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3 **Discourses of Wellbeing and Environmental Impact of Trail Runners in Protected Areas in New**
4 **Zealand and the United Kingdom**

5

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8

9

10 **Abstract**

11 The idea that protected areas (PAs) have both environmental-protection and human-welfare aims
12 seems a relatively straightforward though strained proposition, largely resolved by prioritising
13 conservation activities and restricting human activities. However, it is not a straightforward
14 relationship. PAs are understood as contributing to human wellbeing in the context of the wider
15 promotion of greenspace benefits for human health. Hence, the role of environmental protection
16 may touch on the limits of our positive understandings of the wellbeing benefits of nature. It is for
17 this reason that this study seeks to understand discourses and practices of wellbeing that shape the
18 experiences of the users of PAs, to identify implications for both environmental and wellbeing
19 policies. Focusing on trail runners who actively seek out the experience of 'being in nature' for
20 running, the research examines how participants mobilise and integrate wellbeing and
21 environmental discourses. The study reports on data collected in two separate trail-running events
22 (UK/NZ). Multiple data collection methods were used, including an online survey, 'go-along'
23 interviews, and 'vox-pop' interviews, to generate a rich dataset. The PA experience allows for an
24 intimate and personal sense of wellbeing, yet is shaped by discourses that reflect an individualised,
25 commodified and instrumental approach to nature, in which nature is largely used as a resource for
26 wellbeing. Environmental conservation concerns are considered important but remain largely
27 secondary to these wellbeing discourses. Runners remain concerned with their right to use PAs for
28 wellbeing. The comparative element of this research reveals that the balance between rights versus
29 responsibilities is closely linked to local environmental discourses and practices. While PAs may be
30 desirable spaces for exercise, wellbeing is only ambiguously or simplistically related to discourses of
31 environmental impact. An exploration of wellbeing means also touching on issues about the
32 usefulness of this concept for ensuring environmental protection goals are met in PAs.

33

34 **Keywords:** *wellbeing, environmental impact, protected areas, running, go-along interviews*

35 Introduction

36 At first glance, the idea that protected areas (PAs) have both environmental conservation and
37 human welfare aims seems a relatively straightforward proposition. However, it is not a
38 straightforward relationship. From the perspective of public health and recreational literatures,
39 which describe the health benefits of physical activity in nature (de Vries et al., 2003; Hartig et al.,
40 2014; Lachowycz and Jones, 2013; MacBride-Stewart et al., 2016; Triguero-Mas et al., 2015), the
41 potential contribution of protected areas to mental and physical health is overwhelmingly positive.
42 Places that are perceived to be biodiverse and to have been protected from significant human
43 impact are considered to be particularly beneficial (Fischer and Kowarick, 2018). PAs are regarded as
44 providing the 'ideal' environmental, aesthetic and recreational conditions for human health
45 (Edwards and Smith, 2011; Fry et al., 2017; Sointu, 2005). This is because they include the main
46 elements of what Kaplan and Kaplan (1989) propose constitutes a restorative environment: curiosity
47 or interest, sense of being away, being part of a larger whole, and positive opportunities provided by
48 the setting (Hartig et al., 2014; Maller et al., 2006). Yet little critical attention is given to *how* wider
49 discourses related to wellbeing shape the experiences of the users of PAs. The study deploys a
50 socioecological approach, in which the dynamic interrelations between social discourses and
51 practices of wellbeing, and discourses of the natural world in general, are relevant for understanding
52 how PAs remain desirable spaces for exercise (Richard et al., 2011)

53
54 Recreationalists like high biodiversity settings; some groups actively seek them out because of the
55 'ideal' conditions that they offer for exercise. High biodiversity settings – also known as protected
56 areas, areas of outstanding natural beauty (AONBs) and conservation areas – have conservation as
57 well as wellbeing goals (Fischer and Kowarick, 2018; IUCN, 2015). Wellbeing aims can impact on
58 environmental conservation goals in PAs, although tensions between the two are rarely considered
59 in environmental and wellbeing policies (Bamberg et al., 2018). In the recreation context, the
60 impacts of wellbeing activities on biodiversity or animal habitats are not often described in detail
61 (Marzano and Dandy, 2012). There has been an increase in the number of designated areas
62 (concurrent with the overall global decrease in greenspace), and the demand for them is renewing
63 long-standing tensions between conservation and human wellbeing goals (Balmford et al., 2009;
64 Voigt and Pforr, 2014). The UK is a good example. Here the legislative aims and purposes of national
65 parks are stated as: the conservation and enhancement of natural beauty, wildlife and cultural
66 heritage, *and* the promotion of opportunities for the understanding and enjoyment of their special
67 qualities by the public (National Parks UK, 2018). The second goal is understood as a public duty to
68 foster human wellbeing. These aims are underpinned by the Sandford principle, which states that

