

Turning to Nature to Process the Emotional Toll of Nature's Destruction

Ross Westoby^{1,*}, Rachel Clissold^{2,3} and Karen E. McNamara² 

¹ Griffith Institute for Tourism, Griffith University, Brisbane, QLD 4111, Australia

² School of Earth and Environmental Sciences, The University of Queensland, Brisbane, QLD 4072, Australia; r.clissold@uq.edu.au (R.C.); karen.mcnamara@uq.edu.au (K.E.M.)

³ International Centre for Environmental Management, Hanoi 100000, Vietnam

* Correspondence: r.westoby@griffith.edu.au

Abstract: As challenges emerge in the context of the Anthropocene, one often overlooked area is the emotional toll that the Earth's destabilisation has on the human psyche. Deeper investigation into perceived "negative" emotions of the Anthropocene requires closer attention if those in highly industrialised societies, as the major contributors to the climate crisis, are to avoid collective denial and move towards transformative change. This paper aims to provide insights into these "negative" emotions that are emerging in Australia in response to changes to the biosphere and the destruction of nature, including sadness, grief, anger, frustration, and anxiety. As a way of processing these "negative" emotions, the authors find that connecting with, and being in, nature is critical. Such connection allows people to cope, renew, and heal. In this way, nature is both the trigger for, and answer to, our ecological grief, anger, and anxiety, and, as such, is at the epicentre of human emotions in the context of the Anthropocene.

Keywords: "Black Summer" bushfires; climate change; eco-anxiety; ecological grief; nature connectedness; sadness; World Heritage



Citation: Westoby, R.; Clissold, R.; McNamara, K.E. Turning to Nature to Process the Emotional Toll of Nature's Destruction. *Sustainability* **2022**, *14*, 7948. <https://doi.org/10.3390/su14137948>

Academic Editor: Samuel Asumadu-Sarkodie

Received: 16 May 2022

Accepted: 28 June 2022

Published: 29 June 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Highly industrialised societies wedded to excess consumption have been meddling in nature's cycles for too long, and the "symptoms" are devastating. The 2019/2020 "Black Summer" bushfires in Australia burnt more than eight million hectares of vegetation and significant amounts of the relictual Gondwanan rainforest, leaving it susceptible to regeneration failure and ecosystem decline [1]. At the other end of the country, another iconic World Heritage site—the Great Barrier Reef—continues to face ongoing threats, due in part to coral bleaching episodes [2]. These two examples of ecosystem decline, along with many others across the globe, highlight how we have entered a new geological era. The "Anthropocene" has been the term used to describe this period, where human actions are exerting increasing influence on the environment at all scales, outcompeting natural processes in many ways [3,4]. In this era, we see the impacts of climate change emerging alongside a myriad of other catastrophes, including species loss, ocean acidification, plastic waste pollution, and loss of healthy soils [5].

These kinds of catastrophes have resulted in human emotional responses of sadness, anger, anxiety, disgust, frustration, fear, and grief [6–8], reflecting an emerging body of work that highlights the mental health impacts on people experiencing this epoch of anthropogenic planetary changes and environmental destruction [9,10]. In fact, Head has argued that grief is a "companion that will increasingly be with us" [11] in the Anthropocene as society experiences "unimaginable scales of change" [12]. In-depth studies, including a taxonomy of climate emotions and explorations on subtypes of emotions, are beginning to better capture the diverse climate-induced emotional experiences engulfing the globe [13,14]. Ecological grief, as one of the key emotional responses documented, is "grief felt in relation to experienced or anticipated

ecological losses, including the loss of species, ecosystems and meaningful landscapes due to acute or chronic environmental change" [9]. This kind of grief can be anticipatory, occurring because of an imagined future of further loss of life, normality, health, and/or prosperity for humans [15]. "Eco-anxiety" similarly encapsulates the apprehension and stress about anticipated threats to salient ecosystems [16]. These are perfectly rational responses and, although uncomfortable, must be worked through, engaged with, and processed if we are to see their transformative potential and be able to connect with the urgency of the cascading and interconnected crises [6,16].

