Opportunity for solitude as a desirable attribute of wilderness character.

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The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

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Abstract

This dissertation examines the contemporary, western adulation of wilderness solitude and its frequent portrayal as a defining part of wilderness character. The experience refers to a period of voluntary isolation within a wilderness setting, defined as a self-willed ecosystem that shows historical fidelity to its primeval character and minimal evidence of man's presence. Significant research effort has already addressed the practical stewardship challenges of providing opportunities for solitude within designated wilderness areas. What remains less well defined is the intriguing question of why solitude is so frequently and favourably associated with wilderness in the western canon. Wilderness solitude as a voluntary, positive experience would seem to go against our tribal instincts to seek safety in communities and to defy the historical understanding of wilderness as a frightening realm of monsters and savage barbarity.

In this dissertation, elements of literary analysis are combined with wilderness social science to identify potential motivating factors that drive people to seek temporary isolation from others within wilderness. This includes a number of cognitive, spiritual and emotional factors. These desires are shown to be compatible with the biophysical attributes of wilderness that enhance privacy from unwanted company, and the symbolism of wilderness that inspires moments of personal development. Examining wilderness solitude from this perspective builds on our understanding of its subjective and multifaceted nature and may have practical implications for how we manage designated wilderness areas. A conceptual study of wilderness solitude can also inform our thinking on more theoretical questions about how one defines the value of wilderness and the human relationship with nature.

Table of contents

Page

List of figures

Page

1. Introduction

"For me, and for thousands with similar inclinations, the most important passion of life is the overpowering desire to escape periodically from the clutches of a mechanistic civilisation. To us, the enjoyment of solitude, complete independence, and the beauty of undefiled panoramas is absolutely essential to happiness."

These are the words of Bob Marshall, one of the most renowned conservationists in history (Wilderness Connect, no date). Marshall was a prominent member of the United States Forest Service during the 1920s and 30s and is perhaps best remembered for being one of the founders of the Wilderness Society - an organisation that still brings people together to fight for wilderness preservation today. In this short quote, Marshall has outlined the starting point for this dissertation: there is something within us that is attracted to a sense of separation from others, and something about wilderness that creates a unique opportunity to experience this. In Marshall's own words, moments of solitude are essential to his happiness and representative of a desire for something greater, which may be a feeling of independence and escapism from societal obligations. The experience can be enhanced by natural beauty and a pristine landscape with undefiled panoramas, which itself represents a contrast to the everyday norms of an urbanised and mechanistic civilisation. This quote is not only our starting point, but an introduction to our key concepts and a summary of the theories to be explored.

1.1 Research aim

This dissertation will address the topic of wilderness solitude. This is reflective of the author's interest in the human relationship with wilderness and how we define and value wilderness character. It is a nuanced and challenging topic that blends aspects of the tangible, biophysical reality of wilderness with the more intangible qualities of its character, including its potent symbolism and the subjective, psychological nature of the experience.

The primary research question asks why opportunities for solitude are often portrayed as a desirable attribute of wilderness character in contemporary, western culture, to the extent that they are even codified in wilderness legislation and policy. This is an intriguing question when one considers how paradoxical it may seem to voluntarily seek time alone in a potentially hostile environment. It can also be a confronting question when one considers the history of indigenous communities displaced from designated wilderness areas. A response will be formulated through ancillary questions that ask how the symbolism of wilderness as a social construct inspires solitude and how the biophysical reality of wilderness as a place enhances solitude. This will be followed by an important secondary question that asks what the practical and theoretical implications of this conceptual study could be for the management and understanding of wilderness solitude, wilderness character and our evolving relationship with wilderness.

We know that much of the wilderness legislation, policy and management discourse addresses the importance of curating opportunities for solitude, but this dissertation seeks to examine the underlying assumption behind this, by asking why the opportunity for solitude is significant for the individual visitor and for our relationship with nature. A novel methodological approach will be applied, using a selected sample of published accounts of solo wilderness adventures to identify salient themes in a predominantly literature-based exercise. The methodological approach will be expanded upon in the following chapter.

1.2 Research objectives

The first objective is to define the key concepts being discussed in this dissertation, which are ‘wilderness character’ and ‘wilderness solitude’. This will be addressed in the introduction, which will be followed by an explanation of the chosen research methodology.

To justify new research into this topic, a literature review will summarise existing research into how best to monitor opportunities for solitude using environmental or

psychological factors. The literature review will show how this echoes a wider debate about the significance of wilderness as a biophysical reality and a social construction.

To provide important contextual background, the dissertation will include a brief overview of why wilderness solitude might historically have been an undesirable experience, and why the idealisation of solitude is regarded as a problematic concept in contemporary wilderness discourse.

To address the research aim, thematically organised chapters will identify explanations for the favourable association between solitude and wilderness character. They will include reflections on how the construct of wilderness inspires solitude, and how the reality of wilderness enhances it.

The dissertation will examine the implications of this research in terms of how we understand and manage wilderness solitude and the wider concept of wilderness character, and how we think about our relationship with and place within wilderness.

The dissertation will conclude by addressing the limitations of this research and suggesting potential new avenues of research that could build on these ideas.

1.3 Defining wilderness character

It is helpful to begin with definitions of key concepts, starting with what we mean by wilderness character. The picture that comes to mind when imagining a wilderness landscape will vary from person to person. It might include mountains, forests and rivers, perhaps desert landscapes, jungles, expansive tundra or even vast oceans. Either way, the individual elements of the landscape that we can visualise and easily describe can be thought of as the outward display of a richer idea we call wilderness character (Olson, 2001). Instead of describing a specific material object, the character refers to the quality or attribute created when the elements interact and form something greater than the sum of their parts. Character is a holistic concept, best summed up as the combination of biophysical, experiential and symbolic qualities that distinguish wilderness from other lands (Landres, 2008).

Pinning down a comprehensive and universally accepted definition of wilderness character is not straight-forward. To a certain degree, we all interpret wilderness through our own personal lens and so the answer to the question ‘what is wilderness character’ will depend on who you ask. It has been said that wilderness is easier to experience than to explain (Muir, 1996), rendering it impossible to meaningfully document in words (Snyder, 1990). There are even some who believe wilderness character to be so indescribable and unknowable, that to define it in concrete terms is to diminish it (Landres, 2008). There is clearly a subjective, elusive quality to wilderness character.

Moreover, wilderness is a shifting construct that has changed in meaning throughout history. Two hundred years ago you might have found the prevailing opinion of wilderness to be one of an ugly, inhospitable place to be conquered for the advancement of civilisation (Nash, 2014). For the purposes of this dissertation, a more contemporary interpretation of wilderness is the dominant perspective, seen mainly through a North American lens of understanding. By this standard, wilderness is generally regarded more favourably as a place to be protected and celebrated. Using a combination of wilderness protection legislation (see for instance Wilderness Act, 1964) and stewardship policies (see for instance Landres et al., 2015), supplemented by international standards (see for instance European Commission, 2013, European Wilderness Society, 2019 and International Union for Conservation of Nature, 2022), and management handbook definitions (see for instance Dawson and Hendee, 2009a), it is possible to identify several distinguishing features of wilderness character that prevail in the current body of knowledge.

The first feature is a degree of autonomy. In other words, wilderness is a self-willed ecosystem where natural forces function freely, unhindered by intentional human manipulation. This condition is often associated with the philosophy of ‘hands-off’ stewardship (Landres, 2010), which allows ecosystems to evolve in a manner driven purely by their own internal forces. A helpful example could be to think of an ecosystem’s fire regime. This is the kind of fire activity characteristic of a specific area, defined by the frequency, intensity and type of fire. An untrammeled fire regime would

be without influence from human activities such as fire suppression, vegetation thinning or prescribed burning. Linked to the idea of an unhindered ecosystem is the idea of scale. A wilderness area must be large enough for the effective functioning of dynamic, undisturbed evolutionary and ecological processes.

If unrestrained ecological forces are the process, the product is a natural condition. The definition of ‘natural’ is itself a contested topic (see for instance the collection of essays in Cole and Yung, 2010), but it generally refers to an environment where the assemblage of habitats and species have resulted from the area’s unique evolutionary history. In the most pristine examples of natural ecosystems, one would not expect to find fire suppression, prescribed burning, pest control, ungulate population control, mineral extraction, commercial forestry or commercial grazing, to name but a few examples. A natural ecosystem shows historical fidelity to its primeval character and will often exhibit ecological integrity. This indicates that all processes related to the flow and storage of energy and materials (such as pollination and decomposition) function healthily and all characteristic spatial arrangements (such as forests, meadows or deserts) are present and intact (Woodley, 2010).

The third aspect of wilderness character, as commonly found in the western framework of knowledge, is an undeveloped landscape where evidence of man’s presence should be substantially unnoticeable. On a large scale, the most undeveloped landscapes would have no permanent human habitation, no roads, no pylons and maybe even no campsite facilities. On a smaller scale, there may even be no sign-posts, noticeboards, litter bins or maintained trails. Remaining in an undeveloped state allows wilderness to exist as a contrast to modern civilisation and perpetuates the image of wilderness as a realm beyond the human world (Abbey, 1971). This is one of the central tenants of the contested received wilderness idea, which will be explored in more detail later in the dissertation.

Lastly, there is a category of wilderness characteristics which are more anthropocentric. This is where we start to see wilderness from a human-orientated perspective and separate the anthropogenic qualities from the biological features (see for example the categorisation of wilderness definitions found in European Commision,

2013). Examples of the more anthropocentric qualities include: opportunities for recreation, adventure and enjoyment; feelings of personal development derived from physical and mental challenge; or a sense of freedom from societal obligations. Of most interest for the purposes of this dissertation, is the idea that wilderness character should also include opportunities for solitude.

In summary, it is the character that distinguishes wilderness from other lands. The overarching goal of wilderness stewardship should be the preservation of wilderness character (Landres et al., 2015) and a good understanding of it is essential if we are to articulate desired conditions and cumulatively evaluate the effectiveness of individual stewardship decisions. Moreover, how we perceive its character will influence how we value wilderness. There is a human tendency to want to give things an economic value in order to find a motive to preserve them (Leopold, 1949). As commercial activities such as mineral extraction, forestry or livestock grazing are often prohibited in wilderness, we are forced to consider its value in more intrinsic, biocentric or anthropocentric terms. The value that speaks strongest to us will depend largely upon our understanding of its unique character.

1.4 Defining wilderness solitude

The previous section demonstrated that wilderness is often defined in terms of a negative. The focus is on what is absent, whether that be roads, mechanisation or other signs of human agency. In the case of wilderness solitude, our thoughts turn to an absence of people. Yet when researching solitude, humankind is brought into the spotlight. Questions are asked about what is happening around us, in terms of the social and spatial conditions, and what is happening within us, in terms of the attitudinal and psychological effects. Whilst the idea of being alone may sound like a simple concept, not worthy of a lengthy definition, there are a few important elements to clarify.

One of the most important points to note is that the term ‘solitude’ typically portrays the experience of being alone as an agreeable one. There is a distinction to be made between solitude and the more negative idea of ‘loneliness’ which is unwelcome and unintended and could be seen as failed solitude, occurring when the lack of

company has continued for longer than desired (Vincent, 2020). Solitude, on the other hand, is a function of choice and demonstrates an ability to deliberately withdraw from other people. So as well as being a positive experience, we can also note that part of the definition of solitude is that it is a voluntary state, lasting for a duration of our choice.

Another important characteristic of wilderness solitude is that it might not always be accompanied by complete physical isolation. In fact, the word solitude has been called a misnomer (Dawson et al., 2009) and even a deceptive name (Emerson, 2000) for the experience being referred to in this context. It is not simply about seeing fewer people (Emerson, 2000) or in other words, it is more than the antonym of physical company (Vincent, 2020). The quality being described is more akin to 'privacy' in the sense of separation from other groups. In reality, few people choose to go into the wilderness completely alone and many wilderness experiences are taking on an increasingly social nature (see for example the study by Dustin et al., 2020). Instead of total isolation, wilderness solitude is about having a degree of control over your physical and cognitive state (Hammitt, 1982). So whilst you might be with other people, you maintain a sense of privacy through your control over who those people are, and your control over when and how you encounter other parties.

Consequently, the quality of the experience can be influenced by factors beyond the mere presence of others. The quality of solitude can be affected by sights and sounds that indirectly reveal the presence of other people who have passed through the same area or been active in the surrounding area. Solitude can also be affected by non-recreational activities such as mining and grazing, visual distractions such as installations and aircraft, intrusions from outside the wilderness boundaries, such as water or air pollution and even the implementation of restrictions on visitor behaviour and how self-reliant they feel (Landres et al., 2015). One has to acknowledge that opportunities for wilderness solitude are not easily measurable by quantifiable metrics such as trail encounters. The question of how to monitor wilderness solitude and select suitable indicators will be returned to later in the dissertation.

The final point to make about the definition is that, like the concept of 'character', it can be subjective. Our levels of tolerance for other people are undoubtedly influenced

by our background and culture, the societal norms to which we are accustomed and maybe even the activity in which we are partaking. What is unacceptably crowded to one person, may seem only moderately busy to another. Solitude can be thought of as a fluid concept meaning different things to different people, resulting in something too complex to capture in a single definition (Batchelor, 2020). As a result, solitude can be described as a quality existing along a continuum (Leopold, 1949). It has also been observed that our perceptions of solitude could change over time. Shifting baseline syndrome describes the phenomenon whereby different generations have different ideas of solitude (Baker, 2017). What one generation grows up with and becomes gradually acclimatised to becomes the norm, which in turn becomes the target we strive for.

The main conclusion to draw from this definition must be that opinions will vary as to what wilderness solitude looks and feels like. Whilst some wilderness visitors may want to be completely alone, others may consider it acceptable to be ‘alone together’ with a selected group of individuals. Some may be aggrieved at seeing other people in the distance, some may only feel disturbed if they pass them on the trail, and some may not feel that a temporary social encounter detracts from the overall experience. What we do know is that when we refer to wilderness solitude, we are referring to a generally positive experience that is the result of free-will. The nebulous and subjective nature of solitude is part of what makes it a challenging issue for wilderness stewardship and an interesting topic for research.

Before moving on, it is worth remarking upon the relationship between solitude and wilderness character. In the official language of wilderness management, solitude is clearly perceived to be part of wilderness character. For example, the statement that wilderness should provide outstanding opportunities for solitude can be found in the US Wilderness Act (1964) and in the interagency Keeping It Wild strategy (Landres et al., 2015), which is applicable to every wilderness area in the US National Wilderness Preservation System. We can also find similar examples outside of the US. For example, the same statement regarding solitude can be found in wilderness standards produced by the European Commission (2013), the European Wilderness Society

(2019) and the International Union for Conservation of Nature (2022). In addition, wilderness management research is actively grappling with the subject of solitude. Wilderness managers want to understand how to define solitude, what it means to people, what impacts upon it, how to monitor it, how to create opportunities for it and how it interacts with other aspects of wilderness character. It is clear that creating opportunities for solitude is not only of interest to law-makers and policy-writers, but also to those who are more actively involved on the front-line of wilderness management.

Furthermore, the perspective of wilderness advocates and visitors frequently tells us that solitude is part of what makes the wilderness experience unique. Published accounts of wilderness visits frequently include reflections on solitude, often giving the impression that it was one of the most striking aspects of the experience. For example, this sentiment can be found in the works of many celebrated writers who have reflected upon their time in the American wilderness, including Aldo Leopold (1949), John Muir (1996), Sigurd Olson (2001) and Henry David Thoreau (1995). Research also shows there is a general expectation amongst those who visit wild places of finding opportunities for solitude. For example, research (Smith and Kirby, 2015) has found solitude to be one of the most prevalent thematic elements in a selection of essays about the meaning of wilderness. And there is research (Dawson et al., 2009) to show that social conditions, such as crowding, have a greater impact on the quality of a visitor's experience than ecological conditions. The importance of solitude for the visitor and its role in creating high-quality experiences make it an interesting and worthwhile topic of study.

This introduction has set out the research aim and objectives and provided a definition of the key concepts. 'Wilderness character' has been defined as the combination of biophysical, experiential and symbolic qualities that distinguish wilderness from other lands. How we perceive the character determines the conditions we want to preserve and the value we place upon wilderness. 'Wilderness solitude' has been defined as one of the anthropocentric qualities of wilderness character. It refers to a generally positive experience that is the result of free-will and may be more akin to privacy than complete physical isolation. There is a nebulous and subjective quality to

both concepts that makes them interesting and challenging topics to research. The next chapter will set out the chosen methodology for this dissertation and the rationale behind it.

2. Methodology

2.1 The scope

As mentioned in the introduction, the primary research question asks why opportunities for solitude are commonly regarded as a desirable and defining part of wilderness character in contemporary western culture. To that end, this is a conceptual study of wilderness solitude, asking what the experience symbolises for our society, how it is enhanced by the unique biophysical reality of the environment and what we can learn from this study about the human relationship with wilderness.

There are three ways the scope of this dissertation has been defined. Firstly, we will be talking about the wilderness construct from a white, western, anglophone and predominantly North American understanding. This is not to say other cultural perspectives are invalid or less important. There are multiple lenses through which one can look at wilderness, but keeping the scope of this dissertation on the western canon creates a clearer focus that allows for more depth of analysis. Furthermore, it is in the US specifically where we find a legal mandate to provide opportunities for solitude within designated wilderness areas. It is the intention of this dissertation to build on the contemporary stewardship discussions based on this perspective.

Secondly, the focus will predominantly be on research and writing from the twentieth and twenty-first century. Earlier ideas of wilderness will be included where they are helpful, such as early Judeo-Christian ideology, but a comprehensive overview of changing attitudes throughout history would not be feasible here. A more contemporary focus allows us to build on the modern ideas of wilderness management and explore some of the challenges as they are experienced today.

Thirdly, the scope is limited to wilderness in the terrestrial sense, as opposed to the sub-terranean, maritime, sub-maritime or even extra-terrestrial. This offers us a

richer body of material to reference and analyse when looking for personal accounts of solo wilderness experiences and it is more compatible with contemporary, western wilderness management discourse.

2.2 The approach

This is a literature-based exercise, using qualitative methods. A sample of books containing reflections and observations based on solitary experiences in wilderness or wild nature was read, in order to extract key themes around which the dissertation was structured. This is a novel approach to understanding wilderness solitude, combining elements of literary analysis with wilderness social science to bring a new perspective on the management of wilderness ecosystems. The literary sources grant us a valuable insight into real, lived experiences that occurred across different countries and at different times. And as cultural artefacts that may be shaped by and have the power to shape cultural thinking, they can help us understand in broad terms how wilderness is perceived and valued. Literary analysis is also compatible with a qualitative approach, which is well suited to interpretation-based research and our aim to consider wilderness solitude from an attitudinal perspective. An additional reason for this choice of methodology is a logistical one, as it would not be feasible at this time for the author to accumulate data from physical observations or extrapolate conclusions from field interviews.