69 where there is conflict of interest, more weight should be given to conservation (Snowdonia Society,
70 2017). However, Scottish legislation governing the creation of a new national park area now has four
71 equally balanced aims, only one of which relates to conservation of the natural environment
72 (National Parks (Scotland) Act 2000). In line with this, concerns have been raised about the potential
73 for economic activity (i.e. tourism) to be further prioritised over conservation aims in the UK and
74 globally (Bell and Stockdale, 2015).

75

76 The promotion of PAs for people to enjoy their special qualities is consistent with the idea of the
77 promotion of greenspace as a resource for wellbeing. Here the emphasis has been on the role of
78 nature as a form of cultural service or capital from which wellbeing benefits can be derived – with
79 the potential for assessing the scope of psychological, social and cultural benefits that users
80 experience relative to other places. Much of the literature on this point emphasises that the size,
81 and proximity of greenspace is an important contributor to health: large areas some distance from
82 where people reside are found to provide the most positive wellbeing benefits (Hartig et al., 2014;
83 Kytta et al., 2013; Maller et al., 2006). While proximity is important for accessing greenspace, there
84 is perceived to be an additional benefit associated with a sense of being away or remoteness (Kaplan
85 and Kaplan, 1989). Notably, persistent inequalities in access, use, perception and impact across
86 social groups (gender, ethnicity, age) and locale (residents, visitors, landholders) are reported within
87 this literature (MacBride-Stewart et al., 2016; Schwanen and Atkinson, 2015). Concerns have also
88 been raised in the recreational disturbance literature about the potentially serious impacts on
89 environmental damage, from trampling to human-borne diseases (ie phytophthora) (Marzano and
90 Dandy, 2012).

91

92 This argument is commonly referred to as the 'parks vs. people' debate. On the one hand there are
93 those who argue that nature should be protected due to its intrinsic value. On the other there are
94 those who argue that nature should be saved to provide resources and to benefit human health and
95 wellbeing (Miller, 2005). Within the context of this debate, the role of environmental protection in
96 PAs may touch on the limits of our understandings of the positive benefits of nature for our
97 wellbeing. As we have seen, wellbeing discourses focus mainly on what humans gain from nature
98 (i.e. wellbeing). These discourses are largely uninvolved with ecological concerns over the potentially
99 negative impact of human activities. As Gobster et al. (2007) remind us, the human health goals of
100 PAs are not necessarily in alignment with their ecological goals.

101

102 An emerging body of work presents wellbeing as formed in the reciprocal and dynamic relationship
103 between people and the natural world. Bamberg et al. (2018), for example, proposes that benefits of
104 green exercise might vary across environments and between groups of exercisers. Brown (2017) is
105 more specific about how physically rough or uneven ground can be positive, therapeutic even, for
106 running. Hitchings and Latham (2016) explore how runners' attachment to indoor or outdoor
107 environments reflects the importance of context (i.e. busy lives, routine), such that indoor running is
108 not as perverse as it seems relative to the recognised benefits of outdoor running. Menatti and
109 Casado da Rocha's (2016) focus turns to the dynamic and changing nature of a landscape from which
110 users' intrinsic sense of wellbeing is derived. Similarly, Nettleton (2013, p. 203) describes fell running
111 as a corporeal practice (related to but culturally distinguishable from trail running) in which "the
112 landscape permeates the senses", generating a viscerally pleasurable experience. Similarly, in trail
113 running, the relationship between the natural world, wellbeing and the runner is described
114 elsewhere as a "powerful healthy circuit between the embodied human with their physical fleshy
115 self, their mind and emotions, and the particular quality of the earth beneath them and the
116 landscape surrounding them" (MacBride-Stewart, 2019, p. 149).