Working through these emotions is different for different people, but could include seeking clinical support or group therapy, joining groups for social connection and emotional support, finding ways to become active, and re-connecting with nature, among others [8,16–18]. In terms of the latter, several studies are increasingly documenting the healing potential of nature [19,20] and its ability to enable positive emotions (e.g., improved moods, greater life satisfaction and happiness) [21–23]. In this way, the wellbeing–nature relationship is characterised by two extremes: when the "deeply bonded and reciprocal communion between humans and nature" is denied, this becomes "a source of suffering for both the physical environment and for the human psyche", while the "realization of the connection between humans and nature is healing for both" [24]. Climate change is compounding processes that significantly affect nature, and the danger of this is that the mental health benefits of nature on humans—or the "nature buffer"—may also inevitably diminish as a result of losses, degradation, and decay [25]. This short communication, while not delving deeply into eco-psychology, aims to provide insights into the emotions emerging as a consequence of changes to our environment and the destruction of nature and explore how these emotions might be worked through to enable renewal and healing.

2. Method and Overview of Participants

This paper focuses on the personal experiences of a group of tourists ($n = 72$) who had recently stayed, for one night or more between May and August 2021, at the Mt Barney Lodge. The Mt Barney Lodge is an ecotourism business that sits just outside the Mt Barney National Park in the World Heritage Gondwana area in Queensland. Note that "Lodge" is somewhat misleading, giving the impression of "expensive" and "exclusive", when in fact this is an affordable avenue for diverse peoples to connect with the Gondwana region through camping, basic huts, and low-key lodging. Across the landscape that Mt Barney Lodge sits within, the scars and aftereffects from the "Black Summer" bushfires can be seen (Figure 1). We elicited the emotional responses of participants with regard to the Anthropocene broadly and also their experiences at Mt Barney. This was done by conducting an online questionnaire containing a series of both quantitative and qualitative questions. The authors used broad and open-ended questions to understand how visitors perceived and understood their psychological experiences and responses. This study leaned towards a phenomenological approach, albeit being limited due to the questionnaire method of inquiry.

Questionnaires were administered through the online portal RedCap and participants were recruited via an information sheet and flyer placed in the Lodge reception. Two vouchers of AUD 100 to stay at Mt Barney Lodge were used as incentives to participate. Quantitative data were analysed for their descriptive statistics (i.e., frequency, percentage, and mean) using SPSS v28, and qualitative data were coded into prominent "themes" using NVivo v12. For each "theme" (i.e., prominent emotion that emerged from the data), a number was given for how many times this theme was referenced in the data (manifest content analysis), followed by a deeper description, using quotes, of the emotion (latent content analysis). Ethical approval was granted by the Griffith University Human Research Ethics Committee (GU Ref No: 2021/084). Of the 72 participants who had recently visited Mt Barney, more were female (71.4%) than male (28.6%), and the mean age was 46 years old (youngest was 18 and oldest was 78 years). Just under half of all participants had an undergraduate degree (43.1%), followed by a master's degree (25%), high school completion

(16.7%), vocational training (8.3%), and a doctorate (6.9%). Many participants indicated that they were “Caucasian” (30.6%), “Australian” (29.2%), “Anglo-Saxon” (6.9%), or had dual heritage. The most prominent areas of work for participants included health (19.4%), followed by education (8.3%), environment (5.6%), finance (5.6%), or power and water sectors (5.6%). A portion of participants were also retired (8.3%).



Figure 1. Mt Barney burning at the beginning of the “Black Summer” bushfires in late 2019 (Source: © Ben Blanche [purchase ID: AS000003925]).

3. Findings

Most participants (77.8%) shared that they had experienced emotional responses to the current pressures on natural systems, including climate change, urbanisation, drought, bushfires, and biodiversity loss. Overwhelmingly, participants shared “negative” emotions of sadness and grief, along with anger and frustration, and anxiety.

Sadness (22 references) and grief (5 references) were prominent emotional responses and emerged as a result of both indirect and direct engagements with ecological crises and adverse environmental conditions. In terms of indirect engagements, participants were expressing a sense of sadness and grief relating to anthropogenic impacts on the environment as a whole and humanity’s way of engaging with nature: “[t]here is an

ongoing sense of sadness when, as a society, we manage the natural world so poorly. That so many take what they need and do not give back” (participant #32, 2021). Similarly, others reflected on how they “have laid awake at night thinking about all the biodiversity loss, climate change and wept” or felt “so sad for the animals” in the face of bushfires or urban sprawl, which devastate habitats (participants #16 and #31, 2021). These responses reflect “macro worries” and illustrate the moral/ethical undertones of sadness and grief as “other suffering” moral emotions that encapsulate the compassion felt for others, whether this be for other people, animals, or the environment [13,26–28].

