (pp. 21–40). Manchester University Press.
- Duron-Ramos, M.F., Collado, S., García-Vázquez, F.I. and Bello-Echeverría, M., 2020.** 'The role of urban/rural environments on Mexican children's connection to nature and pro-environmental behavior', *Frontiers in Psychology*, 11, 514. DOI: <https://doi.org/10.3389/fpsyg.2020.00514> [Accessed: 9 July 2024].
- Ecchavarren, J.M., 2023.** 'The gender gap in environmental concern: support for an ecofeminist perspective and the role of gender egalitarian attitudes', *Sex Roles*, 89(9), pp.610–623. DOI: <https://doi.org/10.1007/s11199-023-01397-3> [accessed 1 February 2026].
- Eisenstein, C., 2018.** *Climate: A New Story*. North Atlantic Books.
- Fields, T.R., 2020.** 'Trees in early Irish law and lore: Respect for other-than-human life in Europe's history', *Ecopsychology*, 12(2), pp.130–137. DOI: <https://doi.org/10.1089/eco.2019.0058> [accessed 11 October 2025].
- Flanagan, B. and O'Sullivan, M., 2016.** 'Spirituality in Contemporary Ireland: Manifesting Indigeneity', *Spiritus: A Journal of Christian Spirituality*, 16(3), pp.55–73. DOI: <https://doi.org/10.1353/scs.2016.0051> [accessed 11 October 2025].
- Gellers, J.C., 2021.** 'Earth system law and the legal status of non-humans in the Anthropocene', *Earth System Governance*, 7, .100083. DOI: <https://doi.org/10.1016/j.esg.2020.100083> [Accessed 11.October 2025].
- Geng, L., Xu, J., Ye, L., Zhou, W. and Zhou, K., 2015.** 'Connections with nature and environmental behaviors', *PloS ONE*, 10(5), pp.1–11. DOI: [doi:10.1371/journal.pone.0127247](https://doi.org/10.1371/journal.pone.0127247) [Accessed 9 July 2025].
- Gifford, R. and Nilsson, A., 2014.** 'Personal and social factors that influence pro-environmental concern and behaviour: A review', *International journal of psychology*, 49(3), pp.141–157. DOI: <https://doi.org/10.1002/ijop.12034> [Accessed 11 October .2025].
- Golafshani, N., 2003.** 'Understanding Reliability And Validity In Qualitative Research', *The Qualitative Report*, 8.4, pp. 597–607. DOI: 10.46743/2160-3715/2003.1870 [Accessed: 15 October 2025].
- Harney, L., 2017.** 'Christianising Pagan Worlds In Conversion-Era Ireland: Archaeological Evidence For The Origins Of Irish Ecclesiastical Sites', *Proceedings of the Royal Irish Academy: Archaeology, Culture, History, Literature* 117.1, pp. 103–130. DOI: <https://dx.doi.org/10.1353/ria.2017.0002> [accessed 10 June 2025].
- Hart, M.A., 2010.** 'Indigenous worldviews, knowledge, and research: The development of an Indigenous research paradigm', *Journal of Indigenous Social Development*, 1(1A). Available at <http://hdl.handle.net/10125/12527> [accessed 11 October 2025].
- Harvey, G., 2005.** *Animism: Respecting the living world*. New York: Columbia University Press.
- Hennink, M.M., Hutter, I. and Bailey, A., 2020.** *Qualitative research methods*. 2nd edn. London: SAGE.
- Howe, D., 2011.** *Attachment Across The Lifecourse: A Brief Introduction*. Bloomsbury Publishing.
- Hunt, K., 2003.** 'Understanding the spirituality of people', in Davie, G., Heelas, P. and Woodhead, L. (eds.) *Predicting religion: Christian, secular and alternative futures*. London: Routledge.
- Husserl, E., 1970.** *Logical investigations*. Vol. 2. Translated by J.N. Findlay. London: Routledge & Kegan Paul.
- Ingold, T., 2021.** *The Perception Of The Environment: Essays On Livelihood, Dwelling And Skill*. London: Routledge.
- Johnson, M., 2021.** 'Indigeneity: Making And Contesting The Concept', *The Routledge Handbook of Law and Society*, Routledge, pp 166–169. DOI: 10.4324/9780429293306-33.
- Kibberd, D., 1996.** *Inventing Ireland: The literature of the modern nation*, Random House.