117

118 These embodied, sensory analyses of what it means to run replace more functional accounts about
119 why people run – that is, the need to develop a fit body or to record progress (Little, 2017). These
120 analyses also imply that embodied connections to nature offer some insight into why exercisers can
121 become attached to running in PAs. These attachments may not be explicit – for instance, Hodgson
122 and Hitchings (2018) note that urban runners seldom think about the idea of clean air, while trail
123 runners articulate the lack of pollution as key to their experience of running (MacBride-Stewart,
124 2019). Furthermore, these studies infer that paying attention to the importance of the socio-
125 environmental context – including wellbeing impacts on or from the environment – might lead to a
126 better understanding of the experience of and reasons for accessing greenspace in relation to
127 wellbeing (Lachowycz and Jones, 2012).

128

129 In order to understand the discourses and practices that shape users' experiences of PAs as desirable
130 places to exercise or recreate, this research focuses specifically on trail runners¹. Trail running is
131 promoted in running communities via idealised images of 'nature' and 'untouched landscapes'
132 (Qviström, 2016). In this study, the focus is on the unique views on PAs, wellbeing and
133 environmental protection as expressed by recreational users in two different country contexts (New
134 Zealand, United Kingdom). The synergies and tensions between the discourses that emerge will be

¹ For a fuller account of trail running, the justifications for the use of trail runners in this study, and for an explanation of the embodied experiences trail runners in PAs, please refer to published work by this author.

135 explored using a socioecological approach, which encourages a focus on the construction of
136 relationships between the social world and the natural environment (Humberstone, 1998). Specific
137 attention is given to how the affordances the environment offers are shaped by discourses about the
138 environment and wellbeing, and to the tensions that emerge from the different constructions of PAs
139 in each country.

140

141 **Parks versus People**

142 In order to understand their potential benefits to human health and wellbeing, it is important to
143 recognise why PAs warrant specific attention. For the purposes of this study, PAs include national
144 parks, regional parks, areas of outstanding national beauty (AONB), and high nature value
145 greenspaces (Juffe-Bignoli et al., 2014). PAs are categorized via an international system (IUCN, 2019)
146 that groups physical landscapes across a scale from involving least to greatest human activity. Other
147 features include: conservation, size, public oversight or governance, potential for biodiversity and
148 wilderness, proximity and activities of users (including residents and farming) (Barker and Stockdale,
149 2008; Townsend et al., 2015). Over time, the concept of PAs has expanded from a desire to conserve
150 wilderness (US) and heritage (UK) for the public good, towards sustaining the economic, social and
151 ecological relationships between people and nature (Bell and Stockdale, 2015). This diversity in
152 approaching the landscape has tended to be downplayed in the wellbeing literature.

153

154 When defined under an ecosystem services approach, PAs are recognised as indirectly offering
155 physical, psychological and cultural benefits for health, as well as directly providing essential
156 resources, such as water and land. Notably, ecosystem services approaches help shape global health
157 strategies advocating the protection of the natural environment and explicitly linking human health
158 to nature (Romangosa et al., 2015), including the Ottawa Charter for Health Promotion (World
159 Health Organization, 1986), the United Nations Sustainable Development Goals (UNSDGs, 2015), the
160 'Healthy Parks, Healthy People' approach (Townsend et al, 2015), and the 'One Planet, One Health'
161 approach (Horton and Lo, 2015). In addition, wellbeing has also been incorporated into the policy
162 and evidence frameworks of international bodies for PAs such as the EUROPARC Federation
163 (EUROPARC, 2019) and the International Union for Conservation of Nature (IUCN, 2015). The
164 amenity value of PAs for wellbeing has been recognised as part of the multifunctional landscape. As
165 an example, sustainable development has been added to the goals of recreation and conservation
166 within the United Nations Sustainable Development Goals (Bell and Stockdale, 2015).

167

168 The ecosystem services approach presupposes positive ('win-win') relationships between
169 conservation and wellbeing purposes (Romagosa et al., 2015; Summers et al., 2012). Yet the
170 pressure on PAs to deliver national and local, economic and social goals is argued to add to
171 heightening tensions between conservation and human uses (Bell and Stockdale, 2015). In
172 particular, the commodification of landscapes becomes more and more apparent in designations
173 incorporating ideas of the landscape as a resource or value for human use. It raises the question,
174 whether the designation of protected areas as 'healthy spaces' risks excessive promotion of
175 practices representative of "loving our parks to death" (Hamin, 2002).