Information retrieval skills were used to compile the sample, using a combination of keyword searches and citation searches, as well as recommendations received from the dissertation supervisors. The intention was to read enough material to begin to identify trends, and to stop when predictable, repeated patterns began to emerge. In total, 26 published accounts of solo wilderness experiences were used as the primary sources to analyse, details of which can be found in the bibliography following the main list of references. The bibliography includes a short annotation alongside each title, summarising the key themes that were extracted from each work as well as the date of first publication. The sample of books was chosen based on the criteria set out within the dissertation's scope. To that end, the wilderness experiences are predominantly

situated within the western world, from a western perspective and date from the twentieth and twenty-first centuries.

2.3 The literary sample

Across the literary sample, the most common experiences are in North American wilderness, totalling 13 authors (Abbey, Austin, Dillard, Ehrlich, Gessner, Grieve, Kerouac, Leopold, Muir, Proenneke, Ruess, Thoreau and Weymouth). A few international examples are included to broaden the perspective, including Canada (Tomkies), Antartica (Kagge), South America (Matthiessen) and global travellers (Griffiths and Richards). Examples from the United Kingdom are also included to bring in a European perspective (Cracknell, Crumley, Lloyd-Jones, Macfarlane, Maxwell, Shepherd and Tomkies), although the remote, rugged landscapes found here are more commonly considered to be ‘wild land’ instead of strictly designated wilderness in the American sense.

Primary source accounts from indigenous voices are not included, as the main objective is to look at the evolution of the western ideology that has manifested itself in key wilderness legislation and policy governing many of our designated wilderness areas today. However, this is not to say that other perspectives are invalid and the next chapter will address some of the ethnocentric concerns about this concept.

The majority of the published accounts are by male writers. Out of the total sample, there are 6 female authors (Austin, Cracknell, Dillard, Ehrlich, Griffiths and Shepherd). It is not within the scope of this dissertation to meaningfully explore gender differences in how we experience wilderness, and a range of demographic factors could be examined as potential future research opportunities. However, bringing in female voices increases the range of perspectives and subtlety disrupts the stereotype that wilderness adventures are exclusively a male experience. The reasons as to why female voices are outweighed by male voices in the genre of wilderness literature and why wilderness adventures are generally regarded as more normative for men could also be a topic for further study.

The majority of the first publication dates are from the twentieth century, with just one earlier exception from 1854 (Thoreau) and 11 more recent publications from the twenty-first century. Thoreau was included as an exceptional case, given his impact and ongoing influence as a writer who is still heavily referenced and quoted today. Otherwise, the publication dates fit within the dissertation scope and support the research question, which looks to understand the more contemporary cultural perceptions of wilderness.

2.4 The literary analysis

The primary source accounts were analysed with two questions in mind. The first was to understand why the authors had chosen to visit wilderness alone, or what they felt they had gained from the experience, and the second was to understand the factors that impacted upon the quality of their experience. During the analytical reading phase, notes were made and relevant quotes were recorded under broad headings to capture the motivations and positive gains from the solo experiences on the one hand, and characteristics of the environment that enhanced or degraded the experience on the other. This was based on the dissertation author's own perception of what was being conveyed through the literature. This was a qualitative approach without structured data to analyse or easily quantifiable results to share, the limitations of which will be discussed in a later chapter. It was, however, not the intention of this dissertation to metricate a response, as it does not feel appropriate to aim for specificity in terms of precise figures or absolute answers when talking about subjective experiences and dealing with the nebulous, intangible and somewhat ambiguous concepts of 'wilderness character' and 'wilderness solitude.'

Colour-coding was applied across all the notes to highlight the different themes and make it possible to identify the trends and recurring patterns. The themes were copied onto cards for a card-sorting exercise to determine a satisfactory structure. Critical thinking was used to organise the reflections into broad topics that could form the outline for thematic chapters on restorative freedom, exploration and societal withdrawal. As a stylistic choice, it was decided to arrange the material into three long chapters that could each address one topic in depth, instead of multiple short chapters

that might become repetitive or feel too fast-paced. To help readers navigate the dissertation, it was decided to arrange the chapters into a rough chronological order. For example, references to early Judeo-Christian ideology precede references to the Victorian age of exploration, which precede a discussion about modern ideas of societal discontent. The outline structure was then annotated to show where additional research was required in order to find supporting evidence and theories, on topics such as the wilderness soundscape, the wilderness aesthetic, or wilderness and our mental state. These searches were run across a variety of secondary sources, as explained in the following section.

2.5 Additional contextual research

To situate the dissertation within a wider body of research, a thematic literature review was conducted. Firstly, this summarised the current thinking about how to monitor and model opportunities for solitude with indicators that address the physicality of the environment and the internalised nature of the experience. Secondly, the literature review showed how this research fits into a wider debate about whether wilderness definitions should focus on the embodied reality of a biophysical place or the subjective experiences of a social construction. Search strategies were created and run across Web of Science and Google Scholar. Article abstracts were used to determine relevance and decide which articles should be read in full. The search strategy was refined further using the database's own keyword metadata where available. The list of relevant results was gradually expanded using citation searches and by following-up on references in the most pertinent articles. Critical reading was guided with prompts to reflect on what was unique in each article, how it was relevant, and how it expanded on, agreed with or contradicted other reading. All the literature review searches were repeated during the second year of study to refresh the dissertation with the latest research.

A similar online research methodology was applied to other topics. These were inspired largely by the themes identified during the literary analysis. Examples of such topics include the received wilderness idea and the pristine myth, wilderness spirituality, attention restoration theory, prospect-refuge theory, ecological intelligence and biophilia.

In addition, research was conducted across a variety of other secondary sources offline. This process included index searches in edited essay collections and scholarly works on the wilderness concept and the history and significance of solitude. And in order to define the key concepts of wilderness character and wilderness solitude, definitions and reflections were sourced from international wilderness policies and legislative acts, as well as wilderness management handbooks. Ideas and quotes were recorded as part of the critical reading and organised into the dissertation structure during the planning process for each chapter.

To keep the dissertation focused on the research aim, the author created a conceptual model for personal reference and applied a process of thorough structural planning. This was used in combination with a timetable of milestones and checkpoints to allow for long- and short-term goal setting. This allowed the research to stay on topic and on schedule and resulted in a dissertation which hopefully builds on the existing body of knowledge with a new perspective on wilderness solitude.

3. Literature review

This thematic literature review will look at two relevant and interesting points of debate in contemporary wilderness discourse. Firstly, it will summarise the research into how opportunities for solitude in wilderness can be monitored and modelled. The interesting point of debate here is whether solitude is predominantly a social-spatial issue concerned with the environment around us, or a humanistic issue concerned with the psychological experience within us. The literature review will then show how this echoes a wider debate about the contrasting perspectives of wilderness as a biophysical realm or a social construct. The combination of material and experiential qualities and the interdependencies between them will be a recurring theme throughout the research.

This dissertation can be situated broadly within the discipline of wilderness social science, which is concerned with the human dimension of the wilderness experience. Historical overviews of wilderness social science as a discipline (see for instance Watson and Cordell, 2014 and Watson et al., 2015) track its growth from an early focus

on visitor experiences and recreation opportunities in the 1960s, to new research into public sentiment towards wilderness and the values we associate with it. At the same time, the study of visitor use management has progressed over the last twenty years to explore the wilderness experience in terms of our perceptions of and emotional response to wilderness (Thomsen et al., 2023). Our relationship with wilderness has been shown to be dynamic and in need of an adaptive form of stewardship that can respond to evolving experiences (McCool and Freimund, 2016). The desire to study and understand these changes can be attributed to the belief that wilderness managers are to some extent stewards of that relationship (Dvorak et al., 2013). An understanding of personal values and individual wilderness experiences therefore becomes beneficial in guiding management actions.

3.1 Solitude and the social-spatial or humanistic approach

The study of solitude divides broadly into two categories: the social-spatial and the humanistic. The social-spatial approach focuses on the physicality of the experience. It considers what is happening around us, including the characteristics of the environment we are in and the people we are with. The importance of contextualising experiences of solitude within physical surroundings has been discussed in recent research that examines the extent to which positive solitude is more closely associated with natural spaces than developed environments (see for example Nguyen et al., 2023 and Samangooei et al., 2023).

In terms of wilderness solitude, the social-spatial approach is embodied in the carrying capacity concept (Sumner, 1936). This early management framework is based on the belief that wilderness character will be degraded by over-crowding. It places an implicit emphasis on establishing limits on the amount of recreational use, often leading to policies designed to limit the number of visitors to a designated wilderness area. The carrying capacity concept was later reformulated as the Limits of Acceptable Change (LAC) framework (Stankey et al., 1985). Instead of defining a maximum amount of recreational use, the LAC framework defines desired biophysical and social conditions with measurable standards and tracks changes resulting from visitor activity. The evolution of these frameworks, including the limitations of carrying capacities and the

rationale behind LAC, has been well documented (see for instance Cole and Stankey, 1997, McCool and Cole, 1998 and Whittaker et al., 2011) and would be beyond the scope of this review.

Evidence of the social-spatial approach to monitoring opportunities for solitude is still present in contemporary wilderness management legislation and guidance. However, the range of indicators has expanded beyond crowding to include other aspects of the biophysical setting, such as the topography. While researching the original congressional intent behind the phrase ‘outstanding opportunities for solitude’ in the US Wilderness Act (1964), Engerbretson and Hall (2019) concluded that focusing on social encounters alone was arguably a unidimensional way of managing solitude. According to their research, solitude can also be facilitated by natural landscapes, large acreage, and feelings of remoteness from human development.

This idea of solitude as a multifaceted concept continues in the American interagency strategy for monitoring wilderness character across the National Wilderness Preservation System (Landres et al., 2015). Examples of solitude indicators provided in this framework include: the number of occupied campsites within sight and sound of one another; sounds of automobiles and airplanes; views of urbanisation from high peaks and ridges; and the number of miles of user-created trails. In a similar fashion, the European Union guidance for the management of terrestrial wilderness and wild areas within the Natura 2000 network (European Commission, 2013) specifically addresses scale and landscape as two influences on the experience of solitude.

The social-spatial approach can also be seen in the way modern technology is being integrated into wilderness management. For example, computer simulation modelling is being used to understand the temporal and spatial distribution of wilderness visitors (Cole, 2005a). Input data for the modelling software includes visitor characteristics such as party size, entry points, length of stay, mode and speed of travel, along with environmental data such as the trail network and gradients and the location of campsites. In addition, geographic information systems are being used to map factors such as remoteness from population centres, mechanised access or nearest human artifact, and the degree of naturalness of land cover to show how

different factors combine to affect wilderness character (see for example Carver et al., 2002; 2013; 2023).

In contrast to the social-spatial approach, the humanistic approach treats solitude as more of a psychological concept. It looks at the experience of solitude from the point of view of what is happening within us – how we feel and the values we place on wilderness. According to the humanistic approach, experiences of solitude are treated as mental states rather than physical conditions. Solitude is defined as a personal rather than a place-based concept (Long et al., 2007) and one where the dominant relationship is with the self as opposed to the surroundings (Weinstein et al., 2022). Advocates for the humanistic approach argue that the attitudinal experience of solitude has historically been over-looked (Hollenhorst and Jones, 2001). For a long time, it was assumed that solitude was about physical isolation and the research focus was predominately on factors such as encounter norms, crowding, carrying capacities and biophysical attributes of the environment. In contrast, the humanistic approach addresses the symbolic and metaphoric meaning of solitude.

Adopting the humanistic approach requires identifying new indicators to understand solitude as multi-faceted and multi-dimensional (Dawson, 2004). These new indicators include, for example: psychological detachment from society; a sense of independence from societal constraints; and opportunities for introspection and self-development (Lang, 2018). Other research has focused on defining solitude as a sense of individual cognitive freedom, or a sense of control over one's social behaviour and information processing abilities (Hammitt, 1982;1994, Hammitt and Madden, 1989 and Hammitt et al., 2001). Some have argued that more research is required into the symbolic and spiritual values of solitude, specifically connected with opportunities for the development of self and personal growth (White and Hendee, 2000). The consensus today seems to be that solitude is affected by more than the number of encounters one has (Hall, 2001a) and that a monitoring approach that evaluates solitude based on the number of encounters alone would not adequately capture the important experiential dimensions of a wilderness experience (Hall, 2001b).

In summary, the social-spatial approach to understanding solitude focuses on the physicality of the experience, including the natural and social conditions, whereas the humanistic approach focuses on the psychology of the experience and draws on the importance of personal values and symbols. This is indicative of a wider debate concerning wilderness as an embodied reality versus wilderness as an idea created by values imposed onto the landscape. This will be examined in more detail in the following section.

3.2 Wilderness as a biophysical realm or a cultural construct

Research suggests there are two ways to look at wilderness. One is to focus on the embodied reality of tangible features and natural, pristine conditions. The other is to focus on a more subjective definition based on the individual, internalised elements of the wilderness experience and what it represents for us personally. The difference is between wilderness as an object, and wilderness as a quality. In this section, we will address the debate around perceptions of wilderness as a biophysical place or a symbolic, cultural construction.

On the one hand, there is the social constructivist perspective. This is the belief that wilderness is a human construction, only acquiring meaning from the symbolic values we associate with it. To situate this idea into a broader context, we can reference the work of Greider and Garkovich (1994). They look at landscape in general as a symbolic environment created by a human act of conferring meaning on nature. They go on to discuss the idea that any landscape could have multiple symbolic meanings emanating from different values and sociocultural phenomenon. Accordingly, the concept of a wilderness landscape can become a malleable idea.

One of the most prominent supporters of the constructivist perspective is Cronon (1996). He describes wilderness as a profoundly human creation and a cultural construction that is the product of civilisation. To illustrate this, Cronon traces the changing perceptions of wilderness from Judeo-Christian ideology to Romanticism and the anti-modern perspective. Further examples of the dynamic nature of our relationship with wilderness can be found in various historical accounts of the

wilderness idea, such as its changing place in American culture (Nash, 2014), or its role in western European culture (Kirchhoff and Vicenzotti, 2014). In documenting the evolution of wilderness from a cursed place of the ungodly to a representation of moral authority with religious connotations, Warner (2009) agrees with Cronon's stance that wilderness is a construction moulded by human ideology and therefore a reflection of societal ideologies.

Central to the social constructivist perspective is a belief in the importance of symbolic values. Cole (2005b) defines a symbol as something that holds meaning beyond what is physical and tangible and argues that the symbolic values of wilderness have traditionally been overlooked in favour of ecological and experiential values. In Cole's view, the symbolic values are the most radical because they represent the greatest contrast with modern society, and they are the most important because they are what makes wilderness unique. One of the most passionate celebrations of the symbolic values of wilderness can be found in the writing of Olson (2001). He believes the most important benefits of wilderness are the intangible ones, or to use his own words, the imponderables. Freyfogle (2014) agrees by explaining that wilderness research has as much to do with meaning, values and human perception as it does with the physical world. Since the morals and values we embrace are based purely on social convention, Freyfogle argues we have the right to revise them and wilderness as an idea can therefore mean whatever we collectively want it to mean.

Another aspect of the social constructivist perspective argues that traditional definitions of wilderness as uninhabited and unsullied by human activity, have lost their meaning. In the geological epoch known as the Anthropocene, one could argue that the ubiquitous presence of air, water and noise pollution has spread man's influence to every corner of the globe (McKibben, 2022). Furthermore, research is increasingly revealing the extent to which many areas now designated as wilderness were impacted by previous human occupation (see for example Kalamandeen and Gillson, 2007). If nowhere is truly 'untouched' by man, what is unique about wilderness in a biophysical sense? Following this train of thought, it becomes preferable to consider wilderness as

more of a quality reflective of our own values and desires, as opposed to a biophysical realm with distinct attributes.

It is fair to say that the social constructivist perspective is contentious. The alternative view, known as the realist or materialist perspective, follows three main lines of argument. The first objection is that social constructivism denies the ecological significance of wilderness. Willers (1996) asserts that nature does exist outside of our ideas and argues that Cronon's lack of appreciation for the biological significance of wilderness was detrimental to the environmental movement. Wolke (2014) takes an even stronger stance, claiming that those who believe wilderness is defined by perception are categorically wrong. Wolke argues that wilderness very much exists as a distinct and definable entity with clear characteristics and tangible physical attributes that distinguish it from other places, and with real ecological importance as a baseline environment for natural conditions and evolutionary processes. And Vogel (2002) concludes his own research by cautioning against those who would deny the material reality of the world or reduce our relationship with the environment to one solely of discourse and thought.

The second objection states that social constructivism is an anthropocentric perspective that denies wilderness any intrinsic value beyond that which we assign it. Intrinsic value is independent of human values and exists in the absence of human preferences. In contrast, anthropocentric arguments share the assumption that the values of wilderness exist only in the context of human concerns (Gudmundsen and Loomis, 2005). Environmentalists today are beginning to question the human-centeredness that underlies much of modern thought (see for example Freyfogle, 1998). One of the most assertive opponents of social constructivism is Snyder (2000). He argues that social constructionists commodify nature by denying it any value other than what we as humans can quantify. A rejection of the human-centred perspective is also found in the work of Kidner (2014), who attacks the notion that humans constructed wilderness. Kidner argues that this idea stems from an anthropocentric arrogance that overestimates human contributions and undermines our understanding of nature as the outcome of evolutionary processes.

The third line of argument taken by those who oppose the social constructivist view, is to warn against its potential to facilitate a degradation of wilderness conditions. If wilderness is malleable and transitory, it can be changed and replaced. By rendering the meaning of wilderness in the abstract, social constructivism may be smoothing the path for those who wish to facilitate its destruction (Crist, 2004). If wilderness is a social construction, it is harder for us to see our place in wilderness and this could lead to an attitude where we become dominant, controlling and potentially destructive (Woods, 2017). As Lie (2021) says, the argument that everything is constructed paves the way for technical, scientific and economic forces to adjust the world to suit our needs. A better approach, according to Lie, is to acknowledge the existence of something beyond the powers of human will and construction.

It is possible to occupy a middle-ground in this debate, as demonstrated by those who are willing to acknowledge that wilderness can have a double meaning. It can simultaneously be a biophysical place with observable attributes that are objectively measurable, and a projection of cultural ideals that represent an experiential concept (see for example Olwig, 1996, Bergstrom et al., 2005 and Vucetich and Nelson, 2008). It can have both a legal definition focused on biophysical characteristics and a sociological definition (Dawson and Hendee, 2009a). Whilst nature and wilderness have a biophysical reality, how we apprehend that reality occurs within a social construct. We need to pay attention to those constructs and images because they will ultimately transform from thoughts into actions (Belsky, 2000).

An alternative way to resolve the debate is to reject both the constructivist and materialist perspective as flawed. The argument here would be that materialists do not acknowledge the socio-cultural context of the wilderness concept and constructivists focus too much on everyday socio-ecological interactions instead of true wilderness conditions (Petersen and Hultgren, 2020). Others try to resolve the issue by making the case for more clarity of terminology, including an agreed definition of ‘nature’ (Demeritt, 2022) and better communication between both sides to facilitate more productive engagement and reach a point where social constructivism is taken seriously, but we are also not denied the ability to seek reality in physical nature (Proctor, 1998).