- Kleespies, M.W., Hahn-Klimroth, M. and Dierkes, P.W., 2025.** 'Relational values of nature—a global empirical study of environmental students in 37 countries', *Ecology and Society*, 30(4). DOI: <https://doi.org/10.5751/ES-16513-300403> [Accessed 1 February 2026].
- Kovach, M., 2021.** *Indigenous methodologies: Characteristics, conversations, and contexts*. University of Toronto press.
- Kimmerer, R.W., 2002.** Weaving traditional ecological knowledge into biological education: A call to action. *BioScience*, 52(5), pp.432-438. DOI: [https://doi.org/10.1641/0006-3568\(2002\)052\[0432:WTEKIB\]2.0.CO;2](https://doi.org/10.1641/0006-3568(2002)052[0432:WTEKIB]2.0.CO;2) [accessed 10 October 2025].
- Kimmerer, R.W., 2020.** *Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants*. UK: Penguin Random House. (originally published in 2013: Milkweed editions).
- Lane, B.C., 2002.** *Landscapes of the sacred: Geography and narrative in American spirituality*. Baltimore: JHU Press.
- Lasher, M., 1998.** 'A relational approach to the human-animal bond', *Anthrozoös*, 11(3), pp.130-133. DOI: <https://doi.org/10.2752/089279398787000670> [Accessed: 12 October 2025].
- Leerssen, J.T., 1996.** *Remembrance and imagination. Patterns in the historical and literary presentation of Ireland in the nineteenth century*. Cork university Press.
- Leiserowitz, A. et al., 2021.** *Climate change in the Irish mind*. New Haven, CT: Yale Program on Climate Change. Available at: <https://www.epa.ie/publications/monitoring--assessment/climate-change/climate-change-in-the-irish-mind.php> [Accessed 24 June 2025].
- Leopold, A., 2020.** *A Sand County Almanac: And Sketches Here and There*. London: Penguin Classics [originally published 1949].
- Little, S. and Derr, V., 2018.** 'The influence of nature on a child's development: Connecting the outcomes of human attachment and place attachment', in *Research handbook on childhoodnature* (pp. 1-28). Springer, Cham. DOI: https://doi.org/10.1007/978-3-319-51949-4_10-1 [Accessed: 12 October 2025].
- Macy, J., 2021.** *World as Lover, World as Self: Courage for Global Justice and Planetary Renewal*. Parallax Press.
- Magan, M., 2018.** 'A magical vision is hidden in the Irish language—we need to rediscover it', *The Irish Times*, July 15.
- Magan, M., 2022.** *Listen to the Land Speak: A Journey into the Wisdom of what Lies beneath Us*. Gill & Macmillan Ltd.
- Magan, M., 2024.** *Thirty-two Words For Field: Lost words Of The Irish landscape*. Bonnier Books UK.
- Martin, L., White, M.P., Hunt, A., Richardson, M., Pahl, S. and Burt, J., 2020.** 'Nature contact, nature connectedness and associations with health, wellbeing and pro-environmental behaviours', *Journal of environmental psychology*, 68, 101389 pp.1–54. DOI: <https://doi.org/10.1016/j.jenvp.2020.101389> [Accessed 9 July 2025].
- Mathews, F., 1994.** *The Ecological Self*. London: Routledge.
- Merleau-Ponty, M., 2012.** *Phenomenology of perception*. Translated by D.A. Landes. London: Routledge. Available at: <https://static1.squarespace.com/static/5e265eb50aee2d7e8a81ae69/t/614a0d939e6cdc02ebf22112/1632243096452/Merleau-Ponty-M-Phenomenology-of-Perception.pdf> [Accessed: 29 June 2025].
- Miller, K., 2024.** 'Cultural attunements and ecological wellbeing: embodied conditions for mental health interventions', *International Journal of Environmental Research and Public Health*, 21(3), 287. DOI: <https://doi.org/10.3390/ijerph21030287> [Accessed: 12 October 2025].
- Murray, A., 2023.** *Wild Embrace: Connecting to the Wonder of Ireland's Natural World*. Dublin: Hachette Books Ireland.
- Mustonen, T., Harper, S., Pecl, G., Broto, V.C., Lansbury, N., Okem, A., Ayanlade, A., Dawson, J., Harris, P., Feodoroff, P. and McGregor, D., 2022.** 'Cross-chapter box INDIG: The role of Indigenous knowledge and local knowledge in understanding and adapting to climate change', in Schipper, E.L.F. et al., (eds.) *Climate change 2022: Impacts, adaptation, and vulnerability*. Available at: https://www.researchgate.net/publication/362432216_The_Role_of_Indigenous_Knowledge_and_Local_Knowledge_in_Understanding_and_Adapting_to_Climate_Change [Accessed 28 August 2025].
- Naess, A., 2007.** 'Self-realisation: An ecological approach to being in the world', in Fleming, P., Macy, J., Naess, A. and Seed, J. (eds.) *Thinking Like a Mountain: Towards a Council of All Beings*. New Catalyst Books, pp. 19–30. (Originally published 1988).