176 The recreational disturbance literature provides some indication of how human use is perceived. The
177 literature generally focuses on the impact of recreational activities on wildlife (i.e. trampling), user
178 perspectives, and the management of impacts, which mostly regard humans as having a negative
179 impact on the environment (Marzano and Dandy, 2012). Marzano and Dandy (2012) note that
180 studies that consider how users perceive their own impact and the impact of others suggest that
181 people who hold pro-environmental values experience more positive benefits from nature-based
182 activities but feel more negatively affected by other users (Rossi et al., 2015). Pro-environmental
183 values also affect the kind of activity participated in – for instance, walkers hold more positive values
184 compared to those on wheels. Research suggests that while local users are particularly sensitive to
185 impacts related to weather (path erosion) and travel (congestion, noise), recreational visitors believe
186 they themselves have very little impact, and often blame other users for any damage (Edwards and
187 Smith, 2011; Marzano and Dandy, 2012). Therefore, work on the values people hold about PAs
188 suggests these are useful for understanding pro-environmental behaviours and conflicts between
189 users (Orienstein et al., 2017).

190

191 While conflicts between tourism/recreation and conservation are long standing, such as over left-
192 open gates and littering, there is some evidence that the use of and access to greenspaces is being
193 given priority over conservation in PAs (Bell and Stockdale, 2015). It is complicated in part by wider
194 health-planning, governance and economic pressures that separate health demands from
195 conservation needs. Collection of adequate evidence on access, use and benefits of PAs has been at
196 the forefront of understanding their value for human health and recreation (Marsden et al., 2015;
197 Townsend et al., 2015). As pointed out in many reviews on greenspace and health by both
198 academics (Hartig et al., 2014; MacBride-Stewart et al., 2016) and international bodies (Diaz et al,
199 2015; IUCN, 2015; MEA, 2005), the claim that natural environments have positive benefits on mental
200 and physical health, improve social, emotional and spiritual connections, and provide opportunities

201 for active play is supported by strong evidence. Yet there remains a gap between the way people
202 reconcile their own wellbeing objectives with these wider environmental protection goals.

203

204 **The Socio-politics of Wellbeing**

205 What then are the dominant discourses of wellbeing that relate to both the protected environment
206 and environmental protection? How does an environment come to be constructed as one that
207 benefits wellbeing? With multiple definitions of wellbeing (and greenspace) in existence (Bamberg et
208 al., 2018), PAs have become important in the creation of shared practices, experiences and
209 meanings of wellbeing, and vice versa. Foucauldian work on the 'body politic' is often invoked to
210 explain how individual and social meanings are governed and normalised, in order that dominant
211 discourses about the benefits of nature to wellbeing can be identified alongside the values and
212 practices of users within the PAs that constitute them.

213 Discourses of wellbeing are traditionally anchored in the existing relationship between the
214 environment as a 'resource' and the human right to health (Escobar, 1998; Ferraro and Barletti,
215 2016; McLeod and Wright, 2016). As social theorists have observed, these understandings of
216 wellbeing have been eclipsed by an emphasis on the agency and desire of individuals to be
217 responsible for their own health (Little, 2015; Sonitu, 2005). Wellbeing, to some extent, relies on
218 individual proactivity, self-management, effectiveness (Atkinson and Joyce, 2011; Rose, 2009).
219 Whereas individuals might once have been encouraged to use the environment for its intrinsic
220 contribution to 'healthy' living, wellbeing has come to reflect and reproduce the dominant social
221 ideals of self-development and self-reflection (Sonitu, 2005). This processual view incorporates
222 strong messages about moral obligation, with wellbeing being actively worked towards rather than
223 reflecting a default state (Clarke and Shim, 2011; La Placa and Knight, 2014). Still, the focus here has
224 been on understanding how society, rather than the environment, benefits.

225 Within this context, a socioecological approach has emerged to study the multiple factors (including
226 environmental ones) that enhance or reduce the capacity of individuals to manage their own health
227 (Richard et al., 2011). However, while socioecological models are interested in understanding the
228 social context for wellbeing, they are mostly framed in terms of how the environment influences
229 health, and thus how to improve health promotion. Less likely to be considered is the reciprocity
230 between the social and environmental aspects, including feedback loops, learning processes or
231 agency in response to the environment; and little consideration is given to how wellbeing activities
232 per se affect the environment (Ostrom, 2009).