This section has examined the idea of wilderness from two angles. The social constructivist perspective says wilderness definitions that focus exclusively on biophysical attributes are no longer meaningful, and we should accept the wilderness idea as one that is moulded by a particular human ideology at a given moment in time, acquiring meaning from the values of social convention. The opposing materialist or realist perspective says it is wrong to deny the existence and significance of wilderness as a biophysical place with its own intrinsic value, and that to do so is to condone its destruction. This concludes the literature review. We have now situated the dissertation into a wider body of wilderness research, summarised key concepts that will be expanded upon later and provided justification for further research into the values and symbols associated with wilderness solitude.

4. Here be dragons

4.1 Wilderness solitude as an aberration

We have established the research aim is to reflect upon and examine opportunity for solitude as a desirable attribute of wilderness character. However, it is interesting to include a short reflection on how this may not have always been the case. Whilst contemporary western ideology has predominantly defined wilderness landscapes as places devoid of permanent human habitation and without deliberate manipulation (see for example Section 2(c) of the US Wilderness Act (1964), which says man should be a ‘visitor who does not remain’ and the imprint of his work should be ‘substantially unnoticeable’), that ‘empty’ quality once had negative connotations and the reasons for an absence of people were anything but agreeable. In the past, wilderness was regarded as a mysterious and menacing place. It symbolised evil, danger and darkness in contrast to the morality, safety and virtue of civilisation. Anyone entering the wilderness would most likely find themself alone and isolated, but not in a pleasant way.

It is not hard to understand why the experience of being alone in the wilderness could be seen as undesirable. The idea that people would voluntarily choose to spend time alone in inaccessible and sometimes inhospitable environments sounds counter intuitive. Part of this could be attributed to our tribal origins. Evolution would seem to

show that humans are tribal by nature and social bonds are part of our biology. Natural selection rewarded our ancestors for collaborating and building communities at a time when the most dangerous threat to survival was being excluded from social groups (Kurzgesagt. In a nutshell, 2019). It could be said that humans are still influenced by an ancestral clan instinct to look for safety in communities (Busch, 2019) and to regard voluntary solitude as an aberration (Batchelor, 2020). For example, it is interesting to reflect that solitary confinement is still widely regarded to be one of the worst forms of punishment that can be inflicted (Vincent, 2020). Lessons learned from wildlife observations may even suggest that nature itself favours the wellbeing of the tribe over the individual (Crumley, 2007). So there is an argument to be made that evolution has not prepared us for the isolation and self-reliance demanded by wilderness solitude.

In addition to our tribal origins, we can look at the etymological origins of ‘wilderness.’ It is commonly believed to mean ‘place of wild beasts’ (Nash, 2014, p.2) or ‘land inhabited only by wild animals’ (Fletcher et al., 2021, p.2). Of interest to us here is the emphasis on creatures. The mysterious qualities of wilderness make it an ideal setting for imagination to conjure up demons and monsters (Nash, 2014). Classical mythology and early folk traditions often used wilderness as a setting for fanciful creatures and supernatural beings, which made it an unwelcoming environment for humans. Examples of such mythical beings include satyrs, trolls, ogres, giants, werewolves, dragons and serpents. There was also the pagan god of the woods, Pan, depicted with horns and hooves and regarded as a wild and irrational deity who would evoke fear in solitary travellers in the wilderness, hence the origin of the word ‘panic’ (McCallum, 2005). In medieval times, it was not unknown to draw lions or mythical creatures over uncharted territories on maps, accompanied by the phrase ‘here be lions’ or ‘here be dragons’ to represent the danger that could exist in unexplored lands. Furthermore, wild forests are a common setting for fairy tales, where they often represent a place of magic and danger beyond the safety and familiarity of home, and exist as a lair for malevolent beings. Consider, for example, Red Riding Hood’s encounter with the wolf, or Hansel and Gretel’s encounter with the witch. These serve as cautionary tales about the dangers of wandering off alone into the wild forests. The

tradition of locating frightening creatures in wilderness is another reason why the experience of wilderness solitude could be undesirable.

Another explanation for the negative connotations of wilderness solitude lies in early Judeo-Christian ideology. Wilderness had a central position as a symbolic concept and was often used as a synonym for arid, inhospitable land. Wilderness was seen as a cursed place, which led to the conviction that it was the earthly realm of the powers of evil, a symbol of anarchy and a moral vacuum where the veneer of civilised society could be broken down (Nash, 2014). It has been said that Christian beliefs shaped the New World culture by establishing a division between the sacred and the profane (Ehrlich, 2019), whereby wilderness was cast in the role of evil opponent to the domestic, pastoral and industrial. The 1678 novel Pilgrim's Progress is a good example of how wilderness was used as a Christian symbol of anarchy and evil (Pooley, no date). Bunyan's allegorical tale portrays wilderness as a hostile, temptation-laden place that tests one's faith and courage on the journey towards salvation. Later in this dissertation, we will see how the early Judeo-Christian fear and distrust of wild, uncultivated land evolved to the point where nature came to be regarded as a manifestation of God and the power of His creation. But until that point, the prevailing view of wilderness as a sinful and evil abode would not be conducive to voluntary, solitary excursions.

This biblical ideology became the guiding force driving early settlers of the American frontier, for whom wilderness was a concept loaded with meaning. Beginning in the seventeenth century, a 'recovery narrative' (Merchant, 1996) used the Biblical symbolism of wilderness to sanction human alteration of the landscape. This made it permissible and desirable to reinvent the world in the image of the lost Garden of Eden, or in other words, a cultivated, productive, beautiful landscape (Freyfogle, 1998). Adulation of the pastoral condition led to the belief that controlling the earth, conquering nature and making wilderness fruitful was the ultimate fulfilment of man's potential. This so-called 'Edenic thinking' helped to legitimise and propel settlement of the American continent by Europeans. Subjugation of wilderness was the chief source of pioneer pride and their progress was proportionate to the amount of alteration imposed upon

nature (Nash, 2014). A full exploration of the pioneer mentality towards wilderness would be beyond the scope of this dissertation, but much research has already been conducted into their views of wilderness as something to be subdued and conquered (Rudzitis, 1996), or tamed and moulded to their needs (Olson, 2001). Once again, we find evidence that historically, a voluntary period of wilderness solitude would indeed be regarded as an aberration.

A sense of unease, or even fear, can also exist in a more contemporary context. There is not only a primeval fear of the natural surroundings, but also a fear of who you may encounter, and underlying suspicions regarding people who have withdrawn from society. Some of this fear may be well-founded. For example, law enforcement research in the US (Berkowitz, 1993) has documented the sad fact that a disproportionately large number of people with criminal backgrounds make their way to national parks and forests where they engage in activities such as illegal poaching, clandestine drug laboratories and smuggling contraband. It is also not difficult to find media coverage about individuals or communities who have taken refuge in wilderness to exercise unconventional (and sometimes socially unacceptable) belief systems, such as neo-Nazi communities, para-military groups, ‘doomsday-preppers’ making ready for the end of the world, or other extremist ideologies. All of this can contribute to feelings of unease or even fear about finding oneself alone in the wilderness. Trepidation about entering the wilderness alone is not exclusively a historical matter.

This section has established several reasons why wilderness solitude may not have always been a desirable experience. In physical terms, wilderness was seen to be inhospitable and dangerous and was feared as a place of monsters and savage barbarity. In symbolic terms, wilderness represented mystery and menace and a threat to morality and civilisation. It was believed to be a place of supernatural beings and evil forces. Any opportunities to be alone were a result of the disorientating and alienating quality of this ‘non-human’ environment. And even today, there are still connotations of anti-social, even criminal behaviour in wilderness. Taken all together, these points make an interesting argument that for some, the pursuit of wilderness solitude would be anything but desirable.

4.2 Wilderness solitude as an ethnocentric construct

One explanation as to why solitude is often associated with wilderness character, is because contemporary, western representations of wilderness commonly depict empty and unpeopled landscapes. In western ideology, wilderness is regarded as a place for people to visit, but not dwell within. It is defined as an ecosystem with autonomy, not human agency. It is, in the words of Slater (1996), implicitly unsettled. This idealisation of the 'empty' landscape and associated connotations of solitude are a problematic part of contemporary wilderness discourse. The debate around this topic will be summarised in this section to provide additional contextual background to the research aim.

Emphasising the non-human nature of wilderness is an expression of the received wilderness idea, also known as the classic or traditional idea. Accordingly, the most important wilderness attributes are a natural, pristine environment and an absence of human activity. To help us understand this idea, we can refer to the wording of the US Wilderness Act (1964). This elaborates on the idea that a natural quality requires an absence of permanent human habitation, minimal evidence of man's impact upon the land and a condition that is affected primarily by the forces of nature. The origins and evolution of this idea have been explored in depth by Denevan (1992; 2011), who refers to it as 'the pristine myth'. His American-focused research addresses the fact that many scholars fail to acknowledge the extent to which ecological processes had been modified by Native Americans before the arrival of Europeans. Denevan (1992) considers the image of wilderness as an untouched, virgin land to be an invention of nineteenth-century romanticist and primitivist writers and artists.

As indicated by Denevan's research, the received wilderness idea is a contested subject, with objections falling broadly into three categories. The first is a cultural objection. Whilst it is true that if you go back far enough in history, everywhere on Earth was at one point without humans, there is an argument to say that Eurocentric models of wilderness deny the fact that many ecosystems considered 'wild' today have co-evolved with humans over time (Coetzee et al., 2022), and that these models therefore erase the cultures and communities for whom our wilderness was once 'home' (Morales

et al., 2023). Like Denevan, Cronon (1996) strongly criticises the portrayal of wilderness as an uninhabited landscape, describing it as a form of cultural imperialism that ignores the perspective of indigenous people and denies a long, environmental history of man's impact on the natural world. Callicott (2000) agrees, describing the received wilderness idea as ethnocentric, being most prevalent in American and Australian discourse, where colonial histories have marginalised indigenous voices. Callicott goes even further in his objections, describing the received wilderness idea as a tool of genocide, designed to make it easier to eradicate indigenous inhabitants. It may be that what colonialists regarded as 'virgin' wilderness, was in fact 'widowed' land, created on the abandoned homes of dispossessed indigenous people (Woods, 2017).

This line of enquiry has become known as the process of 'demything' American preservationist principles (Kalamandeen and Gillson, 2007), which involves tracing human influence on the land back over millennia (see for instance the collection of essays about native Californian land management practices in Blackburn and Anderson, 1993). American wilderness management policy has been condemned as a deliberate act of wilful amnesia designed to ignore the influence of indigenous people living on the continent before Europeans arrived (Gessner, 2021). In a similar vein, others have described the American wilderness preservation system as a dehumanising construct (Fletcher et al., 2021), as a model predicated on native dispossession (Spence, 1999) and as an attempt at artificial protection of a mythical land, from which the original inhabitants were erased to the point of invisibility (Rudzitis, 1996). Some have simply observed that many protected areas have a long history of interaction with humanity and instead of idealising empty landscapes, we should accept wilderness as a cultural landscape and a place of dwelling (Olwig, 1996). The challenges of applying the received wilderness idea on a more global scale to countries with a longer history of human settlement have also been explored. A good example can be found in Conte's (2007) examination of the received wilderness idea as an embodiment of a western preference for a wilderness devoid of humanity's imprint and the difficulties in applying this model to developing countries.

The second objection to the received wilderness idea is an empirical one, concerned with whether ecological evidence supports the assumption that wilderness areas exist in a pristine condition, untouched by man. This line of argument has been thoroughly explored by McKibben (2022), who argues that since man's influence has extended to the atmosphere and climate, by way of air pollution, every place on Earth could now be considered artificial. Following this train of thought, the definition of nature as something separate from human society, or the idea of nature as a world apart from man, no longer makes sense for McKibben. This can simultaneously make McKibben feel lonely, as it forces him to recognise there is nothing apart from us, and yet also crowded, as there is nowhere to escape from us.

The third objection is a philosophical one, concerned with man's relationship with nature. One of the most cited essays on this topic is by Gomez-Pompa and Kaus (1992). They oppose a theoretical delineation between civilisation and wilderness, on the grounds that it sets humans apart from nature and fails to acknowledge the presence of humans in wilderness. They believe this delineation is fuelled by a desire to show dominance over nature and is not backed up by archaeological or ecological evidence, which shows continuous human occupation of many areas now regarded as wilderness. The belief that humankind has a rightful place in nature is encapsulated in Leopold's influential philosophy of a 'land ethic' (Leopold, 1949), which draws inspiration from the Darwinian theory that all species are kin, and so challenges us to see a moral equilibrium between humans and all other life on Earth. According to this philosophy, people become members of a community of interdependent parts and should be accepted in nature.

In response to these arguments, which have been described as attacks from which the wilderness idea needs defence, other researchers have put forward their own rebuttals. Woods (2017) provides one of the most expansive responses to what he describes as the anti-wilderness arguments. Central to his proposition is the belief that land may be occupied and impacted, without being damaged, or in other words, a humanised landscape is not necessarily a trammelled landscape. Franklin and Aplet (2009) make a similar proposal, arguing that we should move away from questioning

whether the mere presence of humans in wilderness is natural or not, and evaluate our impact instead. They make a distinction between our influences that have been present in the long-term evolution of ecosystems and our influences that are the result of modern, transformative technology. This distinction between harmonious impact and harmful trammelling means that for Woods (2017), it is not impossible to envisage an inhabited wilderness. Evidence of previous occupation no longer has to disqualify an area from wilderness designation.

Other researchers have taken a different approach in combatting the cultural arguments against wilderness, by providing a counter to the 'pristine myth,' known as the 'myth of the humanised landscape'. According to Vale (1998), assertions about widespread humanisation are questionable and the contemporary emphasis on ubiquitous human agency is overstated. Vale argues the desire to visualise humanised landscapes in the pre-European era derives from social ideologies rather than ecological fact and is driven by a desire to incorporate Native Americans into history. Foreman (2014) has continued this line of enquiry by testing and questioning prevailing theories about the ecological impact of traditional Native American burning. With regards to this debate about the 'pristine' or 'humanised' myth, it is worth pausing to note that everywhere on Earth would have been pristine at one point and subsequently modified to varying degrees as the human species evolved and migrated across continents. One's assessment of how pristine or humanised a landscape is, ultimately depends upon the point in history one chooses to use as the baseline condition.

We now return to the empirical arguments against wilderness, which said that no pristine land untouched by man exists in the age of climate change. The response offered by various researchers (see for instance Keeling, 2008, Foreman, 2014, Woods, 2017 and Duclos, 2020) is to stress that wilderness can exist along a spectrum of conditions. It is suggestive of a quality or attribute and as such, it can be a matter of degree or scale. This idea is encapsulated in the concept of the wilderness opportunity spectrum, which describes a continuum of settings with gradations of naturalness and solitude that range from the totally modified landscape to the most pristine ecosystems (Dawson and Hendee, 2009b). Accordingly, an ecosystem does not have to be pristine

and devoid of all human presence to be wild, but can be more or less of a wilderness depending on the degree of human influence.

And finally, we will consider responses to the philosophical objection, which said the received wilderness idea enforces an artificial divide between people and nature. The response is to acknowledge that whilst humans are of course made of the same elemental materials as the rest of the universe, one cannot deny critical differences between wild nature and human culture (Duclos, 2020). Compared to other species, humans have a unique relationship with nature by virtue of our unique power to control and shape the world around us. As a species, we learned how to create fire, we evolved from hunter-gatherers to understand agriculture, we domesticated other animals to serve our needs and we created machinery capable of transforming the land. This exceptional ability must, to some extent, set humans apart from the rest of the natural world. Without this awareness, and without being able to demarcate boundaries between human culture and non-human wilderness, the concept of wilderness loses all meaning (Woods, 2017). Nature is valuable not in spite of, but in virtue of its 'otherness' to humans (Keeling, 2008).

We have now examined the idea of wilderness as an 'empty' landscape from two perspectives. On the one hand, there is a sense of unease with the cultural and ethnocentric origins of the received wilderness idea, a growing awareness that in today's Anthropocene it is increasingly difficult to find ecosystems entirely devoid of human impact, and an objection to the ideological divorce of people from nature. On the other hand, defenders of the traditional wilderness idea argue that evidence of previous human occupation is overstated and should not disqualify land from wilderness status, that wilderness conditions can exist by degrees along a continuum and that wilderness is rightly regarded as 'other' than human. This section has provided context regarding the contemporary discourse surrounding wilderness as an environment with opportunities for solitude and introduced key concepts that will be returned to later as we explore the values and symbolism of solitude in wilderness.

4.3 Chapter summary

This chapter has provided contextual material that explains the surprising and sometimes problematic origins of the idealised, solitary experience in wilderness. Wilderness was once regarded as a frightening abode of monsters and evil forces and even today, there is evidence that wilderness can provide safe harbour for criminal and anti-social behaviour. This means that for many people, a voluntary period of wilderness solitude would be incomprehensible. Furthermore, there are cultural, empirical and philosophical objections to the contemporary portrayal of wilderness as 'unpeopled,' centred especially around the erasure of indigenous history.

This is clearly a topic where language matters. If descriptions of wilderness reinforce the idea that opportunities for solitude exist because wilderness is an empty landscape, indigenous communities are reduced to intruders in their own home. It is not this author's intention to mentally de-populate wilderness. Instead, the intention is to try and understand why the associations between solitude and wilderness exist and explore the implications for wilderness stewardship. The question that presents itself after this introduction is why, for so many people, have opportunities for solitude become not only a desirable aspect of wilderness character, but also a defining one?

5. A state of mind

5.1 Wilderness solitude as a form of restorative freedom

On the shores of a remote sea loch on the west coast of Scotland, is a small community by the name of Sandaig. It was here, in a former lighthouse keeper's cottage, that British naturalist Gavin Maxwell chose to make his home during the 1950s and 60s. Maxwell's adventures in this isolated and lonely location, described in his own words as a landscape of rock and sea, are immortalised in his popular trilogy The Ring of Bright Water (Maxwell, 2001). Through his writing, Maxwell shares his love for the mountains, sea and wildlife. When reflecting on what the wild, coastal landscape meant to him, he described it first and foremost as a symbol. Specifically, it was a symbol of freedom. The idea of wild landscapes as a place of restorative freedom is the first theme we are going to explore as we address the appeal of wilderness solitude.

Many writers have remarked upon a sense of freedom as a defining part of their solitary, wilderness experience. One example can be found in American conservationist Leopold's (1949) observations of a year spent alone on his Wisconsin ranch. In his own words, it was not only physical boundaries that disappeared around him, but also the very thought of being bounded. For Leopold, freedom was both a physical and a mental construct. This sentiment is also reflected in Lloyd-Jones' (2021) collection of essays and poems describing his adventures in the wild Scottish Highlands and islands. In his opinion, the yearning to visit remote, wild landscapes, stems from a desire for freedom, whether that be freedom from regulations, crowds or the simple routines and demands of everyday life. This chapter will look at how a sense of freedom manifests itself, how it is impacted by solitude and the attributes of a wilderness landscape that enhance it.