- Naess, A., 2011. 'The deep ecology movement, some philosophical aspects' in *Living in the environment: principles, connections, and solutions*, ed by Miller, G. T. and Spoolman, S. Cengage Learning pp 402-405.
- Ní Cassaithe, C. and Kavanagh, A.M., 2024. 'Using Indigenous and traditional stories to teach for climate and ecological action', *Primary History*, 96, pp.46-51. [Accessed: 3 October 2025 at chrome-extension://efaidnbmnnnibpcajpegclclefindmkaj/https://doras.dcu.ie/29912/1/Using_Indigenous_stories_to_teach_for_climate_action_CCassaitheAMKavanaght_PH96%281%29.pdf].
- Nisbet, E.K., Zelenski, J.M. and Murphy, S.A., 2009. 'The nature relatedness scale: Linking individuals' connection with nature to environmental concern and behavior', *Environment and Behavior*, 41(5), pp.715-740. DOI: 10.1177/0013916508318748 [Accessed: 11 September 2025].
- Noorani, T. and Brigstocke, J., 2018. *More-Than-Human participatory research*. Bristol: ISBN: 978-0-9935528-5-4 [Accessed 11 September 2024].
- O'Brien, S.J.C., 2008. Taking place: ritual and reciprocity at holy wells and mass stones in the Republic of Ireland. *Journal of Ritual Studies*, pp.1-20. <http://www.jstor.com/stable/44368778> [accessed 31.01.2026].
- O'Cathasaigh, Tomas, and Matthieu Boyd, '15. Táin Bó Cúailnge and Early Irish Law', *Coire Sois, The Cauldron of Knowledge: A Companion to Early Irish Saga*, (University of Notre Dame Press, 2014), pp. 219-237
- O'Connor, I., 2023. 'Let's talk about climate change: What psychotherapists think about climate change and its relevance to their work', *Inside Out*, Issue 101 (Autumn). Available at: <https://iahip.org/InsideOut-101-Article1> [Accessed: 21 October 2025].
- O'Connor, I., 2025. *Indigenous Wisdom in a Western Setting: Applying a More-Than-Human Methodology to Explore Connection with Nature*. Master's thesis. University of Wales Trinity Saint David. Available at: <https://repository.uwtsd.ac.uk/id/eprint/4093/> (Accessed: [3 March 2026]).
- Ó Duinn, S., 2000. *Where Three Streams Meet: Celtic Spirituality*. Dublin, Columba Press.
- Pereira, M. and Forster, P., 2015. 'The Relationship Between Connectedness To Nature, Environmental Values, and Pro-Environmental Behaviours', *Reinvention: An International Journal of Undergraduate Research*, 8(2). URL: <https://eprints.worc.ac.uk/id/eprint/4081> [Accessed: 12 October 2025].
- Plumwood, V., 1993. *Feminism and the Mastery of Nature*. London: Routledge.
- Ray, C. and McCormick, F. (eds.), 2023. *Holy Wells of Ireland: Sacred Realms and Popular Domains*. Bloomington, IN: Indiana University Press.
- Roald, T., Levin, K. and K ppe, S., 2018. 'Affective incarnations: Maurice Merleau-Ponty's challenge to bodily theories of emotion', *Journal of Theoretical and Philosophical Psychology*, 38(4), pp.205-218. DOI: <http://dx.doi.org/10.1037/teo0000101> [accessed 17 October 2025].
- Rosa, C.D., Profice, C.C. and Collado, S., 2018. 'Nature Experiences and Adults' Self-Reported Pro-Environmental Behaviors: The Role of Connectedness to Nature and Childhood Nature Experiences', *Frontiers in Psychology*, 9, pp.1-10. DOI: 10.3389/fpsyg.2018.01055 [Accessed 9 July 2025].
- St Louise, P., 2019. 'Design and Nature: A History', in Fletcher, K., St Pierre, L. and Tham, M. (eds.) *Design and Nature: A Partnership*. London: Routledge, pp. 92-108. Available at https://www.researchgate.net/profile/Louise-St-Pierre/publication/373653278_DESIGN_AND_NATURE_A_HISTORY/links/64f639b748c07f3da3d87acd/Design-and-Nature-A-History.pdf. [Accessed: 10.10.2025].
- Seed, J., 2007. 'Beyond Anthropocentrism' in Fleming et al., *Thinking like a mountain: Towards A Council Of All Beings* New Catalyst Books edition, pp. 35-40.
- Siegel, D.J. and Hartzell, M., 2013. *Parenting from the Inside Out: How a Deeper Self-Understanding Can Help You Raise Children Who Thrive*. London: Penguin.
- Singh, A., Shindikar, M.R. and E.A., 2023. 'A Comprehensive Review on Climate Change and Its Effects', *International Journal of Environment and Climate Change*, 13(11), pp.924-931. DOI: 10.9734/ijec/2023/v13i113240 [Accessed 12 Septemberv2025].
- Snell, T.L. and Simmonds, J.G., 2012. "Being in that environment can be very therapeutic": Spiritual experiences in nature', *Ecopsychology*, 4(4), pp.326-335. DOI: <https://doi.org/10.1089/eco.2012.00> [Accessed: 14 October 2025].
- Taylor, B.R., 2010. *Dark green religion: Nature spirituality and the planetary future*. University of California Press.
- Thorne, P., Boucher, J., Caulfield, B. et al., 2023. *Ireland's Climate Change Assessment Synthesis Report*. Johnstown Castle, Co. Wexford: Environmental Protection Agency. Available at: https://www.epa.ie/publications/monitoring-assessment/climate-change/ICCA_Synthesis_Report.pdf [Accessed 24 June 2025].