There was also a sense of sadness and grief in response to the damage caused by bushfires on places that people are deeply connected to, reflecting the notion of “solastalgia” (i.e., the “homesickness one gets when one is still at ‘home’ and your home environment is changing in ways you find distressing”) [29]:

Sadness during the Snowy Mountains fires in NSW. This area is where I spend much of my youth, so it was really sad to see it perish. I felt like I was experiencing the same hurt that the environment (trees, wildlife) was—as my memories were embedded in that location (participant #60, 2021)

Forests I'd grown up walking in were burning, including ancient old rainforests which won't get a chance to recover . . . There's a lot of grief attached to that, and a strong sense of being cut off from the future (participant #9, 2021)

These responses infer one of nature’s benefits for wellbeing that could be lost as a result of degrading environments [25]—the benefits and contributions to a sense of place and identity [30,31], which are important for wellbeing. However, grief is not restricted to post-loss scenarios and can also emerge in anticipation of loss, especially the loss of normality and a stable, certain future [13–15,32]:

When I was little, I thought of the world as kind of guaranteed—it would always be there—and having that certainty taken away, knowing that a lot of the things I love about the world won't be there any more, knowing that the world might not be survivable for a lot of people by the time I'm a grown-up—it's grief, and anger, and fear of how much grief is still to come (participant #9, 2021)

This emotion of fear around anticipated grief can be scaled across decades of uncertainty in the Anthropocene.

Emotional responses of anger (12 references) and frustration (7 references) were also prominent amongst participants, particularly in ways that are “other-directed” and “other-condemning” [27,28]. In explaining anger, participants referred to “the lack of leadership in the government”, the “government’s inability to commit to a decent climate policy”, and the problem of “Australia [being] so focused on fossil fuels when the country could run almost entirely on solar and other green energy sources” (participants #5, #7, and #3, 2021). Beyond Australian politics, participants expressed being more broadly “frustrated at the disregard people have for nature and wilderness and their desire to control, take over and fence it”, and by the culture of “business profits being put ahead of environmental protection” (participants #6 and #66, 2021). Other participants claimed that they were “equally sad and angry” that “nothing has been done sooner” and that “very little [has been] done to change current practices despite overwhelming evidence that society cannot continue on the path it is on” (participants #21 and #48, 2021). Although not explored in detail, it was clear that there were varying shades of other-directed anger—from milder irritation to a stronger sense of moral outrage [13]. Eco-anger has also been linked to personal and collective pro-climate behaviour [33], yet we found that participants largely had a perceived sense of lack of agency over their futures, thereby directing their anger at those that they perceived as having more control:

[I have] a lot of anxiety because it feels like we can't do anything to stop it, anger because people that can stop it aren't doing anything (participant #14, 2021)

I'm angry that I can't do enough and that people in higher positions of power aren't doing enough (participant #5, 2021)

Research has suggested that, for worry to lead to adaptive behaviour, people need to perceive the situation as at least somewhat controllable [26,34]. Further, these sentiments reflect a sense of dissatisfaction with one's own actions, which has been recognised as a subtype of eco-guilt that can lead to passivity [14].

This perceived lack of agency was also clearly linked to a sense of anxiety, which was also a prominent emotional response among participants (11 references). Several participants expressed that they felt “[a] lot of anxiety because it feels like we can't do anything to stop it [climate change]” and “we have past the point of no return for damage to our environment”, where “anything we do try, and change is never going to be enough” (participants #14 and #40, 2021). This lack of agency, combined with the sense of urgency to act, can result in a “very panicked feeling” (participant #9, 2021), and reflects the eco-anxiety subtype of “helplessness and frustration” that can be caused by the magnitude of the challenge [14]. This is also culminating into extreme worry about the future, especially for children and future generations (i.e., other-directed) [14,27,28]: “I'm always anxious about what the world will look like when I get older and what it will look for my children when I have them” (participant #4, 2021). In this way, eco-anxiety is emerging as a form of “pre-traumatic stress disorder”, whereby traumatic consequences are anticipated and felt before the event takes place [35]. Another participant explained that the changing nature of their anxiety was based on environmental events: “High levels of anxiety over the future, usually peaking at the time of ‘natural’ disasters (e.g., floods or bushfires), but also a low level, persistent concern during times of drought, that typically only breaks when there are storms/rains” (participant #63, 2021).