233 Within a more critical approach, attention is given to the affordances that nature provides to
234 individual wellbeing (Menatti and Casado da Rocha, 2016) as well as to the relationship with nature
235 on which wellbeing depends. Here, wellbeing is part of a dynamic set of relationships with nature,
236 and the need for environmental protection is considered. Whereas environmental protection is seen
237 generally to contribute positively to health, wellbeing is perceived to impact negatively on
238 environmental protection. A critical socioecological approach, on the other hand, may offer the best
239 alternative for understanding the relational and reciprocal nature of the discourses and effects that
240 are of interest to this study.

241

242 **METHODS**

243 Trail running is now a mainstream 'sport' in PAs, and part of its appeal lies in the experience of
244 engaging physically in an aesthetic and challenging environment (Nettleton, 2013, p. 196). This study
245 reports on entrants in two trail-running events held in PAs: one in an AONB/World Heritage Site in
246 England (UK), and another in a Regional Park area of native 'bush' on the North Island of New
247 Zealand. Both are accessible to urban centres within 30 min and one hour respectively. The UK event
248 was a locally organised women-only event with marathon and relay distances (329 finishers), while
249 the NZ event was one race in a trail-running series, for adults and children², with a maximum
250 distance of 21km (672 finishers).

251

252 Both events promoted the PAs in their advertising. The NZ event was held exclusively in the PA, an
253 area of 97 square miles (250 square km) with elevations up to 2255 ft or 666 m. The NZ location is
254 relatively remote, is not promoted for tourism and has significantly fewer visitors per year than the
255 UK area. The organisers described the event as containing "top notch bush trails... featuring climbs,
256 descents and traverses guaranteed to deliver a challenging morning of adventure". The UK event
257 took in 42 km or 26.2 miles of an AONB, a quarter of which was within a natural World Heritage Site
258 which is promoted as a regional tourist destination (an area that stretches 96 miles or 154 km with
259 191 m or 627 ft elevation). This is a popular site for visitors and described in the event promotion as
260 'scenic' and 'stunning'.

261

262 Event selection was opportunistic, with the researcher contacting the organisers of the women-only
263 UK event because it was promoted as a local celebration of women's inclusion in long-distance
264 running. The NZ event was used as a 'comparator' to the UK event since both were held in a

² Children under 18 were not interviewed as part of this study

265 protected area. The events differed in terms of: gender balance (single sex versus equal mix);
266 location (UK/NZ etc.); and amount of time spent running off-road – for instance, UK participants
267 spent more time off-road. However, events were similar in terms of demographics, based on: equal
268 age distributions; similar patterns of average weekly running distance; and balancing factors – for
269 example, the greater proportion of UK participants who had been running over 10 years matched
270 the greater proportion of NZ participants who had run more than 10 marathons³.

271 *[insert photos]*

272 The unique case studies represent a diversity of experiences and discourses within and across each
273 location. The selection of cases was underpinned by the idea that emplaced, context-dependent,
274 practical and accessible data can reveal a set of rationalities and discursive norms about why people
275 use natural environments or run in PAs (Flyvbjerg, 2006). The NZ case is a franchised event belonging
276 to a global brand, marketed with the byline ‘gives endurance athletes around the world a chance to
277 race in some of the most diverse, spectacular, and challenging natural environments on the planet’.
278 In contrast, the UK event was a locally run event using local volunteers and contributing to the local
279 community but promoted to a global audience⁴. This context contributes to the wider socio-
280 environmental discourses on why people run as discussed below.

281 The main data used in this article come from 29 mobile (‘go-along’) and 103 ‘vox-pop’ (short, media-
282 styled) interviews collected on the day; totalling 132 (82 UK, 50 NZ) group and individual interviews.
283 Interviews were conducted by the author and her co-runner, with an additional two interviewers
284 employed to conduct interviews for the UK event. In the ‘go-along’, interviews were conducted with
285 people running at conversational pace as the co-runner/researcher ran the race route carrying a
286 handheld recording device (Carpiano, 2009; Garcia et al., 2012). Four simple questions were used
287 (see below). This method has been used effectively in research on walking (Evans and Jones, 2011).
288 It may seem perverse to interview while running, although the method has been attempted by
289 others (see Bamberg et al., 2018). If we understand, as Nettleton (2013, p. 206) does, that
290 experiences of trail running that are “unexplainable to others” are “concretised” in the minute-to-
291 minute practice of running, then ‘go-along’ can assist in capturing place-sensitive or contextual
292 accounts used to construct wellbeing discourses and add local detail. Furthermore, as Nettleton
293 (2013) argues, it is the unique “sharedness” of trail running (or “existential capital”) that makes it
294 almost imperative to ‘run with’ interviewees rather than to just talk about the experience. This is

³ The study was approved by the Cardiff School of Social Sciences Research Ethics Committee.