The connotations of freedom in this context are overwhelmingly positive. This is not an experience that dwells on being overwhelmed by choice or afraid of a lack of control. It is not about missing a sense of purpose or wanting for more direction. It is, however, about taking pleasure in a loss of inhibitions and celebrating a new-found independence that can, as various wilderness advocates have said, be joyful, exhilarating and accompanied by a sense of release. Away from the confines of company, you are not required to make adjustments for other people (Baker, 2017). You are free from observation, judgement and societal conventions. It is an opportunity for people to enjoy a way of life where they take 'no more heed to save time or make haste than do the trees and stars' (Muir, 1996, p.22). In this way, wilderness becomes a place to live as one's authentic self and to create and explore a world full of new possibilities (Barnes, 2018).

However, there is another perspective on this, which is to say that unrestrained behaviour may in some circumstances be dangerous. Berkowitz (1993) coined the phrase 'Middle of Nowhere Syndrome' to describe how human behaviour changes in a wilderness setting. The phenomenon is characterised by three character traits known as 'the good,' 'the bad,' and 'the ugly.' The 'good' refers to the people who perceive there is no threat from undesirable behaviour in wilderness, either because they believe only good citizens visit wilderness, or because they believe everyone who visits wilderness

behaves well. This causes them to abandon normal precautions. The 'bad' refers to the people who lose their self-restraint and behave more irresponsibly and with more carefree abandon than normal. They often do not see the adverse impact of their behaviour and can be inconsiderate. The 'ugly' refers to the people who abandon all regard for the law. They behave ruthlessly and engage in criminal behaviour, believing there is no law enforcement in wilderness. This theory suggests that complete freedom of behaviour in wilderness should be treated with a degree of caution. In the context of this dissertation however, we are focusing on opportunities for solitude as a positive experience.

As well as being at liberty to act without inhibitions or judgement, the freedom obtained from wilderness solitude also impacts upon our mental state. We will now move from the physical to the mental construct and consider freedom in terms of the restorative benefits for cognitive and emotional processes. The importance of recognising and incorporating aspects of our mental state into wilderness conversations is perhaps best summed up by Nash (2014), who wrote that wilderness is ‘not so much a place as a feeling about a place – a perceived reality, a state of mind’ (Nash, 2014, xviii). This state of mind may incorporate aspects of contemplation and self-reflection that are conducive to improved mental well-being, when it is defined as our resilience to cope with the stresses of life, our capacity to learn, develop and fulfil our potential (World Health Organization, 2022).

An exploration of the wilderness state of mind can be found in the work of travel writer and journalist Dan Richards (2020). Richards set out on a global quest to experience life in remote locations, visiting places as diverse as forests, oceans, deserts and the Norwegian tundra. All the while, Richards was seeking to understand what draws people to such isolated locations. One of Richards’ early observations concerned a cognitive shift that was perceptible in people after time spent alone in wilderness. Richards refers to this change as a transformative overview effect. This is the process by which we as humans become more cognisant of our place in the world through immersion in wild nature and thereby gain a new perspective on life. Benefits of this

new perspective, according to Richards, include attaining a more patient, generous and less materialistic outlook on life.

Much research has been conducted into the relationship between wilderness solitude and the process of cognitive restoration. For example, solo experiences have been shown to offer a wide range of psychological pathways to well-being (Petersen et al., 2021) and to be one of the key components necessary for a beneficial psychological response to wilderness (Ashley, 2017). It has been shown that solitude allows space and time for self-reflection, in a way that enables self-examination and a shift in perceptions (Naor et al., 2020), and that solitude is more effective than company in restoring fatigued mental capacity (Staats and Hartig, 2004). Hammitt (2012) specifically looked at how the restorative wilderness experience relies upon the interconnection between naturalness and solitude and concluded that both need to be present to facilitate the restorative benefits of wilderness. In this way, it can be claimed that being alone in wilderness offers unique benefits for our mental state that cannot be found with company.

It is interesting to reflect upon whether society's need for restorative environments was part of the original motivation for wilderness preservation (Cole and Hall, 2010). If we look at the origins of the wilderness preservation movement in America, for example, we can find references to the psychological benefits of wilderness. American forester Bob Marshall was an early wilderness activist. In his 1930 essay (Marshall, 1930), he wrote about wilderness having a psychological bearing, providing health benefits over and above those of clean air and physical exertion. Marshall described how wilderness provided an incentive to independent cognition and opportunities for the mind to convalesce away from the distractions of everyday life. And later in 1949, Howard Zahniser, the primary author of the US Wilderness Act (1964), remarked that wilderness visits could release tension and heal mental disorders (Cole and Hall, 2010). There is evidence therefore that early in the wilderness preservation movement, wilderness was valued as a place to privately explore one's thoughts and listen freely to one's inner voice for the improvement of mental wellbeing.

In addition to our actions and our mental state, freedom can also manifest itself in how we exercise our religious or spiritual beliefs. Wilderness can be a place to find sanctuary from religious persecution, or to seek privacy for personal, spiritual moments. We will now consider freedom as a religious or spiritual experience. Wilderness spirituality is often defined as a feeling of connection to nature, accompanied by an appreciation for tranquillity and awe, and the elevation of our consciousness beyond the everyday, corporeal world (Ashley, 2007). Unlike religion, it is not bound by a certain belief system, but embraces a relationship with something other than and greater than oneself. The intangible, spiritual values of wilderness are regarded by some to be the most important values of all (Olson, 2001).

Many writers have experienced a sense of religious or spiritual enlightenment during their time alone in wilderness. For example, when Tomkies (2001) reflected on his time living alone in the forests of the Canadian Pacific coastline, he observed that wilderness was one of the finest sources of spiritual inspiration. And the well-known naturalist Thoreau (1995), who documented his time living alone in Massachusetts, reflected upon the fact that nature was 'the laboratory of the Artist who made the world' (Thoreau, 1995, p.198). Research (see for example Heintzman, 2003) has supported the hypothesis that the spiritual benefits of wilderness are more likely to occur when people are alone, as they are more likely to experience the peace and tranquillity necessary for self-reflection.

There can be few better meditations on wilderness spirituality than the writing of Scottish naturalist John Muir. Muir is justifiably regarded as one of the most influential wilderness advocates of the twentieth century. As well as co-founding the Sierra Club environmental organisation, one of Muir's most important legacies was his collection of essays describing his treks in the American wilderness, most famously in Alaska and the Sierra Nevada. On his travels, Muir deliberately sought adventures that took him off the beaten track and into what he regarded as untouched wilderness. Muir is renowned for celebrating and embracing the solitary experience, but one of the most distinctive features of his writing is the abundant use of religious language to describe his surroundings. Muir could see the word of God in cloud formations, manifestations of His

presence in glacier bays and divinity in the architecture of mountains. For Muir, wilderness was undoubtedly a spiritual place where the presence of God was felt intensely.

Long before the experiences of Muir and his contemporaries, there was an established tradition of holy men intentionally seeking out periods of wilderness isolation to exercise their spirituality or to find sanctuary from religious persecution. In Christianity, wilderness had a role as a place to purge and cleanse the soul through spiritual communion and introspection in order to find and draw closer to God. For example, the Israelites wandered for forty years through wilderness in order to make ready for the Promised Land, John the Baptist spent time alone in wilderness revitalising his faith and making ready for the Messiah, and Jesus proved himself ready to speak to God through a period of self-imposed exile in wilderness. This presents a striking contrast to the narrative described in the previous chapter, in which wilderness was the earthly realm of evil, and demonstrates the fascinating dual role of wilderness in Judeo-Christian ideology.

It is important to note that spiritual solitude is not the monopoly of Christianity (Vincent, 2020). Solo wilderness experiences are an established part of many ancient traditions associated with transformation and enlightenment (Naor and Mayseless, 2020). For example, both Hindu and Buddhist traditions include stories of wandering, holy figures who voluntarily retreated to caves, mountain tops and other remote locations to practice meditation and other spiritual disciplines (Brown, 1988). To expand our perspective further, we can consider the long tradition of indigenous rituals of wilderness solitude, such as the native American vision quest. A vision quest typically involves going to an isolated location and engaging in private, solitary periods of fasting, prayer and meditation to seek guidance from spiritual helpers (Spence, 1999). A vision quest may last several days and is seen as a mechanism for forming one's identity and shaping one's view of the world (Martínez, 2004). Wilderness spirituality and the freedom to practice private, religious beliefs is a large part of the tradition of solo, wilderness experiences.

This section has introduced the idea that a desire for wilderness solitude may be associated with a state of mind we can summarise as restorative freedom. This can manifest itself through our actions (when we lose inhibitions and the fear of judgement), our mental state (when we allow our minds to relax and the inner voice to be heard), and our faith (when we seek private moments to practice our religion or to gain spiritual enlightenment). The rest of this chapter will analyse what it is about wilderness environments that is particularly conducive to a sense of freedom in comparison to an urban or more cultivated landscape.

5.2 The wilderness landscape and restorative freedom

Spatial psychology and environmental preference theory are two scientific fields that study the way people perceive and respond to certain spatial configurations, whether that be a room, a building, a city or a natural environment (Dosen and Ostwald, 2016). These theories are used to explain our preferences for certain environments and the effect they have on our emotional state. A full discussion of these theories would be beyond the scope of this dissertation but in this section, we will focus on the qualities of a wilderness environment that facilitate or enhance a sense of restorative freedom.

The first and most obvious attribute is the conceptual and physical separation of wilderness from everyday life. For most visitors, wilderness represents an escape from normality and all its associated routines and obligations. As Busch (2019) wrote in his reflective essay on the attraction of a life isolated from modern influences, there is a pleasure to be derived from living outside the rhythm of ordinary life. The subject of societal discontent will be explored in more depth in a later chapter. For now, it is sufficient to note that wilderness solitude relieves one of all requirements to follow social conventions or schedules. Physically removing yourself from your everyday surroundings and inhabiting an unfamiliar place that looks and feels as different from home as wilderness does from civilisation, can bring about a change in mindset and behaviour conducive to a sense of freedom.

However, the sense of freedom that comes from wilderness solitude cannot solely be attributed to being somewhere new and unfamiliar. Even more significant, is

the fact that wilderness itself is untamed and untrammeled. This is the condition by which natural forces are allowed to operate freely with minimal human intervention. There is no fixed end-point and no ‘right’ or ‘wrong’ assemblage of species. Nature is left to decide. When writing about her experiences on a seven-year odyssey discovering wilderness around the world, Griffiths (2008) noted that a defining quality of wildness is that it is not subject to any will except its own. For this reason, freedom becomes an intrinsic part of wildness. Removing oneself from society and immersing oneself in wilderness, puts one in an environment that is compatible with one's inclinations, where the natural condition mirrors the freedom one wants to feel internally.

An important part of the untrammeled condition is an absence of boundaries. This is something Freyfogle (1998) has reflected upon, drawing a distinction between wilderness and the more human-dominated landscapes that are characterised by human-drawn lines, such as fences, roads and property boundaries. Freyfogle observes how it is a tendency of the human species to see expansion as a process of dividing and bounding the land in a way that turns nature’s organic whole into a collection of parts. Wilderness, on the other hand, is often remarkable for its uninterrupted and vast scale. This is something Shepherd (2014) reflected on when documenting her walks in the Cairngorm mountains during the 1940s. Shepherd recorded her observations of the uninterrupted views and the ability of space to evoke a feeling of liberation. As Macfarlane (2007) wrote, each wild place is remarkable for its unique spatial arrangement and open, uninterrupted spaces in particular are often perceived to be a metaphor for freedom.

To further our understanding of the unique person-environment interaction in wilderness, we can reference Attention Restoration Theory (ART) (Kaplan, 1995; 2001). This theory helps to explain why wilderness provides unique opportunities to recharge one’s depleted cognitive capacity. ART draws a distinction between involuntary attention, which is captured by inherently interesting stimuli, and directed attention, which is directed by cognitive-control processes. Mental fatigue occurs when, after prolonged use, the capacity to direct attention is reduced and the capacity to ward off distractions diminishes. Restoration occurs when you move to an environment that does

not rely on directed attention, thereby allowing the capacity for it to rest and recover. According to ART, nature is the perfect environment for restoration because it is innately fascinating and can effortlessly hold our attention. This premise has been substantiated by numerous studies designed to compare the restorative effects of natural versus urban environments (see for example Berto, 2005 and Berman et al., 2008).

Although ART discusses nature in general terms, wilderness epitomises the innate fascination being described. With its striking scenic beauty and unparalleled opportunities to observe nature and wildlife, it is rich enough to constitute a whole other world that can effortlessly hold our attention (Kaplan, 1995). Whilst fascination can come from small objects, such as flowers and insects, part of the innate fascination of wilderness must be ascribed to its scale and grandeur. Often covering large tracts of land with great distances between boundaries, wilderness has the required scale to hold our fascination effortlessly for sustained periods of time. The noticeable absence of external influences in such vast, remote locations allows for the development of novel ways of thinking (Busch, 2019). And in addition to geographic extent, scale can also function at a conceptual level in wilderness (Kaplan, 1995). Mountains, glacial moraines or the curve of a riverbed can all prompt a sense of connection to another era and a larger world beyond our immediate, familiar habitat. In this way, the scale of wilderness can exist in a temporal as well as a geographic extent.

Whilst it does seem reasonable to conclude that ART's observations regarding nature-based interventions would be applicable to a wilderness environment, there is an alternative perspective to consider. Amongst the body of research into nature as a restorative and therapeutic environment, it is possible to find words of caution about how the theory transfers to wilderness. It could be argued that the restorative capacity of wilderness in particular (as opposed to nature in general) is at best ambiguous (Xu et al., 2018). This is because in some circumstances, wilderness might provoke feelings of fear. Consider, for example, a dark forest which could be a hiding place for potential attackers. This links back to the ideas discussed in the previous chapter, where voluntary periods of wilderness solitude were regarded as an aberration. Whilst the

positive benefits of wilderness solitude on mental well-being are a recurring theme across much wilderness literature, it is important to bear in mind that this is on the assumption that safety is not a concern.

We now return to the idea of freedom of religion and moments of wilderness spirituality. The tradition of associating wilderness with spiritual insights can partly be attributed to its aesthetic appeal. Research (see for example Ashley, 2007 and Foster, 2012) has drawn links between the outstanding aesthetic quality of wilderness and its capacity to contribute to spiritual experiences. The theory is that if beauty is divinely endowed, the unique natural beauty of wilderness must create unique opportunities for divine communion. To illustrate this theory, we can reference the philosophical position of Deism. Deism states that the complexity and beauty of the natural world (along with empirical reason) is sufficient evidence to determine the existence of a Creator, without the need for knowledge acquired from religious texts (Lucci, 2017). The awe-inspiring beauty of wilderness is therefore an important attribute to consider when discussing solitude and spirituality.

As a brief aside, it is interesting to note that the scale and grandeur of wilderness was not always regarded favourably, and its aesthetic quality was not always perceived to be beautiful. The previous chapter set out some of the fears and superstitions in early wilderness mythology, one of the most notable being the belief that wilderness bespoke Satan's influence (Nash, 2014). Attitudes began to change with the ideas of Romanticism and the aesthetic of the sublime. As a period of history, Romanticism was fundamental in transforming a historic revulsion of wilderness (Nash, 2014). It has been described as the foundation of modern-day environmental thought (Hinchman and Hinchman, 2007) and the predominant western view of wilderness today is still regarded as one that is 'tinged with romanticism' (Rudzitis, 1996, p.15). Romanticism introduced a predilection for the mysterious and exotic (Haila, 1997), and wilderness was favoured because of its aesthetic, elusive qualities that defied comprehension (Knott, 1996). Romanticism also popularised the aesthetic of the sublime (Løvoll et al., 2020), which dispelled the notion that beauty could only be found in rural or pastoral land. Sublimity established an interest in the quality of greatness, which made it possible to perceive a

beauty in the vastness of wilderness that was the beginning of the association between wild nature and God. Sublimity also recognised nature's capacity to inspire awe and overwhelm our powers of comprehension, which helped to generate the fascination with wilderness still evident today.

This section has explained how the experience of restorative freedom is enhanced by the wilderness landscape. Its untrammeled condition and the lack of boundaries highlight the conceptual and physical contrast between wilderness and society. In addition, wilderness has been proven to be a particularly restorative environment for our cognitive processes due to its scale, remoteness and innate fascination. And our capacity to experience wilderness spirituality will be enhanced if we find it to be a beautiful and awe-inspiring landscape. This contributes to our understanding of how the biophysical attributes of wilderness enhance the experience of solitude.

5.3 Chapter summary

This chapter has explored how the appeal of wilderness solitude can partly be attributed to a desire for freedom and a need for cognitive restoration. This can manifest itself in our actions, our mental state and our belief systems, and has predominately positive connotations. The experience is enhanced by the biophysical attributes of wilderness, such as its self-willed nature, innate fascination and awe-inspiring beauty. In terms of wilderness character, this chapter has explored its value as a conceptual contrast to society, a restorative environment and a symbol of divine creation. But there may be another side to wilderness solitude. One where freedom is dominated by the mysterious and unknown, self-reflection is replaced by challenge and exertion, and beauty is overshadowed by danger. This is the starting point for our next theme, which will be explored in the following chapter.

6. Blank spots on the map

6.1 Wilderness solitude in pursuit of exploration and adventure

Travel writer and naturalist Peter Matthiessen (1988) was, by his own admission, an incautious explorer, often travelling to locations where the dangers were so great, ‘only a maniac would ever set foot’ (Matthiessen, 1988, p.24). In the 1960s, he embarked on an epic journey through the South American wilderness, crossing the continent from North to South. At the start of his adventure, in the Amazon jungle, Matthiessen marvelled at the vastness of the wilderness, noting how it was difficult to accept that a wilderness of such scale still existed. Were you to get off the boat at any random point, he mused, the chances are that no man would have ever stood beneath the same trees before. On one expedition to search for paleontological remains in Peru, he reflected on how the purity of a jungle stream with ‘no mark of the white man’s heavy hand upon it’ (Matthiessen, 1988, p.239) was more meaningful and exciting for him than the discovery of dinosaur bones. Above all else, Matthiessen relished the mysterious quality of wilderness, the element of the unknown, and the sense of adventure and exploration. This chapter will consider the relationship between wilderness solitude and a desire for exploration, challenge and adventure.

Firstly, we will look at the solo wilderness traveller as an explorer. This is how Dillard (2011) referred to herself when describing her time living in and travelling around the unmapped mountains and valleys of Virginia. In many cases, exploration is not only about journeying into unfamiliar terrain, but is also about a sense of pioneering unchartered terrain. Journeying to a destination by yourself and feeling isolated in a remote landscape can evoke feelings of being the first person to discover somewhere, to see something or to experience something. While exploring archaeological remains in the Utah desert wilderness, Gessner (2021) observed that the most enjoyable moments were those when one could imagine oneself as the site’s first discoverer. And Abbey (1971), who also documented his time exploring the Utah desert canyons, confessed that he preferred to set out without too much foreknowledge or preparation because he wanted to encounter the unexpected and feel he was making anew the discoveries of others. It is important to recognise the risk here of inadvertently erasing the history of indigenous communities through careless use of language. Whilst these examples show a desire to feel like one is going into unexplored terrain, it is acknowledged that this may sometimes only be a perception, not a reality. Taking Matthiessen’s (1988) reflections

on the Amazon as an example, research (Fletcher et al., 2021) has shown substantial human impact on the composition of soils and vegetation across the Amazon, which may challenge Matthiessen's perspective on being the first person to walk beneath the rainforest canopy.