- Thurgill, J., 2015.** A strange cartography: Leylines, landscape and “deep mapping” in the works of Alfred Watkins. *Humanities*, 4(4), pp.637–652. DOI: <https://doi.org/10.3390/h4040637> [Accessed 1 march 2026].
- Tilley, C., 1994.** ‘Space, Place, Landscape and Perception: Phenomenological Perspectives’, in Tilley, C. *A Phenomenology of Landscape: Places, Paths and Monuments*. Vol.10. Oxford: Berg, pp.7–34.
- Trenberth, K.E., 2018.** ‘Climate Change Caused by Human Activities is Happening and It Already Has Major Consequences’, *Journal of Energy & Natural Resources Law*, 36(4), pp.463–481. DOI: 10.1080/02646811.2018.1450895 [Accessed: 10 September 2025].
- United Nations Permanent Forum on Indigenous Issues, 2015.** *Who are Indigenous Peoples? Fact Sheet No. 1*. New York: United Nations. Available at: http://www.un.org/esa/socdev/unpfii/documents/5session_factsheet1.pdf [Accessed: 25 June 2025].
- Welch, R., Taylor, N. and Gard, M., 2021.** ‘Environmental attunement in the health and physical education canon: Emplaced connection to embodiment, community and “nature”’, *Sport, Education and Society*, 26(4), pp.349–362. DOI: <https://doi.org/10.1080/13573322.2021.1890572> [Accessed: 12 October 2025].
- Wells, N.M. and Lekies, K.S., 2006.** ‘Nature and the Life Course: Pathways from Childhood Nature Experiences to Adult Environmentalism’, *Children, Youth and Environments*, 16(1), pp.1–24. Accessible at 10.1353/cye.2006.0031 [Accessed 12 October 2025].
- Whelan, D.T., 2010.** *Ever ancient ever new: Celtic spirituality in the 21st century*. Dublin: Original Writing Ltd.
- Whelan, J. and Kelly, O., 2024.** ‘Experiential, relational, playful pedagogy in Irish primary schools—possibilities offered by Forest School’, *Irish Educational Studies*, 43(4), pp.1363–1387. DOI: <https://doi.org/10.1080/03323315.2023.2280224> [accessed 10 October 2025].
- Whitburn, J., Linklater, W. and Abrahamse, W., 2020.** ‘Meta-analysis of human connection to nature and proenvironmental behavior’, *Conservation biology*, 34(1), pp.180–193 DOI: <https://doi.org/10.1111/cobi.13381> [Accessed 11 October 2025].
- White, P. M., 2020.** *Discovering Meaning In Ireland: Megalithic Spiritual Experiences* (Doctoral dissertation, Saybrook University. Available at <https://www.proquest.com/docview/2494303628>). [Accessed: 4 May 2025].
- Williams, D.R. and Vaske, J.J., 2003.** ‘The Measurement of Place Attachment: Validity and Generalizability of a Psychometric Approach’, *Forest Science*, 49(6), pp.830–840. DOI 10.1093/FORRESTSCIENCE/49.6.830 [Accessed 11 September 2025].
- Wilson, S., 2020.** *Research is ceremony: Indigenous research methods*. Fernwood publishing.
- Witt, A.H.D., 2013.** ‘Pathways to Environmental Responsibility: A Qualitative Exploration of the Spiritual Dimension of Nature Experience’, *Journal for the Study of Religion, Nature & Culture*, 7(2). DOI: 10.1558/jsrnc.v7i2.154 [Accessed: 14 October 2025].
- Wolloch, N., 2016.** *Nature in the History of Economic Thought: How Natural Resources Became an Economic Concept*. London: Routledge.
- Zylstra, M.J., Knight, A.T., Esler, K.J. and Le Grange, L.L.L., 2014.** ‘Connectedness as a core conservation concern: An interdisciplinary review of theory and a call for practice’, *Springer Science Reviews*, 2(1), pp. 119–120. DOI 10.1007/s40362-014-0021-3. [accessed 10 October 2025].