Participants also described how being in natural areas, such as Mt Barney, can be a critical strategy for dealing with heavy emotions triggered by nature's demise. To overcome and work through emotions, participants were “[r]etreating to nature as much as possible”, “appreciating the bush more”, and “[s]pending as much time outside [so] that I can hear trees, plants, and animals” (participants #7, #8, and #16, 2021). The motivation for this was “to see everything before it disappears”, “to connect with nature as much as possible”, and also because “nature is one of the most powerful healers we have access to, and for the most part, it is freely available to all” (participants #9, #61, and #12, 2021). Participants explained how “being in nature is important to mental wellbeing”, it is “healing and rejuvenating” and “always gives me a sense of spiritual coherence and connection with the natural world” (participants #28, #13, and #36, 2021).

For some, this rejuvenation is exactly what is needed to continue fighting: “If we don't see the places, we forget what we're fighting for, and we're more likely to get burned out trying to protect the world” (participant #9, 2021). These are reflective of an extensive body of literature that has increasingly emphasised nature's influence on positive moods [21–23], restoration or psychophysiological recovery [36], and its healing potential [19,20], among many other benefits. Similarly, one participant explained that there is a great healing effect from observing the resilience and healing of nature itself after devastation: “[I] find peace and some confidence in its [nature's] ability to regenerate if given a chance” (participant #31, 2021). Emotional healing can, therefore, be connected to the healing (renewal and regeneration) of the local landscape and ecology of the area for which an individual person has deep connections to [19] (Figure 2). The ebbs and flows of decay and renewal in nature are, therefore, causing sadness, grief, anger, and anxiety, while also being at the centre of people's strategies to cope with such emotional responses (i.e., connecting and exposing oneself to nature as the “buffer” against distressing life events). The loss of these kinds of benefits from nature exposure as a result of degradation may have significant consequences for mental health and wellbeing into the future and should be further explored [25].



Figure 2. Rare Bell Fruited Mallee Ash species were thought to be lost to the fire, and were welcomed with joy and relief when they coppiced beautifully from the base of the toasted trees (Photographer: Innes Larkin).

4. Concluding Remarks

This case study has elucidated how nature connectedness is both the trigger for, and answer to, perceived negative emotional responses to the deep macro-planetary changes that people experience at micro- and localised scales. With environmental change and loss come negative emotional responses, and yet most participants also shared stories of deep soothing from being in and around nature. We posit that people feel pain when the nature that they affiliate with suffers (i.e., through drought, flooding, and bushfires), and yet they equally feel a deep and profound sense of renewal when they are (re)connected with nature or it is healthy and thriving. This reiterates that nature plays a dualistic role in our wellbeing [8,25]. Despite being the source of our great suffering when the reciprocal communion is broken, it may also be the one thing we must turn to for healing and rejuvenation [24]. In these ways, these results support the need for programs that promote nature connectedness, although other strategies that help people to manage emotional responses will be necessary due to the mental health risks of connecting with a natural environment that is degrading [8].

Author Contributions: Conceptualization, R.W., R.C. and K.E.M.; methodology, R.W., R.C. and K.E.M.; formal analysis, R.W., R.C. and K.E.M.; investigation, R.W., R.C. and K.E.M.; writing—original draft preparation, R.W. and R.C.; writing—review and editing, R.W., R.C. and K.E.M.; project administration, R.W.; funding acquisition, K.E.M. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded through an Australian Research Council Future Fellowship (grant number FT190100114).

Institutional Review Board Statement: The study conducted was approved by the Griffith University Human Research Ethics Committee (GU Ref No: 2021/084).

Informed Consent Statement: Informed consent was obtained from all participants involved in the study.