Nevertheless, there is within these accounts a palpable desire to go where no-one has gone before and to see the unseen. The innate human desire to explore is a topic McCallum (2005) discusses in his innovative work *Ecological Intelligence.* McCallum proposes that the human brain is primed to search and explore, and attributes this to our evolutionary origins as hunter-gatherers, trained to seek out food and new hunting grounds. The idea is expanded upon in Macfarlane's (2003) history of mountaineering. While describing the Victorian age of mountaineering and global exploration, he argues that a compulsion to go where nobody has gone before is deeply entrenched in the Western imagination. In his advocacy for wilderness preservation, Olson (2001) made frequent references to this same compulsion, eulogising about the joy of discovery and the thrill of seeing new scenes for the first time. Going into wilderness can be a way to experience a sense of discovery for those unable to travel the globe and literally pioneer unchartered routes.

We can expand on this theme by considering how exploration is as much about an element of mystery and the unknown, as it is about making discoveries. Of his time living alone in the Canadian wilderness, Tomkies (2001) observed that he felt a sense of timelessness, mystery and the unknown in the wild. Writer and artist Ruess (2021), who disappeared without explanation in the Utah desert wilderness, captured in his letters how he was attracted to the obscure and difficult trails that led into the unknown. And in the California Sierras, Austin (2020) remarked upon a palpable sense of mystery in the desert air. Some solo wilderness travellers are drawn in by the element of mystery and take pleasure in experiencing an environment that is perhaps less scrutinised, mapped and documented than other more cultivated or populated areas.

This can result in something of a conundrum. On the one hand, there is a desire to explore and discover. On the other hand, there is a desire to preserve an air of mystery. Regarding the latter, Thoreau (1995) commented on the human need for some

places to remain unsurveyed and unfathomed and Kagge (2018) also wrote of a human need for places that have not been fully explored, when reflecting on his time in the Antarctica wilderness. There may be some benefit for our relationship with nature, our well-being or simply for our powers of imagination and creativity, to know that some unexplored wilderness remains. Leopold (1949) summed this up beautifully in a phrase that conveniently links back to the previous chapter about restorative freedom, when he asked ‘Of what avail are forty freedoms without a blank spot on the map?’ (Leopold, 1949, p.149).

In addition to exploration, wilderness solitude presents opportunities for adventure, with associated experiences of hardship and jeopardy. An interesting reflection on this theme can be found in the diaries of Dick Proenneke (2021), who spent sixteen months living alone in a self-built cabin in the Alaskan wilderness in the 1960s. As well as building his own shelter, he fished and hunted for food and learned to live alongside the wildlife, including mosquitos, troublesome squirrels and inquisitive bears. First and foremost, he states that he went into the wilderness to test himself in a more thorough and lasting examination than ever before. The most exciting parts of the adventure were, according to Proenneke, the heightened sense of risk, the test of self-reliance and the sense of achievement and pride that came from knowing he was capable of surviving alone. He found satisfaction in hard work and concluded that man does not know what he can achieve until he is sufficiently challenged. In this way, Proenneke’s diaries illustrate the link between solitude, challenge and adventure.

Proenneke is not unique in this regard, as we can find the same pursuit of challenge, even discomfort and risk, in other wilderness accounts. For example, poet and author Kerouac (2018) believed one of the benefits of going alone into wilderness was the opportunity to depend solely on himself and thereby learn his true strength. It is often about more than simple hardship though, as the extremes of fear and jeopardy are often pursued. When preparing to leave home in Scotland and build a new life for himself alone in Alaska, Grieve (2007) found inspiration in the stories of people who had learned to survive alone and endure great hardship. Tomkies (2001) made a similar move from Scotland to live alone in the wild woods of the Canadian Pacific coastline.

He recalls various moments when he came close to losing his life either at sea, in wildlife encounters or in winter storms, and says that such moments made him feel more alive than anything in his previous life, where he wrote he neither felt nor experienced anything.

The pursuit of fear and risk is reflected in the growing trend for extreme solo challenges in wilderness, such as solo mountain climbs and ultra-long-distance treks. And it can also be seen in calls for the creation of 'no rescue zones' in American wilderness (see for example McAvoy, 1999 and McAvoy and Dustin, 1981). The proposal was to create designated areas where government agencies were prohibited from conducting search and rescue operations, leaving visitors entirely self-reliant and with sole responsibility for their welfare. McAvoy believed the unique opportunities to experience risk, challenge and adventure in rescue-free zones would be in keeping with the intent of the US Wilderness Act (1964) and a hands-off approach to management. This is an idea that still generates debate and finds occasional support, often after high-profile and very costly search and rescue operations (see for example Coon, 2020). If an environment or situation is not challenging enough, there are those who are willing to make it more so to satisfy their desires.

Despite these modern trends, it is worth remembering that the idea of wilderness as a testing ground, and a place to overcome challenges and prove oneself worthy, is not a new one. Consider, for example, how wilderness served as a testing ground in early Judeo-Christian ideology, such as when Jesus was tempted by the devil in the desert. Or the fact that many indigenous cultures use time alone in wilderness as a symbolic rite-of-passage, such as the Aboriginal practice of walkabout. Or the way in which wilderness advocacy in the first half of the twentieth century recognised a need to preserve a space for one to test one's self-reliance away from the 'coddling of civilization' (Marshall, 1930, p.88). For a long time, it has been recognised that wilderness provides unique opportunities to challenge oneself.

To try and understand the deliberate and voluntary act of seeking out a solo challenge in wilderness, we can reference Monbiot's (2013) reflections on the human need to reawaken an 'ancestral thrill' (Monbiot, 2013, p.139) that would once have been

satisfied by hunting and fighting for survival. Monbiot hypothesises that in the absence of modern-day monsters to fight, we are forced to invent quests and challenges to escape from boredom. A similar line of argument can be found in Vincent's (2020) comprehensive history of solitude. This links the desire to expose oneself to tests of physical and emotional strength to a deliberate act of 'striding away from soft civilisation' (Vincent, 2020, p.70). Macfarlane (2003) supports this idea when he writes that man's desire to experience fear often reflects a need to escape from 'cosseted urban living' (Macfarlane, 2003, p.88), and in his reflections on reconnecting with nature, Baker (2017) argues we all need a bit of jeopardy in our lives to break out of the 'overly comfy cocoon' (Baker, 2017, p.236) in which we live. In addition to a 'pull' from wilderness, there may also be a 'push' from civilisation that is driving people to seek new experiences. The idea of societal discontent as a motivation for wilderness solitude will be discussed in the next chapter.

Before concluding this section, it is worth mentioning that wilderness adventure does not always have to include elements of fear and danger. It can also be about pure enjoyment. Recreational use of wilderness is legitimised in the US Wilderness Act (1964). This influential piece of legislation specifically calls out opportunities for enjoyment and recreation as valid reasons for the preservation of wilderness. For example, section 2(a) states that wilderness should be preserved and administered for the use 'and enjoyment' of the American people. Section 2(c) states that wilderness should provide opportunities for 'primitive and unconfined types of recreation.' And section 4(c) includes recreational use in a list of limited uses for which wilderness should be devoted. (The other legitimate uses are scenic, scientific, educational, conservation and historical.) Whether the solo visitor finds enjoyment in the observation of natural beauty and wildlife, the exertion of a simple hike, the excitement of an overnight camp, or the satisfaction of completing a physical challenge, wilderness adventures can certainly provide opportunities for enjoyable recreation.

This section has looked at the solo wilderness experience as a means to cast oneself in the role of explorer and adventurer, and to experience elements of challenge, fear and risk from which we are often sheltered in modern life. It has also introduced the

idea that there may be something driving people away from civilisation, as well as something pulling them towards wilderness, which will be expanded upon in the next chapter. The rest of this chapter will look at the qualities of wilderness that are conducive to these experiences and that evoke these feelings more so than any other natural or urban setting.

6.2 The wilderness landscape, exploration and adventure

We have seen how there is something about wilderness that generates unique opportunities to experience a sense of exploration and adventure. To understand why this is the case, we will first consider its undeveloped and natural condition. As briefly discussed in the introduction, this is one where natural processes are allowed to run their course in an unmodified ecological environment with minimal human imprint upon the land. This is not just about observing the absence of other people at the present moment, but it is about feeling that other people were not present before you either. Such an ecological condition could inspire a sense of connection to another era – a time before humans or at least, before human settlement or interference. It could even conjure up an air of mystery, confronting us with the incomprehensible, overwhelming forces of nature that are beyond our control. It is therefore not hard to imagine how this environment could be well suited to those who want to feel they are travelling along a previously unexplored route. Combined together, these two qualities of the natural and undeveloped condition are a large part of what makes wilderness distinctive from other landscapes and may impact upon the quality of a solo wilderness experience.

However, there must be a note of caution attached to this characterisation of wilderness as a land that was never previously occupied. When describing wilderness as ‘natural’ or ‘undeveloped,’ the temptation is to use words such as ‘virgin,’ ‘pristine’ or ‘untouched,’ all of which reinforce the idea of an environment where other people have never been present. Whilst this may be true for some locations today, such as regions of Antartica, there is a persistent risk that evidence of former habitation is not acknowledged, and indigenous history is ignored. This is a concern Monbiot (2013) raised when expressing his disapproval of any re-wilding policy that would constitute a ‘hushing’ (Monbiot, 2013, p.178) of cultural history or local voices. These concerns bring

us back to the debate about the received wilderness idea and the more troubling aspects of emphasising the importance of solitude in wilderness. A fascination with the unknown and the idealisation of the untouched could create a harmful illusion of a mythical, virgin territory and put us at risk of the sort of ‘willful amnesia’ (Gessner, 2021, p.87) previously mentioned.

To counteract the notion that wilderness must be entirely void of any evidence of human activity, it is important to note that the presence of historical artefacts need not preclude an area from wilderness status. Evidence to support this can be found in the US Wilderness Act (1964), which says that wilderness may contain features of historical value, and in the origins and intent of the US Eastern Wilderness Areas Act (1975). The latter was designed to explicitly consider areas previously impacted by human activity, acknowledging the fact that the untrammeled quality of many areas in the East of the country could not match the same standards found in the West. The Act allowed for the creation of smaller wilderness areas, closer to population centres and with more evidence of past human activity than previously found in the National Wilderness Preservation System. In this way, evidence of previous habitation and land use is not a barrier to wilderness designation, but it is interesting to consider what impact it will have on the quality of a solitary wilderness experience.

For some visitors, the tangible reminders of man’s historical presence mean they never feel truly alone in wilderness. For example, both Shepherd (2014) and Maitland (2009) often walked alone in the Scottish mountains without meeting anyone, but they did encounter frequent reminders of past human activity. Examples include stone circles, cairns, sheep folds, remains of field systems, dry-stone walls, bothies and ruined lime kilns. It is even remarked upon that many place names on modern-day maps were bestowed by previous generations or reflect previous land use. Reading the accounts of their adventures, there is another intangible presence with them all the while. Even if cultural and historical artefacts are not visible, there may still be a troubling awareness of lost communities that haunts the wilderness character. Lloyd-Jones (2021) makes one of the strongest cases for this when he remarks upon an ‘aching absence’ (Lloyd-Jones, 2021, p.120) in the wilds of the Scottish glens. Not only

is he referencing the crofters dispossessed in the period of history known as the Clearances, but also the native woodlands cleared by iron age farmers and the bears and wolves driven to extinction by human activity. For Lloyd-Jones, the emptiness of his wild surroundings has a deeper, sadder dimension to it because of this knowledge.

We have now looked at two seemingly incompatible wilderness attributes: the natural and undeveloped condition on the one hand, and the presence of historical artefacts on the other. It is important to note that these are both valid wilderness conditions, as illustrated by the previously mentioned concept of the wilderness opportunity spectrum (Dawson and Hendee, 2009b), which reminds us that wilderness can be a matter of degree or scale. The most extreme examples of the natural and undeveloped condition are compatible with a desire to go where no-one has gone before and discover new ground, but may carry unhelpful, ethnocentric overtones. The presence of historical artefacts may be compatible with an attraction to mystery and the making of discoveries, but may result in a feeling of being less alone.

Another important attribute of wilderness that should be considered in relation to the themes of exploration and adventure is that of scale. In the previous chapter, scale was addressed as something that could evoke a sense of release and freedom. In this chapter, scale has a function as something that evokes a feeling of being somewhere unknown, unfrequented and far from home. To feel that one is on an adventure, or exploring new terrain, one must escape the visual and auditory encroachment of civilisation, such as the view of skyscrapers on the horizon, the noise of traffic in the background or the sights and smells of industrial pollution in the air. The larger the wilderness area, the easier it is to feel oneself on a solo expedition away from other people. This can also be made easier in landscapes where people are easily hidden from sight, such as in areas of thick vegetation or undulating topography.

We now return to the matter of solo wilderness adventures creating opportunities to test oneself, manage risk, confront danger and overcome fear. It is not difficult to see how wilderness could create unique opportunities in this regard. In many ways, it can seem like an inherently hostile environment. Anyone visiting wilderness must be prepared to deal with any number of potential hazards from hostile climates to natural

dangers such as wildfires, river crossings, steep terrain and rock falls. There is also the potential threat from animal encounters. As Weymouth (2018) starkly observed when travelling solo through Alaska, 'I am accustomed to eating. Now, I can be eaten' (Weymouth, 2018, p.82). Many of the obstacles and challenges in wilderness will be situations we are not habitually trained to deal with and may require special skills or equipment, especially if one is travelling alone and being self-sufficient for food and shelter. In addition, wilderness visitors may find themselves in terrain that is difficult to navigate or maybe even unmapped, and far from assistance or simply unable to communicate and request help if required. The unique challenges encountered in wilderness make it an ideal setting for those wishing to test themselves outside of the comfort of their daily routines.

This section has examined the attributes of wilderness that make it an ideal place to fulfil the desire for exploration and adventure. The natural and undeveloped condition enhances the feeling of pioneering untouched terrain where other people have not been, while the scale and potential natural hostilities create a uniquely challenging environment for solo adventures. As in the previous chapter, the complex interactions and dependencies between different aspects of wilderness character are gradually being revealed.

6.3 Chapter summary

This chapter has discussed how the solo wilderness experience can satisfy an innate desire for exploration, by creating the impression of journeying through previously unknown land, and a desire for adventure, by allowing one to experience the satisfaction of testing one's strength and self-reliance. These desires are compatible with the wilderness landscape because of its natural and undeveloped condition, its large scale and potentially hostile terrain. In terms of wilderness character, this chapter has considered its value as a symbol of mystery, a symbolic testing ground and a place for human use and enjoyment. As previously alluded to, there is another way to look at this topic, which is to consider what the 'push' factors driving the solo wilderness adventurers away from modern society might be. This will be the focus of the next

chapter, addressing the third and final theme of our research into the appeal of wilderness solitude.

7. Homecoming

7.1 Wilderness solitude as a form of societal discontent

In the nineteenth century, American naturalist Thoreau chose to spend two years living alone in a small cabin outside Concord, Massachusetts. His account (Thoreau, 1995) of the years spent living by Walden Pond is widely regarded as a classic of nature writing. Through his writing, it becomes clear that Thoreau's desire to isolate himself in nature was driven by a sense of frustration, boredom and dissatisfaction with a certain way of life. One of his most famous quotes describes the 'quiet desperation' (Thoreau, 1995, p.4) with which most men live their lives. In Thoreau's opinion, his contemporaries followed largely futile pursuits and placed too much value on luxuries that acted only as hindrances to the elevation of humankind. Thoreau, on the other hand, wanted to adopt a more primitive way of life where he could find more joy and fulfilment, or in another of his most famous quotes, where he could 'suck out all the marrow of life' (Thoreau, 1995, p.59). Nature and wilderness became the tonic for his discontent. This chapter will explore wilderness solitude as a form of voluntary withdrawal from society, driven by a feeling of dissatisfaction with contemporary life, and will examine why we as a species may feel psychologically safer and more connected to our surroundings in wilderness as opposed to urban environments.

In many accounts of solitary wilderness experiences, there is a shared sentiment that a highly developed, technology-centric and consumer-driven environment is detrimental to our wellbeing. A common belief is that a world of gadgetry and artificiality leaves us unfulfilled, and that the rapid advance of urbanisation and technology is the cause of a growing number of perplexing problems with which we are ill-equipped to deal (Olson, 2001). It may be that the pace, complexity and pressures of modern life are simply becoming too much. Before moving to Alaska to start a self-sufficient life alone, Grieve (2007) wrote of the unhappiness he felt in a life filled with clutter, artificial concerns and false goals dictated by others. Proenneke (2021), who undertook a

similar Alaskan adventure, also documented his concern that technology was advancing faster than he could adjust. And Abbey (1971) described the Utah desert wilderness as a refuge that allowed him to cut himself off from the chaotic, noisy confusion of the wider world. The choice to voluntarily spend time in wilderness has been described as an act of disobedience against the restraint and authority of an increasing population, expanding settlement and growing technological burden (Hammitt, 2012). And in a similar vein, Griffiths (2008) describes her feelings for wilderness as a revolt against the lethargy of modern life, while documenting her own 'ferocious discontent' (Griffiths, 2008, p.6) at being surrounded by nature that is bounded and tamed. In contrast to some of the previous chapters, we are now acknowledging the existence of 'push' factors behind the desire for wilderness solitude, as well as the 'pull' factors drawing people to wilderness.

It has been said that we as a society, have the 'collective blues' (Ehrlich, 2019, p.132) and suffer from a 'remarkable collective delusion' (Monbiot, 2013, p.11) that estrangement from nature is beneficial. An eloquent exploration of this topic can be found in Kimmerer's (2020) philosophical work of nature writing. In her opinion, loss of community and loss of connection with nature are especially harmful. Kimmerer expresses her regret that we have chosen the 'isolation of technology' (Kimmerer, 2020, p.126) over a sense of collective community, and remarks upon the way in which fabricated demand and compulsive overconsumption has tricked us into believing we crave 'belongings' instead of 'belonging'. Kimmerer goes on to explain how our sense of isolation extends to our relationship with the land. In her mind, much that ails modern society stems from the fact that we have cut ourselves off from nature. Forgetting the names of plants and animals, or simply how to be at home in nature, leaves us in a state of isolation and disconnection – a phenomenon referred to as 'species loneliness' (Kimmerer, 2020, p.208). As human dominance over the world grows, so does our sense of isolation and separation from nature.

If excessive consumerism, technology and urbanisation are what people want to escape from, what does wilderness provide in return? One emotion frequently referenced in wilderness literature is a sense of homecoming, which could be a feeling

of returning to a comfortable and natural habitat from which one had been temporarily displaced. Anthropology would show that our racial memory from pre-urban evolution has been conditioned over a million years by an entirely different existence from the one we live now (Olson, 2001). Tomkies (1984) referred to this idea when he wrote that his desire to live alone in the Scottish Highlands was a response to a 'deep ancestral calling' (Tomkies, 1984, p.2) to immerse himself in the natural world. In one of the many interesting episodes from Weymouth's (2018) canoe expedition across Alaska, he recalls meeting an individual who had moved into the state to start a new life in the wilderness, and who felt on arrival 'the most overwhelming sense that I was home' (Weymouth, 2018, p.62). And even before embarking on her global travels to explore wilderness in all its varieties, Griffiths (2008) recalled feeling homesick for the wild. It is possible that the feelings of nostalgia, safety and security associated with home are part of the appeal of the wilderness environment.