Appendix 1: Survey questions

Indigenous wisdom in a Western setting: If Place speaks, can we hear it and if we can, how do we respond?

This survey investigates how we humans discern the interests of the ‘more-than-human’ natural environment through our personal relationship with places in nature we feel connected to. It seeks to explore how our relationship with place is informed by our cultural and spiritual beliefs and how these beliefs and relationships influence our environmentally related behaviour.

Section 1 – Relationship with the environment

This section explores your relationship with a place in nature you feel deeply connected to.

1. Please think of a place in nature with which you feel a special connection in your life right now. Where is it located? Response by province: Connaught, Leinster, Munster, Ulster
2. Please indicate which best describes its setting: Urban, Suburban, Rural, Mixed (urban-rural).
3. In relation to the place you have selected, what best describes its habitat? Coastal, Woodland. Meadow/bogland, Freshwater (river, lake), Mountain.
4. How connected do you feel with this place? Very deeply connected to Not connected.
5. Can you share a little about what makes this place special for you? Written response
6. How long have you had a connection with this place?
7. How often do you currently visit this place?
8. On average, how long do (or did) you spend at this place during each visit?
9. What is (or was) the focus of your relationship with this place?
 - a. Tending the land (e.g. gardening, farming, stewardship).
 - b. Recreation (e.g. walking, camping, sport).
 - c. Spiritual (e.g. meditation, ritual).
 - d. Creative (e.g. art, writing, photography).
 - e. Social (e.g. family, community gatherings).
 - f. Healing or therapeutic (e.g. personal reflection, stress relief, rest).
 - g. Education (e.g. learning about nature).
 - h. Place where I live.
 - i. Place where I work.
10. In relation to the following statement, please select the option that best fits for you:
“My relationship to this place is an important part of who I am”.
11. Have you ever felt that this place communicated with you? Yes/No
12. If your answer is **yes** or **maybe** to the above question please answer the following questions in this section. If the answer is **No**, then proceed to section 2 by clicking on **Next** at the end of this section. Firstly, can you describe a particular instance where you experienced this place communicating with you? Written response. When did this experience occur? Less than 1 year ago; Between 1 and 3 years ago; 3-10 years ago; 10+ years ago.
13. What element of the place did you feel was communicating with you?
 - a. Fauna (animals, insects, aquatic life). Flora (plants, trees, fungi).
 - b. Non-living natural features (e.g. rocks, water, earth).
 - c. The weather.