Data Availability Statement: In accordance with the consent provided by participants on the use of confidential data, data are not available to be shared.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Godfree, R.C.; Knerr, N.; Encinas-Viso, F.; Albrecht, D.; Bush, D.; Cargill, D.C.; Clements, M.; Gueidan, C.; Guja, L.K.; Harwood, T.; et al. Implications of the 2019–2020 megafires for the biogeography and conservation of Australian vegetation. *Nat. Commun.* **2021**, *12*, 1023. [[CrossRef](#)] [[PubMed](#)]
- Curnock, M.I.; Marshall, N.A.; Thiault, L.; Heron, S.F.; Hoey, J.; Williams, G.; Taylor, B.; Pert, P.L.; Goldberg, J. Shifts in tourists' sentiments and climate risk perceptions following mass coral bleaching of the Great Barrier Reef. *Nat. Clim. Chang.* **2019**, *9*, 535–541. [[CrossRef](#)]
- Crutzen, P.J. The “Anthropocene”. In *Earth System Science in the Anthropocene*; Ehlers, E., Krafft, T., Eds.; Springer: Berlin/Heidelberg, Germany, 2006; pp. 13–18. [[CrossRef](#)]
- Steffen, W.; Grinevald, J.; Crutzen, P.; McNeill, J. The Anthropocene: Conceptual and historical perspectives. *Philos. Trans. R. Soc. A Math. Phys. Eng. Sci.* **2011**, *369*, 842–867. [[CrossRef](#)]
- Rose, D.B. Anthropocene noir. *Arena J.* **2013**, *41*, 206–219. [[CrossRef](#)]
- Head, L. Transformative change requires resisting a new normal. *Nat. Clim. Chang.* **2020**, *10*, 173–174. [[CrossRef](#)]
- Westoby, R.; McNamara, K.E. Fear, grief, hope and action. *Nat. Clim. Chang.* **2009**, *9*, 500–501. [[CrossRef](#)]
- Curll, S.L.; Stanley, S.K.; Brown, P.M.; O'Brien, L.V. Nature connectedness in the climate change context: Implications for climate action and mental health. *Transl. Issues Psychol. Sci.* **2022**. [[CrossRef](#)]
- Cunsolo, A.; Ellis, N.R. Ecological grief as a mental health response to climate change-related loss. *Nat. Clim. Chang.* **2018**, *8*, 275–281. [[CrossRef](#)]
- Hayes, K.; Blashki, G.; Wiseman, J.; Burke, S.; Reifels, L. Climate change and mental health: Risks, impacts and priority actions. *Int. J. Ment. Health Syst.* **2018**, *12*, 28. [[CrossRef](#)]
- Bulkeley, H.; Drew, G.; Hobbs, R.; Head, L. Conversations with Lesley Head about Hope and Grief in the Anthropocene: Reconceptualising Human-Nature Relations. *Geogr. Res.* **2018**, *56*, 325–335. [[CrossRef](#)]
- Head, L. The Anthropoceneans. *Geogr. Res.* **2015**, *53*, 313–320. [[CrossRef](#)]
- Pihkala, P. Toward a Taxonomy of Climate Emotions. *Front. Clim.* **2022**, *3*, 199. [[CrossRef](#)]
- Agoston, C.; Csaba, B.; Nagy, B.; Kóváry, Z.; Düll, A.; Rácz, J.; Demetrovics, Z. Identifying Types of Eco-Anxiety, Eco-Guilt, Eco-Grief, and Eco-Coping in a Climate-Sensitive Population: A Qualitative Study. *Int. J. Environ. Res. Public Health* **2022**, *19*, 2461. [[CrossRef](#)] [[PubMed](#)]
- Berinato, S. That Discomfort You're Feeling is Grief. *Harv. Bus. Rev.* **2020**, *23*, 2020.
- Cunsolo, A.; Harper, S.L.; Minor, K.; Hayes, K.; Williams, K.G.; Howard, C. Ecological grief and anxiety: The start of a healthy response to climate change? *Lancet Planet. Health* **2020**, *4*, e261–e263. [[CrossRef](#)]
- Westoby, R.; McNamara, K.E.; Clissold, R. Ways of healing in the Anthropocene. *Clim. Dev.* **2021**, *14*, 67–74. [[CrossRef](#)]
- Baudon, P.; Jachens, L. A scoping review of interventions for the treatment of eco-anxiety. *Int. J. Environ. Res. Public Health* **2021**, *18*, 9636. [[CrossRef](#)]
- Cox, H.; Holmes, C. Loss, Healing, and the Power of Place. *Hum. Stud.* **2000**, *23*, 63–78. [[CrossRef](#)]
- Chawla, L. Children's Engagement with the Natural World as a Ground for Healing. In *Greening in the Red Zone*; Tidball, K., Krasny, M., Eds.; Springer: Dordrecht, The Netherlands, 2013; pp. 111–124. [[CrossRef](#)]
- Mayer, F.S.; Frantz, C.M.; Bruehlman-Senecal, E.; Dolliver, K. Why Is Nature Beneficial? The Role of Connectedness to Nature. *Environ. Behav.* **2009**, *41*, 607–643. [[CrossRef](#)]
- Zelenski, J.; Nisbet, E. Happiness and Feeling Connected: The Distinct Role of Nature Relatedness. *Environ. Behav.* **2014**, *46*, 3–23. [[CrossRef](#)]
- Cox, D.T.C.; Shanahan, D.F.; Hudson, H.L.; Plummer, K.E.; Siriwardena, G.M.; Fuller, R.A.; Anderson, K.; Hancock, S.; Gaston, K.J. Doses of Neighborhood Nature: The Benefits for Mental Health of Living with Nature. *BioScience* **2017**, *67*, 147–155. [[CrossRef](#)]
- Davis, J. Ecopsychology, Transpersonal Psychology, and Nonduality. *Int. J. Transpers. Stud.* **2011**, *30*, 137–147.
- Dillman-Hasso, N. The nature buffer: The missing link in climate change and mental health research. *J. Environ. Stud. Sci.* **2021**, *11*, 696–701. [[CrossRef](#)]
- Ojala, M.; Cunsolo, A.; Ogunbode, C.A.; Middleton, J. Anxiety, Worry, and Grief in a Time of Environmental and Climate Crisis: A Narrative Review. *Annu. Rev. Environ. Resour.* **2021**, *46*, 35–58. [[CrossRef](#)]