But what does a wilderness 'home' provide that is comfortable and desirable? Wilderness literature would suggest that solace can be found in the simple experience of solitude. For example, poet and author Kerouac (2018) acknowledged that he went into the wilderness in search of 'an experience men seldom earn in this modern world: complete and comfortable solitude' (Kerouac, 2018, p.103). As previously discussed earlier in the dissertation, solitude allows for cognitive restoration (see for example Hammitt, 2012) and escape from obligations and conventions. Vincent's (2020) study of solitude looks at this idea in the context of modernity. He explains the role of solitude as a response to the materialism of the age and argues that part of its continuing attraction is an oppositional response to the pressures of modern society. In other words, solitude becomes more important for our wellbeing as time for reflection and restoration become more important. We have seen how the US Wilderness Act (1964) establishes a legal mandate to provide opportunities for solitude within wilderness and it is indeed hard to think of any other setting where such a mandate exists. As Abbey (1971) wrote of his wilderness homeland, it created a unique opportunity for those who wanted to see something besides people. Escaping from other people, or at least gaining more control over one's choice of social encounters, supports the narrative of wanting to remove oneself from a particular way of life.

In addition to solitude, wilderness also provides opportunities to immerse oneself in nature and feel closer to wildlife. The presence of wild animals has been said to hold 'totemic significance' (Crumley, 2007, p.101) for wilderness and a wilderness without them would, according to some, be undoubtedly less wild (Rudzitis, 1996). The autobiographies of British naturalist Mike Tomkies (1984 and 2011) provide one of the best illustrations of this passion for wildlife. For many years during the 1970s and 80s, he lived alone in a remote part of the Scottish Highlands, devoting his time almost exclusively to watching, documenting and photographing wildlife. He enjoyed the simple observation of foxes and badgers close to his home, as well as gruelling expeditions to stalk wild red deer and locate golden eagle eyries. He writes about feeling a deep sympathy for the wild creatures and living close to the animal state himself as he developed his knowledge of their habitats, behaviours and preferences. Allowing oneself to become absorbed by zoology (and maybe even botany too) could be an expression of the desire to distance oneself to some extent from the human-made world.

It is worth noting here, in the context of wilderness solitude, that wildlife observation is often an activity best undertaken alone. Solitude makes it easier to remain still, quiet and unobtrusive. You can blend in and go unnoticed. You can, in effect, disappear. Like Tomkies, Maxwell (2001) and Crumley (2007) also devoted much of their lives to observing and documenting wildlife around their remote homes in the Scottish Highlands. Although most famous for his tales of living with otters, Maxwell also enjoyed observing many other forms of wildlife, including stags, seals and wild swans. In his opinion, isolation was a key feature of his Scottish life and one that he found exhilarating. Being alone heightened his awareness of his surroundings and sharpened his senses to the wildlife around him. In a similar fashion, Crumley spent many years observing eagles, beavers, deer, osprey and otters, amongst other animals. He patiently stalked them alone, waiting for long periods of time in stillness and in silence, hoping to observe and learn without interfering or intruding. For him, solitary excursions were the best way to grow one's understanding of nature and were in fact, the key to a deeper relationship with wilderness. In his opinion, one could learn more about nature and one's surroundings when travelling alone, compared to when travelling in a group.

The benefits of solitude for wildlife tracking and nature appreciation have also been documented by those exploring wilderness further afield. For example, Dillard (2011) recalls time spent patiently stalking and observing wildlife around her mountain home in the US. Her efforts were rewarded by encounters with muskrats, otters and a wide variety of birdlife, and her enthusiasm is evident when she writes: ‘The great hurrah about wild animals is that they exist at all, and the greater hurrah is the actual moment of seeing them’ (Dillard, 2011, p.195). Equally, Abbey (1971) found that in contemplating the natural world, his pleasure was greater when there were not too many others contemplating it with him. And for Barnes (2018), the quietness that accompanies solitary nature walks is a powerful experience simply because of how unusual it has become in today’s world. We can see that for those who want to observe wildlife or nature in general, solitude can be a key factor in the quality of their experience.

This section has examined accounts of wilderness solitude from the perspective of wanting to remove oneself from an unfulfilling, alienating or otherwise dysfunctional way of life. Spending time alone in wilderness has been shown to evoke feelings of returning ‘home’ to live a more authentic life, in tune with one’s surroundings, the wildlife and one’s evolutionary origins. In an interesting twist, we can see how modern civilisation is now regarded by some with the same fear and disdain with which wilderness was once regarded. The rest of this chapter will analyse what it is about the wilderness environment specifically that makes it such a powerful symbol of urban contrast and that creates such evocative feelings of homecoming.

7.2 The wilderness landscape and societal discontent

We have seen how choosing to experience solitude in wilderness can symbolise a voluntary withdrawal from society in search of a tonic for feelings of despondency and dejection. This unique antidote to societal discontent has been called the ‘wilderness formula’ (Olson, 2001, p.41), but what are the specific features of the wilderness landscape that make it feel like a more comfortable and natural habitat? In terms of the biophysical reality, previous chapters have already discussed the significance of an untrammeled condition, naturalness and an undeveloped state, as well as other

features such as geographical scale and aesthetic beauty. This section will introduce additional wilderness attributes and related theories for consideration.

The first theory addresses the identity of wilderness as an ancestral homeland for the human species. Here we are recognising that the urbanised environment in which many of us now live, is far removed from the sort of natural environment in which we would have survived hundreds of thousands of years ago. It has been claimed that the human species has spent less than 0.01% of its history in modern surroundings and the rest of the time living in nature (Hansen et al., 2017). Our genetic wildness has been domesticated over time, rendering us as a species ‘wild but tamed’ (Griffiths, 2008, p.150). In other words, we are natural creatures living in unnatural surroundings (Brown, 1988). It has been asserted that we all have a ‘pronounced streak of the primitive’ (Olson, 2001, p.5) or an ‘inner beast’ (Baker, 2017, p.240) within us that is lying dormant. In more emotive language, it has been said that humans are ‘hunter-gatherers in suits and dresses' (Barnes, 2018, p.3) or even ‘smart apes that have forgotten where they came from’ (Baker, 2017, p.11).

To understand the implications of this, we can reference the theory of ecological intelligence. In its simplest form, this theory states that humans have a natural affinity for wild, natural places and an innate ability to feel at home within them (Hammitt, 2012). McCallum (2005) provides one of the most expansive studies of ecological intelligence, referring to it as the genetic memory of our evolutionary and biological past that creates a historical sense of kinship with wild places. It is therefore a natural part of the human psyche to feel we belong in wild places and consequently it can be said that ‘homesickness and a loss of wildness are the same thing’ (McCallum, 2005, p.3). In evolutionary terms, leaving the wild places was our species’ equivalent of leaving home.

Closely related to the theory of ecological intelligence, is that of biophilia. According to biophilia, humans not only have a biological attraction to nature (Hansen et al., 2017), but also an innate need for contact with nature for healthy, optimal development (Naor et al., 2020). In other words, nature is a restorative environment that is particularly well adapted to our biological, evolutionary and psychological needs. More specifically, biophilia looks at how nature and wilderness act as triggers for

moments of personal transformation, sometimes referred to as ‘peak experiences’ (Naor et al., 2020). These moments, characterised by clarity of thought and a sharpening of the senses, can be enhanced by solitude as it creates the space and time necessary for self-reflection.

Combined together, the theories of ecological intelligence and biophilia suggest that choosing time alone in wilderness may sometimes be a symbolic act of ‘re-wilding’ oneself. Accordingly, time alone in wilderness becomes an opportunity to reconnect with a more primitive way of being and even an opportunity to assume a new sense of self. In their respective travels through the American wilderness, Gessner (2021) acknowledged the symbolism of wilderness as a place to be reborn and Ruess (2021) enacted this sentiment by adopting a new name of Lan Rameau as a mark of his new identity in the wilderness. There is a sense that those who seek to experience solitude in wilderness may be attempting to find release from an unhappy and dysfunctional existence by re-connecting with their atavistic roots (Baker, 2017).

Another component of the so-called wilderness formula is topography. As we have seen from the anecdotes and examples in the first half of this chapter, there is something about a wilderness environment that creates a feeling of ‘homecoming,’ and we know this may have connotations of safety and security. It is possible that these feelings may be attributable to the simple arrangement of topographical features. According to prospect-refuge theory, we as a species are most comfortable in areas where we simultaneously have far-reaching views and a sense of enclosure (Dosen and Ostwald, 2016). This allows one to see danger coming from far away in the distance and take shelter to hide if necessary. This combination of openness and cover may be unique to natural environments. Consider for example how cityscapes, with their broken skylines and high-rise buildings, do not allow for far-reaching views, and how most formal gardens, agricultural or otherwise manicured and domesticated landscapes do not provide easy shelter. The unique topographical conditions in wild nature could be one explanation for the psychological feelings of comfort and safety associated with home.

As well as the topography, we should also consider the biodiversity of wilderness and its condition of ecological integrity. These qualities are what makes it possible to experience a fascinating and stimulating sense of immersion in nature and proximity to wildlife, as described earlier in this chapter. Biodiversity refers to variability in living organisms, as well as in the landscape and habitat complexity. Ecological integrity describes an ecosystem that has a full complement of native species and healthy, functioning processes related to the flow and storage of energy and materials (Woodley, 2010). It is widely accepted that the preservation of biodiversity and ecological integrity is one of the most effective methods to build a stable and resilient ecosystem that is able to recover from stressors, persist and maintain its characteristics in changing environmental conditions. However, it is worth considering that an intact, diverse ecosystem may also have a role to play in improving the quality of wilderness solitude for those who desire to feel truly apart from urban, modern life.

Closely linked to the idea of a rich and diverse ecosystem is the concept of a unique natural soundscape. This is also part of what enables a sense of immersion into another world. The therapeutic value of silence, in terms of allowing us to rest from cognitive processing of information, has been addressed in various papers (see for example Ashley, 2007, Foster, 2012 and Naor and Mayseless, 2020). But in this context the focus is specifically on auditory protection from anthropogenic sounds. In the words of Norwegian explorer Kagge (2018), silence found in nature is of the highest value. Taking pleasure in the natural soundscape is a common theme across various accounts of solo wilderness adventures. For example, Leopold (1949) writes about the ‘pulsing harmony’ (Leopold, 1949, p.149) of the land and the way in which the simple act of listening to birdsong is ‘an adventure in pure listening’ (Leopold, 1949, p.61). Others have documented the unwelcome intrusion of anthropogenic sounds. As an example, we can look at the journals of American writer Dillard (2011), who documented how the sound of an airplane overhead or traffic in the distance could destroy the quality of her day. In a similar vein, Thoreau (1995) described how artificial sounds, such as the noise of a train passing, penetrated his solitary experience and brought him back to society. This is one of the reasons why for Thoreau, solitude was not measured only by the numerical miles between an individual and their companions. What we hear can also

have an impact. We will return to the emerging field of ecoacoustics and how its methods can be applied to wilderness mapping (see for example Carruthers-Jones et al., 2019) when we discuss the implications of this research.

Something else that can enhance the sense of solitude and withdrawal in wilderness is the existence of so-called technology 'black spots'. This is often most noticeable in the absence of telecommunication methods due to geographical remoteness and an absence of infrastructure such as pylons and cables. Many of those who travel alone find their experience is enhanced by being disconnected from technology. For example, in his recollections of a global journey to visit remote outposts in wild locations around the world, Richards (2020) specifically observed that an absence of technology allowed him to be more present and aware of his surroundings, and more intensely in touch with wild country. This reveals something of wilderness' identity as a counterpoint to technological culture (Douglas and Borrie, 2016) and the idea that technology is antithetical to the wilderness experience (Dustin et al., 2017). It distances the visitor from their surroundings, distracts their focus elsewhere and weakens their connection with nature, not to mention that it could be seen as contradictory to the intent of the US Wilderness Act (1964) to create opportunities for 'primitive' forms of recreation that can be enjoyed without technological dependencies.

An interesting reflection on the relationship between technology and solitude can be found in Vincent's (2020) publication, in which he observes how the growing prevalence of digital communication technology has severely compromised our ability to feel alone. Vincent notes that an excessive dependency on digital communication has made physical solitude more attractive, to the extent that one can draw a parallel between the immersive presence of technology and patterns of withdrawal from society. It is interesting to observe how this idea manifests itself in various anti-modernity trends, such as digital detoxes. These are often marketed as commercial ventures providing facilitated time-out from technology. Described as 'retreats', they are often set in remote, off-grid locations and may include activities focused on wellness such as yoga, meditation and walking (see for example the digital detox treks in Yosemite by White Wolf Tours, 2023). Many of these ventures place great emphasis on the importance of

the biophysical setting, particularly on wildness, beauty and isolation, as part of the experience.

Much of this chapter has focused on the identity of wilderness as an urban contrast, or the place people go to get away from modernity and other people. This conceptual distinction between wilderness and the ‘human’ world is another quality to consider. There is an argument to be made that wilderness and civilisation need each other in order to give each other identity and meaning. As Nash (2014) wrote, nothing can be wild if nothing is tame. Nelson (1998) explained this in more detail when he wrote of a philosophical necessity for wilderness. He argues that where one thing exists, its opposite must also exist to arrive at a complete and proper understanding. There can be no understanding of civilisation without the concept of wilderness. They are an embodiment of the yin and yang concept. This dichotomy between polluted society and the purity of nature is especially ubiquitous in American culture (Farrell, 2020). It has often been said that wilderness appreciation developed as an urban product, born in the city (Nash, 2014), where those whose social and economic circumstances allow them the relative luxury of supporting environmental issues (McCarthy, 1998). The question of whether the wilderness ideal was created by city-dwellers to serve as a counterpoint to civilisation, brings us back to the debate referenced in the literature review about wilderness as a social construct (see for example Cronon, 1996).

This section has discussed some of the attributes of wilderness that make it a desirable destination for people who are seeking escape from an unfulfilling way of life. The unique natural topography and symbolic identity as an ancestral homeland may contribute to the feelings of ‘homecoming’, safety and security in wilderness, and the technological disconnect, rich ecological integrity and natural soundscape are conducive for those who desire to experience a form of personal ‘re-wilding’ through immersion in nature. The overriding theme is one where the construct of wilderness represents an urban contrast and the potential to find an alternative way of being.

7.3 Chapter summary

This chapter has examined the solo wilderness experience as a means of escapism from contemporary life, in search of an alternative existence that feels more authentic and in tune with nature. These desires are compatible with the wilderness landscape not only because of the previously mentioned qualities such as an untrammeled, natural and undeveloped condition, but also because of the unique topography, technological isolation, biodiversity, ecoacoustics and symbolism of wilderness. This chapter has shown a strong association between the biophysical reality of wilderness and the symbolic act of removing oneself from society. Reflecting on what this means for wilderness character, we can conclude that it holds value as an urban contrast, as a symbolic, ancestral homeland, and as an intact, unspoilt ecosystem within which one can be fully immersed in nature. This concludes the thematic exploration of why solitude became such a defining characteristic of the wilderness experience. In the next chapter, the dissertation will summarise the research findings and reflect on the practical and theoretical implications for our understanding of wilderness solitude and wilderness character.

8. Implications

8.1 Summary of research findings

We have now completed the thematic exploration of why opportunities for solitude are regarded as a defining and desirable attribute of wilderness character. Before examining the implications, a reminder of the dissertation context and the topics covered so far may be helpful. This dissertation has taken a predominately anthropological approach to examining the human relationship with wilderness. The introduction defined the concepts of wilderness character and wilderness solitude, as understood for the purposes of this dissertation. The literature review summarised existing research concerned with the selection of effective solitude indicators and wilderness as a social construct. Additional context was provided in the form of a discussion about the problematic side to our idealisation of wilderness solitude, including criticisms of ethnocentric language and colonial overtones in the received wilderness idea. Subsequent chapters responded to the research aim by exploring

different themes related to solitude, as identified through qualitative analysis of primary source accounts of wilderness experiences.

The aim was to understand why opportunities for solitude are frequently and favourably associated with wilderness character. The research has answered this by showing the unique alignment between the motivations for solitude and the tangible and intangible qualities of wilderness character. The anecdotes and reflections provided throughout this dissertation show there is often a purpose to removing oneself from company. This can be explained by a combination of ‘push’ factors representing the unwanted experiences being left behind, and ‘pull’ factors representing the benefits being gained from solitude. The research has shown the experience is primarily about the opportunity to feel something new, whether that be freedom, spiritual awakening, adventure, cognitive restoration, a renewed connection with nature, or even a whole new way of life with a new sense of identity. It is important to observe how in this context, solitude is a voluntary, positive experience, in contrast to the more negative connotations of being alone, such as loneliness, confinement or abandonment.

The research addressed how these desires are compatible with wilderness character. As a biophysical reality, it can enhance solitude with attributes such as its self-willed, natural and undeveloped condition, its unique topography, scale, rich biodiversity and awe-inspiring beauty, along with other qualities such as its innate fascination, unique soundscape and technological isolation. This environment not only provides privacy from unwanted physical company, but also a sense of being separated from modern society in general and even of being removed from the human world. And as a symbolic construct, wilderness holds value as a restorative environment, a place of divine creation, a place for human use and enjoyment, a conceptual contrast to society, an ancestral homeland, and an intact, unspoilt ecosystem within which one can be fully immersed in nature. This can inspire and encourage people to seek solitude within it.

To summarise what we have learned about the appeal of wilderness solitude, the following diagram is offered as a way to visualise the key points. It shows that there are three equally important aspects to consider: what motivates people to choose solitude;

how wilderness as a biophysical realm enhances a sense of privacy; and how the intangible, symbolic qualities of wilderness heighten the sense of disconnect from society. It is the unique alignment of these conditions that makes wilderness solitude a positive experience.