- d. Human-constructed structures.
 - e. The entire ecosystem of the place or part of it.
 - f. Supernatural forces (e.g. fairies or *sídh*e, spirits, omens).
14. Please respond to the following statement in relation to communication from place: 'In the moment, I received the communication through...'
- a. My senses (sight, hearing, taste, touch, smell).
 - b. Visceral, 'gut' awareness (e.g. muscular tension and relaxation, heart-rate, breath, nervous system).
 - c. Feelings, (e.g. gratitude, awe, fear, excitement). Thoughts/ideas.
 - d. Imagination (images, dreams, altered states). Divining tools.
15. Did this communication result in you responding spontaneously in any of the following ways?
- a. Emotional response (e.g. joy, sadness, awe, fear).
 - b. Physical movement (e.g. walking, running, dancing). Verbal response (e.g. singing, sighing, chanting).
 - c. Creative expression (drawing, writing, composing). Tending action (cleaning up, repairing, gardening). Ritual/Spiritual (prayer, meditation, offering).
 - d. Somatic/body response (e.g. crying, sighing, shaking)
 - e. Avoiding disturbance/withdrawing (e.g. leaving the place alone, avoiding disturbance of wildlife).
16. To what extent do you agree or disagree with the following statement: 'I felt a sense of awe or wonder after my experience of place communicating its interests.' Scale: Strongly agree to strongly disagree.
17. 18. In relation to the following statement please select the option that best applies to you: "Experiences of communicating with nature have influenced my knowledge about the natural world". Scale: Strongly agree to Strongly disagree.

Section 2 – Beliefs about the relationship between humans and nature

1. In relation to the following statement, please select the option that best applies to you: "I feel very connected to all living things and the earth". Scale: Strongly agree to Strongly disagree.
2. Which of the following statements best describes your connection with nature.
 - a. I understand the Earth as a self-regulating, complex system, and while I don't attach spiritual meaning to it, I respect and value it immensely.
 - b. I view the Earth as a sacred, living, conscious entity which should be cherished and protected.
 - c. I perceive all living and non-living entities as interconnected, sharing a natural life force and thus worthy of care and protection.
 - d. I believe that all of nature including its living and non-living beings can be viewed as possessing spiritual intelligences or personhood, and I feel a kinship with and duty to protect and care for all these beings.
 - e. I don't hold any beliefs about the relationship between humans and nature.
3. To what extent do you agree with the following statement: "*The natural environment can express its own needs and interests in ways that humans can perceive*". Scale: Strongly agree to Strongly disagree.

4. Which of the following statements best reflects your view on the ethical relationship between humans and the natural environment?
 - a. Humans have the most important role, and nature should be valued primarily for its usefulness to human beings.
 - b. The environment should be protected and conserved to maintain human well-being and the resources needed for current and future generations.
 - c. Animals with the ability to experience sensations and emotions have intrinsic value, and humans should act to protect these creatures.
 - d. All living beings (for example, plants and animals) regardless of their capacity to think and feel have an innate value of their own, and humans should protect their rights and well-being.
 - e. The entire ecosystem, including non-living components, has intrinsic value, and we should prioritize the well-being of the Earth as a whole over individual species or human interests.
5. I mostly ascertain the interests of the non-human environment through the following methods....
 - a. Scientific knowledge.
 - b. Intuition.
 - c. Spiritual guidance/prayer.
 - d. Cultural traditions and folklore.
 - e. Direct experience of communication from the environment. Religious or spiritual teachings.
 - f. Observation and practical experience. Reasoning or logic.
 - g. I cannot ascertain the interests of the non-human environment.
6. Can you identify any spiritual beliefs, cultural traditions or folklore, that have had a particular influence on your own relationship with places in nature and the wider environment in general? Written response.

Section 3 – Environmental ethics and behaviour

1. How true is the following statement for you – “I have a deep understanding of how my actions affect the natural world”. Scale: Completely true to Completely untrue.
2. How often do you engage in environmentally friendly practices? Scale: Very often to Almost never.
3. What types of environmentally friendly behaviors or actions do you engage in?
 - a. Recycling and waste reduction.
 - b. Reducing energy consumption
 - c. Conserving Water
 - d. Buying local, sourcing organic products.
 - e. Using sustainable transportation.
 - f. Reducing or refraining from meat or animal product consumption.
 - g. Supporting fairtrade, eco-friendly businesses and ethically sourced products and services.
 - h. Avoiding single use plastics.
 - i. Repairing and reusing rather than discarding and replacing.