27. Landmann, H. Emotions in the context of environmental protection: Theoretical considerations concerning emotion types, eliciting processes, and affect generalization. *PsyArXiv* **2020**. [[CrossRef](#)]
28. Kals, E.; Maes, J. Sustainable development and emotions. In *Psychology of Sustainable Development*; Springer: Berlin/Heidelberg, Germany, 2002; pp. 97–122. [[CrossRef](#)]
29. Albrecht, G. 'Solastalgia'. A New Concept in Health and Identity. *Philos. Act. Nat.* **2005**, *3*, 41–55.
30. Warsini, S.; Mills, J.; Usher, K. Solastalgia: Living With the Environmental Damage Caused By Natural Disasters. *Prehospital Disaster Med.* **2014**, *29*, 87–90. [[CrossRef](#)]
31. Clayton, S.; Czellar, S.; Nartova-Bochaver, S.; Skibins, J.; Salazar, G.; Tseng, Y.-C.; Irkhin, B.; Monge-Rodriguez, F. Cross-Cultural Validation of A Revised Environmental Identity Scale. *Sustainability* **2021**, *13*, 2387. [[CrossRef](#)]
32. Willox, A.C. Climate Change as the Work of Mourning. *Ethic-Environ.* **2012**, *17*, 137–164. [[CrossRef](#)]
33. Stanley, S.K.; Hogg, T.L.; Leviston, Z.; Walker, I. From anger to action: Differential impacts of eco-anxiety, eco-depression, and eco-anger on climate action and wellbeing. *J. Clim. Chang. Health* **2021**, *1*, 100003. [[CrossRef](#)]
34. Tallis, F.; Davey, G.; Capuzzo, N. The phenomenology of non-pathological worry: A preliminary investigation. In *Worrying. Perspectives on Theory, Assessment and Treatment*; Davey, G., Tallis, F., Eds.; John Wiley & Sons: Hoboken, NJ, USA, 1994; pp. 61–90.
35. Kaplan, E.A. Is climate-related pre-traumatic stress syndrome a real condition? *Am. Imago* **2020**, *77*, 81–104. [[CrossRef](#)]
36. Kaplan, S. The restorative benefits of nature: Toward an integrative framework. *J. Environ. Psychol.* **1995**, *15*, 169–182. [[CrossRef](#)]