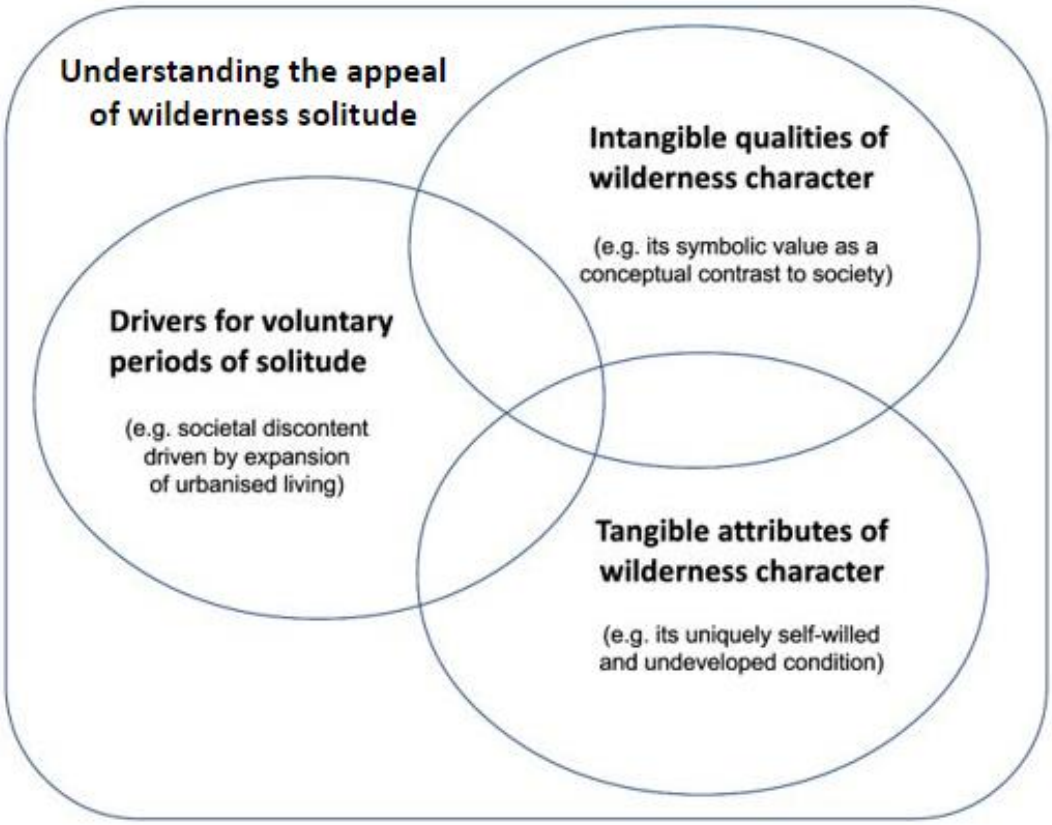

Figure 1: Understanding the appeal of wilderness solitude.

As a precursor to the rest of this chapter, the lens through which we are defining wilderness should be re-acknowledged. This dissertation has discussed a particular wilderness aesthetic and an appreciation of wilderness solitude that have their roots in a primarily white, western construct. The research has briefly explored how the origins of this particular social construct are linked to the expansion of urbanised living, the increased domestication of the land and our increasingly digitised and technology-centric world. There are certain aspects of our contemporary life that have allowed us to develop a view of wilderness solitude that may have eluded our ancestors or other indigenous cultures, for whom wilderness was a place in which to live and survive. An

awareness of this particular lens of understanding gave rise to the theory that wilderness appreciation as we know it, was a product of urbanisation (Nash, 2014). It does, however, also give rise to criticisms. As previously mentioned in this dissertation, the received wilderness idea has been criticised for presenting a romanticised view of wilderness that falsely portrays it as a ‘virgin’ landscape untouched by human hands, despite evidence of previous occupation by indigenous communities. It was not the author’s intention to erroneously de-populate wilderness, but only to explore the appeal of wilderness solitude.

8.2 Practical implications

The research has built on our understanding of the humanistic approach to solitude, which takes an interest in the psychology of the experience, by providing evidence of a personal, subjective aspect that may be challenging to observe or quantify. Earlier in the dissertation it was acknowledged that opportunities for solitude will look and feel different for different people. For example, someone accustomed to an urban setting might have a different level of tolerance for crowds than someone from a rural setting. Some may be content to be ‘alone together’ with company, whereas some may want to experience total isolation. The research has continued this examination of subjectivity by showing how solitude enhancers and detractors depend to a large extent on an individual's underlying motivations for choosing solitude. For example, someone intent on undertaking a solo challenge may find the quality of the experience is diminished by intrusive support infrastructure, such as information panels, navigation aids or the proximity of search and rescue teams. On the other hand, someone attempting to remove themself from modern society may be more sensitive to subtler anthropogenic impacts on the environment, such as changing pollution levels or the arrival of invasive species. An awareness of personal context is critical when discussing solitude and its subjective nature must be considered when defining desired conditions.

This impacts upon how one monitors the quality of solitude. The dissertation previously acknowledged that visitor density and encounter rates are only surrogate measures of wilderness solitude and may not be adequate predicators of wilderness

experience satisfaction (Hammitt, 2012). The research has built on this discussion by illustrating the extent to which solitude is a multifaceted experience. Firstly, there is the condition of the biophysical environment to consider. The research has built on our understanding of the social-spatial approach to monitoring by demonstrating how the benefits afforded by solitude are often best experienced in the unique environment that distinguishes wilderness from other lands. Wilderness is a realm that affords an enhanced sense of isolation or privacy, attributable to its uniquely undeveloped condition, along with the scale, remoteness, topography, vegetative screening and natural soundscape. In addition to the biophysical, we have seen evidence of how the sensorial environment, which encompasses what our human senses are attuned to, can also enhance or detract from a person's sense of isolation. For example, the auditory encroachment of civilisation or the presence of artificial light sources may detract from solitude, whereas the aesthetic appeal of the sublime or the mental 'detox' from technology may enhance solitude. And finally, there is the regulatory environment to consider. This encompasses the use of direct controls to govern visitor behaviour, such as limits on group size, entry points or visit duration. These regulatory means may detract from solitude by reducing a sense of freedom, or enhance it by enforcing dispersal and reducing encounters. To identify effective indicators for the quality of solitude, a holistic approach that spans multiple environments is required.

This builds on our understanding of how to map or model opportunities for solitude. As mentioned in the literature review, spatial information technology is increasingly being used to model solitude based on criteria such as remoteness from mechanised access, human artefacts, settlement and even mobile phone coverage (see for example Carver et al., 2023). This dissertation supports the argument that a breadth of indicators is required for a complete understanding of solitude. For example, mapping could also use criteria such as regulations on visitor behaviour, availability of emergency search and rescue assistance or even the natural soundscape (see for example the work on ecoacoustics by Carruthers-Jones et al., 2019). However, the research has also shown there is a psychological aspect to solitude and an element of elusive mystery in wilderness character. Quantitative mapping can only go so far in understanding what is essentially a qualitative experience (Carver and Fritz, 2016). In

other words, it may be impossible to represent the full richness of wilderness solitude in a visual spectrum. This is not to say geospatial information systems serve no purpose, but an understanding of geospatial attributes cannot replace a complete understanding of the true nature of wildness (Douglas and Borrie, 2016).

The research also contributes to our understanding of management strategies used to create and preserve opportunities for solitude. Traditional options to disperse people and reduce encounter rates often rely on regulatory means such as limits on group size or length of stay, choice of entry points, trails and campsites and the imposition of booking processes and entry fees. However, regulatory methods can be costly to administer, hard to enforce and may be unpopular with visitors. The research demonstrates how a holistic approach to preserving opportunities for solitude could incorporate management strategies that span across the biophysical and sensorial environments as well as the regulatory. For example, strategies designed to maintain naturalness and ecological integrity and minimise the intrusion of invasive technology could also have an impact on the quality of solitude. However, it is worth noting that some impacts will remain beyond management control. Consider, for example, potential detractors such as air, noise and light pollution spreading into the wilderness from surrounding areas, the non-compatible use of private inholdings within a designated wilderness area, or conflict between visitor parties. It may be the case that wilderness managers can only create opportunities for solitude, not guarantee experiences.

To summarise our thinking so far, the following diagram is offered as a visual aid. It shows how the practical implications can be divided into three topics: defining desired conditions; selecting effective indicators; and implementing management strategies. When considering any of these issues, a holistic approach should factor in aspects of the biophysical, sensorial and regulatory environments. This is what we refer to as the social-spatial approach. It is externally focused on the surrounding environmental conditions. The humanistic approach is the context against which all other thinking occurs. It is internally focused on the psychology of the experience.

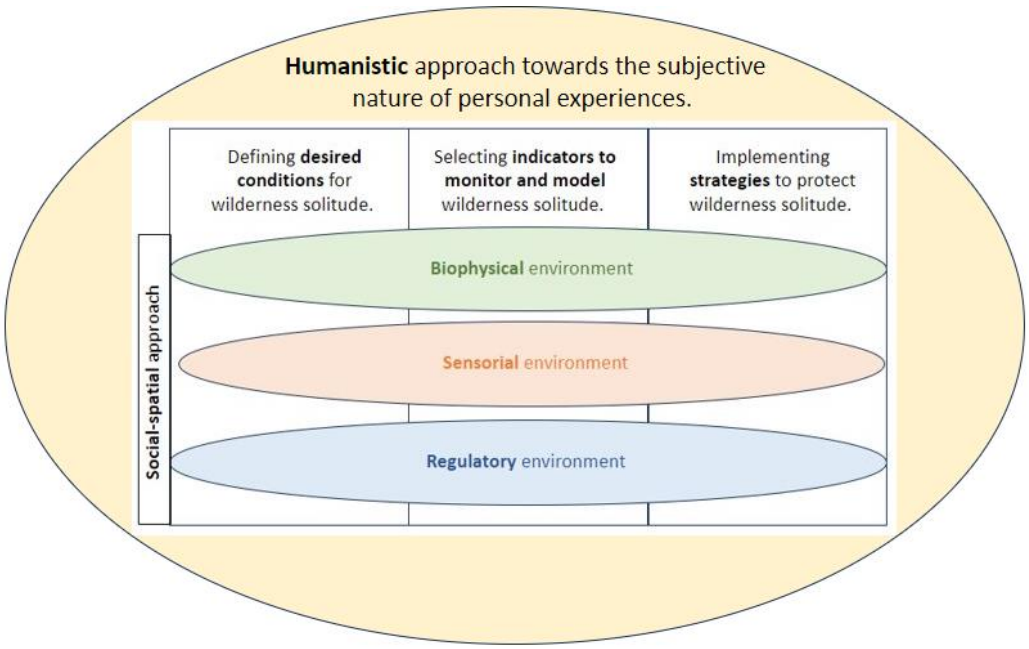

Figure 2: The social-spatial and humanistic approach to solitude.

Much has been made so far of the personal interpretations and diverse expectations of wilderness solitude. One could say that wilderness management relies to some extent on value-based judgments and subjective decisions, not only about desired conditions but also about the appropriate means to achieve them. The research therefore supports the argument that public involvement in wilderness management decision-making may be beneficial (Dawson and Hendee, 2009c). Open dialogue between management and the public generates a more informed discourse, reveals any unconscious biases and allows for greater transparency around the decision-making process. It can also foster a greater sense of public ownership over management solutions and create more interest in their implementation. A good outcome would be a management plan that accurately reflects the values of the people involved.

Before concluding this section, we will consider the preservation of wilderness character in more expansive terms. The introduction explained that opportunities for solitude are one of many attributes that make up wilderness character. Other attributes include a natural and undeveloped condition and an untrammeled practice. The research has built on this picture by illustrating the complex web of interdependent

relationships between the many attributes, showing how each can detract from or enhance another. For example, management actions intended to protect the wilderness resource from intentional manipulation and human-induced changes could benefit the quality of naturalness but degrade the untrammeled condition. With regards to solitude in particular, the challenge lies in resolving the tension between preserving the psychological experience of solitude, allowing for unconfined recreation and conserving the biophysical resource. Management actions may be associated with a positive or negative outcome depending on which quality they are evaluated against. A holistic assessment of wilderness character is required, which looks at it not as a collection of individual parts, but as a whole consisting of many relationships.

This section has examined how the research builds on our understanding of wilderness solitude in practical terms. It has shown how the study of wilderness solitude requires an understanding of psychological and environmental factors, as it is the unique combination of both which impacts upon the quality of the experience. It has looked at the subjective nature of how we define solitude and its multifaceted nature that incorporates elements of the biophysical, sensorial and regulatory environments. This has consequences for how one selects solitude indicators, models opportunities and implements management strategies. It also supports the argument to incorporate more public involvement in wilderness planning and in more general terms, illustrates the complex web of interdependent relationships that combine to create wilderness character.

8.3 Theoretical implications

The research has shown how both the realist and constructivist perspective are necessary for a complete understanding of wilderness character. As summarised in the literature review, the realist or materialist perspective defines wilderness as a unique biophysical realm of intrinsic and ecocentric value. The social constructivist perspective argues that wilderness is an idea moulded by human ideology that acquires meaning only from the anthropocentric values of social convention. The research suggests a resolution to this debate by allowing one to acknowledge the importance of both the

tangible and intangible aspects. Wilderness character has been proven to be a unique combination of the experiential and the material, the symbolic and the physical, perception and reality. It is the symbolism and cultural meaning associated with wilderness that shapes our perceptions and expectations and creates the allure of solitude, and it is the biophysical reality of wilderness that creates an environment conducive to solitude.

It is also interesting to consider whether we should conclude from this research that wilderness cannot exist without opportunities for solitude. From a purely legalistic point of view, one of the most influential pieces of wilderness legislation (the US Wilderness Act, 1964) places a legal obligation on all designated wilderness areas in the US to provide outstanding opportunities for solitude. For that reason, one could argue wilderness in the US cannot exist as a defined legal entity without solitude. However, leaving the legalities aside, a more nuanced response would reaffirm the statement that wilderness character is a quality existing along a continuum. A place may look and feel more or less wild under different conditions (for example, at different times of the year, in different weathers, as the pollution levels or ecoacoustics change) and depending on many visitor variables (such as their state of mind, the activity they are engaged in, or their familiarity with the area). The presence or not of opportunities for solitude simply determines where on the spectrum a particular environment would be. And an even more interesting response would acknowledge that wilderness has unique biophysical attributes and definable ecological value that persists regardless of how many people are present. The biophysical reality of wilderness can exist without solitude, but what will fluctuate is our personal experience of it (Dvorak and Borrie, 2007).

The following diagram is provided to illustrate this interesting point. It shows how both the social constructivist and realist perspectives provide meaningful and necessary insights into how we perceive and value wilderness character. The former places more emphasis on the experience of wilderness and the latter on the material reality. By making this distinction, we can see how wilderness as a physical place could exist without the experience of solitude.

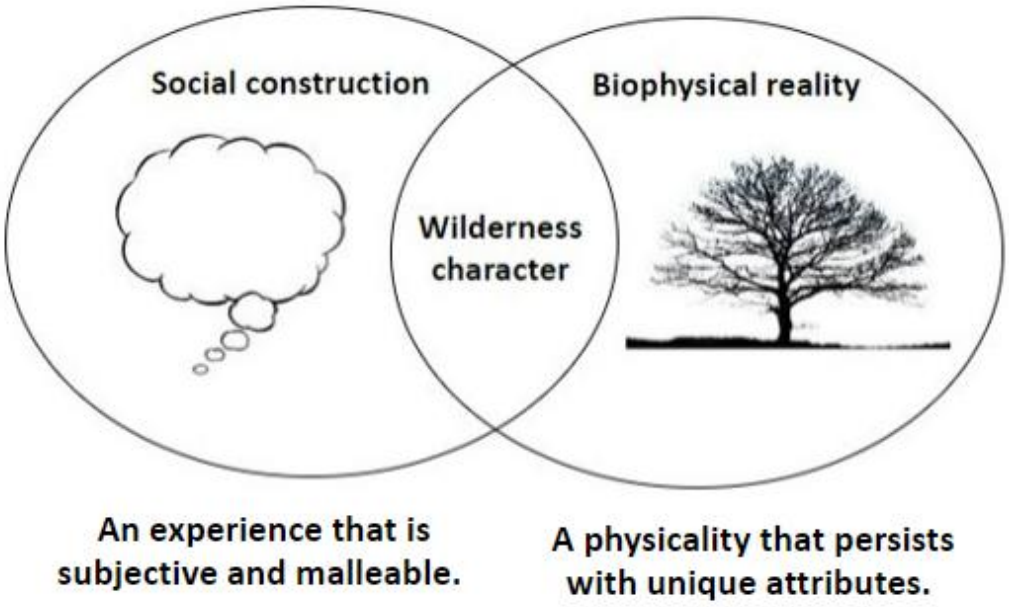

Figure 3: The constructivist and realist perspectives on wilderness.

Another question we can ask is whether the desirability of solitude makes our presence incompatible with wilderness character. This is another complex question that cannot be fully answered in the confines of this chapter, but it is certainly a relevant one to ask. Creating opportunities for solitude may serve to temporarily remove people from sight, but not being seen is not the same as being compatible with wilderness character (Worf, 1980). In the past, it was noted that an implicit message in much wilderness preservation literature was that people inevitably defile the land and the only way to preserve it was to designate it off limits (Freyfogle, 1998). And it is undoubtedly true that modern society has caused undesirable changes in wilderness ecosystems, such as habitat fragmentation, the introduction of invasive species, the removal of keystone predators and increased pollution levels. One could interpret the mandate for solitude as a choice to single out the human species as a source of potential threat or actual harm to wilderness character, and therefore to justify the application of novel regulatory methods to minimise our impact, and even our visibility, within the environment.

However, as has been frequently reiterated throughout the research, many areas now considered wilderness historically evolved under human stewardship, and there are also many groups who benefit from access to designated wilderness today, such as

scientists, artists and recreationists. Whilst the US Wilderness Act (1964) does mandate that opportunities for solitude should be present, it also mandates that wilderness should be preserved for people's use and enjoyment and that it may be used for the purposes of recreational, scenic, scientific and educational use. This implies that wilderness retains part of its value by being visited, thus contradicting the idea that our presence is incompatible with wilderness character.

One way to resolve this perplexing question about whether our presence enhances or degrades wilderness character is to make a distinction between our influences that have been present in the long-term evolution of ecosystems and our influences that are the result of modern, transformative technology (Franklin and Aplet, 2009). Examples of the former would include indigenous use of fire, hunting, irrigation and agriculture that may have altered the composition and structure of an ecosystem. Modern technology begins with developments such as the plough, saw and gun and continues with modern machinery and chemicals that are capable of wholesale transformation of an ecosystem and have the potential to bring unpredictable and potentially irreversible changes. Acknowledging this distinction makes it possible to see that people are not inherently 'unnatural' and to move the management focus towards ensuring an absence of modern technology, instead of simply an absence of people (Gomez-Pompa and Kaus, 1992). This approach has the additional benefit of not enforcing an artificial divide between man and nature that can lead to more disconnect and pave the way for the destruction of nature.

We can also reflect upon the research implications for the received wilderness idea. More specifically, is it possible to talk about wilderness solitude without the ethnocentric and colonial overtones associated with the imagery of an 'empty' and 'unpeopled' landscape? The research shows that opportunities for wilderness solitude are often symbolic of more than an absence of physical company. Instead, the experience may be about removal and separation from contemporary society. This theme was explored in more detail in the previous chapter, which looked at the idea of returning to our atavistic roots in wilderness and reconnecting with nature through moments of solitude. It therefore follows that evidence of modern humans and the

transformative impact of modern technology is likely to have more of a detrimental effect on the quality of solitude than evidence of previous indigenous settlement. Seen in this light, it becomes possible to retain a sense of connection between people and wilderness and acknowledge that places of solitude were once inhabited. When indigenous history is preserved, environmental planning is as much a cultural issue as it is a scientific one (McCarthy, 1998). Sensitivity to local, indigenous context should be an important aspect of any wilderness management plan, especially with regards to solitude.