- j. Choosing ethical banking and investment options.
- k. Environmental activism, including animal welfare.
- 4. “My environmental behaviours are directly influenced by the emotional bond I have with places in nature I am connected with”. Scale: Strongly agree to Strongly disagree.
- 5. To what extent do your spiritual and/or ethical beliefs about the responsibilities of humans towards nature influence your environmental behaviours? Scale: Very significantly to Not at all.
- 6. How often the is following statement true for you: “My personal wants and goals coincide with what I feel would benefit the natural environment”. Scale: Always to Never.

Section 4 – About You

1. What gender do you identify with?
2. Age
3. How in general do you spend your day.
 - a. Caring for others (e.g., children, elderly, social care).
 - b. Research and Education (e.g., teaching, studying, reading, academic research). Service work (e.g., hospitality, retail, customer service).
 - c. Community or social work (e.g. volunteering, activism, social services). Business or administration (e.g. office management, finance, marketing). Creative work (e.g. arts, music, crafts).
 - d. Working with nature or outdoors (e.g. animal care, farming, gardening, environmental conservation).
 - e. Technical or skilled work (e.g., IT, engineering, design).
 - f. Medical, healthcare or physical therapies (e.g. nursing/doctor, counselling/therapy, physical therapy, fitness, holistic health).
 - g. Manual work (e.g. construction, maintenance, skilled trades).
 - h. Religious or spiritual work (e.g. spiritual guidance, clergy, psychic guidance). Transport, delivery, or driving (e.g., couriers, logistics, public transport).
4. Where do you live? Select Province.
5. What type of environment do you live in? Select: Urban. Suburban. Rural. Mixed – (urban-rural).
6. How long have you been living there? Select years.
7. Where did you spend most of your childhood (up until age 12)? Please state country and region.
8. What type of environment did you grow up in? Select: Urban. Suburban. Rural. Mixed – (urban-rural).
9. How would you identify your cultural background? Select: Irish (including Gaelic/Irish heritage). Irish Traveller. Northern Irish British. Other European. African. Asian Mixed Ethnic Background
10. Religious affiliation. Which best describes your *childhood* religious or philosophical affiliation? Select: Roman Catholic; Other Christian; Celtic Christian; Celtic Pagan; Muslim; Jewish; Buddhist; Indigenous/Shamanic; Humanist; Spiritual; Agnostic; No affiliation.
11. Religious affiliation. Which best describes your *current* religious or philosophical worldview? As in Q.10 above.

12. As you reflect on your relationship with natural places you feel connected to and your beliefs and ethical behaviour in relation to nature, what might be the main insight that you are taking away with you as you reach the end of this questionnaire?

Written response.

13. *“Engaging with this questionnaire has helped me to think more deeply about my relationship with the natural environment and how I care for it”. (Scale: Strongly agree to Strongly disagree)*

Section 6 – Thank you.

I would like to thank you for taking the time to participate in this study. I hope you experienced it as interesting and worthwhile. This study has been designed to reach as wide a range of people as possible, and you are invited, if you are willing, to share the survey with one or more of your own contacts, using the link below.

<https://forms>.

If you have found any part of this experience distressing, I encourage you to seek help from your support network.

Appendix 2:

Semi-Structured questions for interviews

Focus of the interview: to explore the impact of the participatory and transformative aspects of the research methodology; in particular, the impact of the survey as an instrument for encouraging personal awareness of embodied connection and intercommunication with nature places and links to cultural context and environmental awareness.

1. Introduction; Recap by researcher of the main sections of the survey.
2. What matters most to them in relation to the questions posed in the survey in terms of their connection with nature: communication experiences with nature? cultural influences? environmental beliefs and behaviours or other? Expand.
3. Deeper exploration of the relational dimensions of the nature place described by each participant in the survey focusing on their embodied sensory experience and behaviour responses.
4. Transformative aspects of the research. What was their experience of interacting with the questions on the survey – learnings/ insights, behaviour changes
 - a. at the time,
 - b. now as they reflect on it – engagement with it led to any lasting changes?
5. Participation: how would they like to see the research used.
6. Debriefing