Before concluding this chapter, it is important to recognise that the research has focused predominantly on the anthropogenic value of wilderness. Much of the discussion has been from a human-orientated perspective, centred around what wilderness character means to us, and what wilderness solitude can offer us. This is not to deny the validity of more ecocentric modes of understanding wilderness, for example its role as a wildlife refuge, or as an important provider of ecological services such as clean air and water. And it is not to deny the intrinsic value of wilderness that exists independent of human need or benefit. Intrinsic value means wilderness has a right to exist regardless of whether we visit, observe or simply contemplate it from afar. Its worth is not contingent upon anything else and it has no need of extraneous justification. It was the author's choice to situate this dissertation broadly in the field of wilderness social science and focus more on the human relationship with wilderness, to discuss what it means to us and how we experience and perceive it. This was in part to reflect the author's own interests, and also to respond to the research aim. As a result, it has naturally put a more anthropocentric focus onto wilderness character.

This section has explored the more theoretical implications of the research. It has looked at the combination of experiential and material aspects that define wilderness character and the significance of solitude as part of that character. It has also asked questions about man's place in wilderness and considered the implications for the received wilderness idea and the relationship with indigenous land-use. This section ended with a brief discussion about the different ways in which we can value wilderness

character. This concludes our examination of the research implications. Next, the dissertation will address the research limitations and how it could be expanded upon.

9. Limitations

Whilst there was a logical rationale for conducting this research as a literature-based exercise, there are some inherent limitations with this approach that should be acknowledged. The first point concerns the selection of literature used for the initial analysis and identification of themes. It is possible that an element of convenience sampling entered the process, meaning books were chosen to some extent based on their ease of availability – what was in print, in English, findable, accessible and so on. Furthermore, following up references from one author to another could have introduced an element of confirmation bias, meaning information was sought and retrieved that aligned with the values and ideas already found. In addition, the selection was obviously limited to a degree by the parameters set out in the initial scope. In this research, the non-western perspective is largely excluded, as well as the experience of solitude in non-terrestrial wilderness areas. Therefore, the theories and conclusions have not been tested across a range of cultures and a truly diverse variety of ecosystems.

Secondly, we need to consider the implications of relying on literature as our source of data for analysis. One could argue this reduces the variety of perspectives being considered. For writing to have been selected for publication, the author must be capable of expressing their feelings with skill, which may mean they are more likely to be educated and possibly therefore from a more affluent background. The perspective of the ordinary wilderness visitor, and even the more private and self-contained visitor who is less inclined to seek publication, may be missing. There is also a gender-bias as the female perspective is under-represented in wilderness literature, possibly because solo experiences are regarded as more normative for men. Furthermore, with a few exceptions of diary entries, we are relying on information captured after the experience. The authors had the space and time to reflect on the experience and construct meaning from it afterwards, possibly even with editorial input from a second party. By only capturing thoughts after the event, we have also lost the ability to see the experience as dynamic or multi-phasic. And finally, a literature-based approach is not easily scalable.

There is a limit to how many books one can obtain, read and analyse within a set amount of time, whereas methodologies such as surveys or field interviews could be scaled up using technology or even delegation. This could generate a wider and richer volume of data for analysis.

As well as the limitations inherent to literature-based research, there are also some considerations regarding the use of a qualitative method. This was deemed to be a suitable approach for understanding subjective experiences and broadly categorising ideas, but has its own inherent limitations. Qualitative research is liable to more subjective interpretations and author bias. In particular, confirmation bias could mean evidence from the literature was interpreted as confirming a pre-conceived idea. The other challenge is that qualitative research is not easy to replicate and reproduce for independent verification and without any quantitative output, it is harder to prove or disprove the conclusions. Using a form of linguistic analysis or sentiment analysis could have generated more quantitative data upon which to draw conclusions.

Being mindful of these limitations and potential biases throughout the research process was important in order to put mitigations in place. The most important ones centred on applying the rigour of core academic skills, including information retrieval, analytical reading and critical thinking, as well as seeking constructive challenge from the dissertation supervisors and carrying out a thorough literature review against which to contextualise and test the theories. It was also important to openly define and acknowledge the scope early on, along with the rationale for making it. A final mitigation is to suggest potential avenues by which this research could be expanded upon, which will be addressed in the following chapter.

10. Further research

The intention behind this dissertation was to contribute to the existing body of knowledge on wilderness solitude and build our understanding of the concept. It is recognised that there are many ways this research could be expanded upon, and it is indeed the author’s hope that this dissertation may generate further discussion or new avenues of research. One possible route to go down would be to devise a methodology

that tests the theories presented in this dissertation. This acknowledges the limitations of literature-based exercises and qualitative research and seeks to address them by finding other means to prove or disprove the conclusions. The main theories would be those concerned with the motivations for seeking wilderness solitude, its importance as part of the wilderness experience and the elements that impact upon the quality of the experience.

One option for carrying out such testing could be to increase the data sample and apply more quantitative analysis. Example methods could include field observations, interviews or surveys designed to understand visitor motives, experiences and behaviours. To really test the theories, it would be advisable to increase the number of experiences looked at, and to increase the diversity by seeking input from a wider sample of people. This could potentially even include the perspective of those who do not visit wilderness but appreciate it from afar purely for its existence value. Another option would be to put some of the theories into practice for wilderness management and observe the effects. This could involve experimenting with the choice of solitude indicators, modelling techniques and management strategies across the biophysical, regulatory and sensorial environments in real-world practice or hypothetical or simulated scenarios. This could reveal something about how effective and meaningful the insights from this research are in practical terms.

A different avenue to explore could be to change the parameters of the research. One option would be to widen the scope to consider the experience of solitude across wilderness in all its forms and from the perspective of different cultures, including for example the African, Asian and East-European perspective. Another option could be to narrow down the focus to really understand the nature of individual experiences, looking for example at how the experience of solitude varies across different situations and contexts. This recognises the existence of in-person variation, for example solitude may be more or less welcome depending on one's chosen activity, one's stage in life or whether one feels safe and secure, as opposed to afraid and vulnerable.

Research could also attempt to understand the impact of different demographic factors on the experience, such as gender, age, ethnicity or nationality. The topic of

gender in particular could pose some thought-provoking questions. It has been reiterated throughout the dissertation that solitude is a positive experience, but that this is reliant upon safety not being a concern. There could be an argument to say women are perhaps conditioned to feel more vulnerable than men when they are alone, and it would be interesting to see whether that impacts on their wilderness experience. Even through the small sample studied in this dissertation, it was noticeable that an interest in pursuing jeopardy and hardship was more prominent from the male voices than the female. Other gender-based questions could ask why these wilderness experiences are regarded as more normative for men, and why male voices are more dominant in this literary genre. Expanding or narrowing the research parameters in these ways would be an interesting way to challenge our understanding of wilderness solitude.

Analysing literary accounts of solo wilderness experiences was a novel means to reflect on the motivations for, importance of and impacts upon solitude. As briefly indicated in this section however, there is a variety of other means by which this could be achieved, tested and expanded upon. It is hoped that this dissertation will contribute in some way towards a wider body of research by building our understanding, starting conversations or inspiring future research.

11. Conclusions

Wilderness solitude is a topic of great fascination and intrigue. It asks why somebody would voluntarily choose to spend time alone in a landscape that was once regarded as the abode of evil, and that can undoubtedly still be hostile and challenging today. And it asks why these moments of solitude are frequently portrayed as a defining part of the wilderness experience, not to mention being a legal requirement for designated wilderness in the US. It can also be a challenging and stimulating topic. It is one where concepts may be nebulous, definitions are often subjective and a level of awareness of personal, cultural and historical context is important. It is also a topic full of potential. Not only does it reveal something about how we perceive wilderness ecosystems and value wilderness character, but it also suggests something about our innate needs and desires and our relationship with the natural world.

The sampled literature has illustrated how in contemporary western culture, the act of intentionally seeking out moments of solitude in a wilderness environment is often a manifestation of a desire for something greater than the simple absence of other people. It could be a longing for adventure or a more primitive way of life, perhaps a search for cognitive restoration or spiritual awakening, maybe a desire to return to one's atavistic roots in an ancestral homeland and reconnect with the natural world. The commonality across all themes is that it is an experience unlike that of physical isolation in any other environment, such as one's home, garden, urban park or agricultural farmland. It is an experience unique to the wilderness environment, where the defining characteristics of its biophysical reality provide a stark contrast to modern civilisation and a sense of separation from the human-made world.

This conceptual study of wilderness solitude, that has reflected upon the desire to remove oneself from company in a wilderness environment, has provided an interesting new perspective on the topic. It has examined some of the underlying assumptions in wilderness management about the importance of opportunities for solitude as a defining part of wilderness character and encouraged critical thought about the reasons for their desirability, cultural significance and symbolism. It is an approach that addresses the unique alignment between the motivations for solitude and the tangible and intangible qualities of wilderness character that enhance and inspire solitude. It develops our awareness of solitude's subjective and multifaceted nature, its relationship with other aspects of wilderness character and the evolving nature of our relationship with wilderness. It does so by acknowledging the identity of wilderness as both a place and an experience. The ideas and theories put forward in this dissertation will hopefully be discussed, tested and expanded upon in a way that continues to inform our thinking about how we value wilderness and how we see our place within it.

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Bibliography

The following bibliography is an annotated list of the books from which key themes were extracted to answer the primary research question. Each of these books contains reflections and observations of solitary experiences in wilderness or wild nature. Further details about the selection and analysis of the literary sample can be found in the methodology. Full details of the publications used can be found in the preceding list of references.

Abbey, E. (male) *Desert solitaire. A season in the wilderness.*

First published in 1968. Seasonal park ranger Edward Abbey describes his inner turmoil as he witnesses modern developments transforming the Arches National Park in the Utah desert during the late 1950s and early 1960s. His passion for natural beauty and his hatred for consumerism and over-crowding hints at an underlying sadness about the loss of undefiled wilderness and adds a melancholic tone to his writing. His unequivocal

message is that humankind needs to preserve wilderness because of the unique opportunity it affords us to escape from that which we do not like in the human world.

Austin, M. H. (female) ***The land of little rain.***

First published in 1903. American nature writer Mary Austin recalls her journey through the desert landscapes of the California Sierras in the early twentieth century. For Austin, there is great appeal in the mystery and beauty of wilderness landscapes. She acknowledges the emptiness and loneliness of the landscape, along with the surprising richness of indigenous cultures, flora and fauna.

Cracknell, L. ed. (female) ***A wilder vein.***

First published in 2009. An edited collection of essays about experiences in wild places across Northern Ireland and northern Great Britian, including female authors such as Maitland. Many of these essays reflect the author's acute awareness of previous human occupation, made noticeable either through what is still visible, such as stone circles, or what is now absent, such as the keystone predators hunted to extinction. This sense of loss can, at times, create a mournful atmosphere for the solo traveller.

Crumley, J. (male) ***Brother nature.***

First published in 2007. British nature writer Jim Crumley reflects on time spent travelling alone in Alaska and Scotland, including his observations of wildlife and his thoughts on nature conservation. Crumley makes an interesting comparison between the historical benefits of staying in a tribal community for survival, and the benefits of solitude that he cherishes today in order to achieve the most immersive experience in nature.

Dillard, A. (female) ***Pilgrim at Tinker Creek.***

First published in 1974. The journals of American Annie Dillard who lived alone in the Blue Ridge Mountains in Virginia in the 1970s, during a period she describes as a self-imposed exile from city life. Dillard describes herself as an explorer who enjoys walking the mountains and valleys around her secluded home, where she devotes much of her time to the quiet observation of native wildlife.

Ehrlich, G. (female) ***The solace of open spaces.***

First published in 1985. American author Gretel Ehrlich reminisces about her life in Wyoming during the 1970s, reflecting on the 'collective blues' of modern society and the contrasting views on wilderness held by Christianity and indigenous communities. During a period of intense personal grief, Ehrlich reflects on the impact of space and solitude on her mental state.

Gessner, D. (male) ***Leave it as it is. A journey through Theodore Roosevelt's American wilderness.***

First published in 2020. American author and professor David Gessner describes a journey across America to visit locations associated with President Roosevelt's life and to study current wilderness issues, including the problems of reconciling the history of indigenous communities with the notion of an untouched landscape.

Grieve, G. (male) ***Call of the wild. My escape to Alaska.***

First published in 2006. One man's account of leaving his family and newspaper job in Edinburgh to build a cabin in Alaska and learn to live off the land and work with a dog sled by himself. Grieve describes with raw vulnerability his desire to escape to a new life of adventure and challenge and in an emotional conclusion, he describes the powerful, beneficial effect this had on his sense of emotional wellbeing.

Griffiths, J. (female) ***Wild. An elemental journey.***

First published in 2006. Jay Griffiths describes a seven-year personal odyssey to travel solo around the world, exploring the nature of wilderness character and meeting the communities who call wilderness home. Griffiths writes with extraordinary honesty about her deeply held desire to experience and inhabit wild locations, which she believes is indicative of an ancestral pull to wild nature.

Kagge, E. (male) ***Silence in the age of noise.***

First published in 2016. Norwegian explorer Erling Kagge's account of a 50-day solo expedition walking across Antarctica. After experiencing the benefits of complete immersion in nature's unique soundscape, Kagge encourages us all to seek ways to reduce the over-stimulation of modern life and find moments of quiet in nature.

Kerouac, J. (male) ***Lonesome traveler.***

First published in 1960. A collection of journal entries by poet and author Jack Kerouac, including some from the time he spent living and working alone as a fire lookout in the Cascade Mountains of Washington State. His account of this idyllic period includes recollections of nights spent star gazing and days spent singing aloud to nobody in pure happiness and carefree abandon.

Leopold, A. (male) ***A sand county almanac and sketches here and there.***

First published in 1949. American forester, environmentalist and conservationist Aldo Leopold shares lyrical observations of the changing seasons over a year on his Wisconsin farm. His writing reveals his scepticism about the societal benefits of what is often perceived to be 'progress' and his strong belief that we cannot meaningfully exist without wild nature. Time spent in nature allows Leopold to cherish the flora and fauna around him and contemplate the differing types of solitude.

Lloyd-Jones, R. (male) ***Scottish wilderness connections. Wandering and wondering among landscapes and seascapes.***

First published in 2021. Author and photographer Robin Lloyd-Jones brings together a collection of his essays, poems, memories and reflections of exploring the wild places of Scotland. He shares his sense of loss when perceiving the deforestation and removal of keystone predators and asks whether sharing the special locations and bringing them to the attention of a new audience risks degrading them further through over-crowding and increased human impact.

Macfarlane, R. (male) ***Mountains of the mind. A history of fascination.***

First published in 2003. British writer Robert Macfarlane explores the history of mountaineering and what motivates climbers to ascend to the summit. His fascinating research examines how mountainous landscapes changed in society's mind from something to be reviled, to something to be revered. And how our perception of climbing for leisure changed from an act of lunacy to an appealing sport.

Macfarlane, R. (male) ***The wild places.***

First published in 2007. British writer Robert Macfarlane explores the wild places around Britain and Ireland, from moorland to marshes and mountains. Macfarlane pays particular attention to the unique spatial arrangements and their impact on the visitor, commenting for example that open, uninterrupted spaces often evoke a sense of freedom in contrast to bounded, divided land.

Matthiessen, P. (male) ***The cloud forest. A chronicle of the South American wilderness.***

First published in 1961. Travel writer and explorer Peter Matthiessen's account of travelling through South America, from the Amazonia jungle to Machu Pichu, Tierra del Fuego and Patagonia. Matthiessen harbours a strong desire to pioneer into uncharted territory and relishes the feeling of adventuring where other people have not been. So strong is this feeling that he values the time spent in the untouched rainforest more than the time spent discovering palaeontological remains.

Maxwell, G. (male) ***The ring of the Bright Water trilogy.***

First published in 1960. Gavin Maxwell's account of living alone on the West coast of Scotland in the 1950s in a remote house he famously shared with three otters. In what is widely regarded to be one of the most popular nature books in print, Maxwell shares his love for the remote, wild landscape, the sense of freedom it brings him, and the animals who live there.

Muir, J. (male) ***The wilderness journeys.***

First published in the early twentieth century. A collection of writings from Scottish naturalist John Muir about his experiences walking in the Sierra Nevada and Alaska amongst other places. Muir's writing is perhaps most notable for its abundant use of religious rhetoric, as he observes divinity in the landscape around him and even compares it to a temple or cathedral. For Muir, the wilderness experience is a deeply spiritual one, easier to experience than to explain.

Proenneke, R. (male) ***One man's wilderness: an Alaskan Odyssey.***

First published in 1973. The diaries of Dick Proenneke who spent 16 months living alone in a self-built cabin in Alaska from 1967 to 1968. Proenneke writes openly about the sense of pride, achievement and satisfaction that resulted from working hard, going beyond his comfort-zone and knowing that he was capable of surviving alone in a high-risk environment.

Richards, D. (male) ***Outpost. A journey to the wild ends of the Earth.***

First published in 2019. Author Dan Richards explores the appeal of living in remote outposts in a range of environments from the Scottish mountains to the Norwegian tundra and Utah deserts. One of his interesting conclusions is that humans desire to be original, hence the need to feel as if one is exploring and reaching a location other people have not previously visited.

Ruess, E. (male) ***A vagabond for beauty.***

First published in 1983. A collection of letters and short essays by writer and artist Everett Ruess, a young man who explored the Utah deserts alone in the 1930s. Ruess displays an obvious sense of dissatisfaction with his life and a belief that he can escape to a happier, new identity in the wilderness, where the beauty intoxicates him and the lone trail is the most appealing.

Shepherd, N. (female) ***The living mountain.***

First published in 1977. Scottish author Nan Shepherd describes her experiences walking and climbing in the Cairngorm mountains during the 1940s. Although Shepherd's writing is often a study of landscapes, and her walks are described as physical, sensory experiences, there are also reflections on her mental state and her sense of finding herself and being her authentic self when alone in the mountains.

Thoreau, H.D. (male) ***Walden; or life in the woods.***

First published in 1854. This work by American naturalist Henry David Thoreau is a reflection upon a simple life lived alone in Massachusetts over the course of two years. In a memorable episode, he remarks that a life lived in the city can be lonelier than one lived alone in wilderness, where nature provides companionship.

Tomkies, M. (male) *A last wild place*.

First published in 1984. British naturalist Mike Tomkies describes ten years living in alone in Inverness-shire in the 1970s and 80s in an area he describes as one of the largest uninhabited areas in the British Isles. Tomkies displays a remarkable affinity for the native wildlife and an unrivalled dedication to the meticulous study of the ecosystem in which he is frequently the only human. He writes of an ancestral calling to the land and a feeling of returning to an animal state as he learns the secrets of the animal kingdom.

Tomkies, M. (male) *Alone in the wilderness.*

First published in 1977. British naturalist Mike Tomkies describes the years he spent alone living on the remote British Columbian coast in the 1970s. The experience is often exceptionally difficult as he is forced to adapt to a hostile environment, but it is a period of his life where he ultimately felt more alive than any other time.

Weymouth, A. (male) *Kings of the Yukon. An Alaskan river journey.*

First published in 2018. Adam Weymouth's account of a solo 2000-mile canoe expedition across Alaska. Amongst his conversations with the people he encounters, he records the motivations that led people to move to Alaska despite the apparent challenge of adapting to the hostile environment and wildlife.

Words (excluding references and bibliography): 28,725