⁴ The UK event was promoted as a celebration of acts that “paved the way for women to take part in endurance events”. Its framing around social justice concerns was further evident in the choice of its global partner charities: ‘261Fearless’ and ‘Free to Run’

295 consistent with phenomenological/embodied methodologies where minute-to-minute experiences
296 are collected to enrich the data (see MacBride-Stewart, in press).

297 What has also been left out of research on running, thus far, is how the experience of an event
298 changes across the field of runners. In this study interviews were with the 'middle' of the field,
299 where a diverse mix of runners is most likely to accumulate. As evidence of the events' 'existential
300 capital', the interviewer reported that "conversations flowed between complete strangers, often as
301 miles of ground were covered, with considerable laughter and some even stopping to take
302 photographs" (personal communication, 15 June 2019). Interviews were conducted as the co-
303 runner/researcher caught up with or slowed down to meet other runners, and most were collected
304 in the first half of the marathon, in places where the path could accommodate two or more people.
305 Some runners did refuse to be interviewed, but politely did so usually running ahead or declining
306 because of the effort to run and talk. This occurred more often in the shorter NZ event, and in the
307 harder second part of the marathon.

308 The 'go-along' method captured the experience of conversationally paced and not-yet exhausted
309 runners. To broaden the field, the study added 'vox-pop' interviews to capitalise on opportunities to
310 talk to runners and friends/families gathered before and after the event (Dowling et al., 2016). 'Vox-
311 pop' interviews are particularly effective for "one-time, short-run, events with fast exit rates"
312 (Seaton, 1997, p. 25). Both interview methods used the same four questions, asking about the
313 enjoyment, health benefits, value, and sustainability of trail running. Interviews lasted between 10
314 and 30 minutes, with most lasting more than 10. 'Go-along' interviews were shorter overall, because
315 they were conducted 'on the go' or in smaller groups. While the 'go-along' interviews were
316 opportunistic, the 'vox-pop' participants were mostly randomly selected with attention to diversity
317 (i.e. age, ability, etc.). The interviewers worked as a team and spent the entire day moving around
318 the event field, starting from the time of registration until the last runners came in. If a group or
319 person had already been interviewed, they thanked them and moved on. Their shared status as an
320 interested runner/interviewer was possibly reflected in only one request for a 'vox-pop' interview
321 being refused. Refusal was higher for 'go-along' interviews as explained. Interviews were digitally
322 recorded and transcribed.

323 The interview data were supplemented by an online survey that collected 260 responses (140 UK,
324 120 NZ). The Qualtric-hosted survey had 28 (UK) and 34 (NZ) qualitative and quantitative questions
325 on the benefits, barriers and costs (including environmental) of trail running for wellbeing. The NZ
326 survey included additional questions about biosecurity measures in place during the event. The
327 survey link was given to competitors in the pre-race and post-race information.

328 A post-structuralist discourse analysis approach was used⁵ (Fairclough, 2013). The analytical process
329 of post-structuralist discourse analysis included looking for talk about well-being, especially in
330 reference to being in natural environments. Talk was examined in order to identify patterns of
331 relationships or themes between the experiences, and the personal and social norms and beliefs
332 that described these experiences as meaningful. The analysis needed a critical, theoretical lens in
333 order to address the problems outlined in the literature review. Post-structuralist discourse analysis
334 provided that lens and was used to interpret the individual process of meaning-making about well-
335 being within the context of socio-political influences and country. The final themes were verified by
336 returning to the literature on tensions and discourses of protected landscapes (Bell and Stockdale,
337 2015; Roper, 2012) and analysis of neoliberal constructs of health (Clarke and Shim, 2011; Rose,
338 2009).

339

340 **RESULTS**

341 Using the perspective of wellbeing as a socioecological process, this section provides a detailed
342 examination of the experiences and discourses of wellbeing and the environment in PAs. The
343 analysis draws out the ways in which wellbeing is portrayed as a personal and individual good and is
344 shaped by a wider relationship to the natural environment. The second part of the analysis explores
345 how the concept of ‘healthy spaces’ continues to have salience for off-road runners in the context of
346 environmental obligations and conflicts.

347 **Wellbeing as Personal Achievement**

348 Taking their wellbeing as a starting point, the participants confirmed that they actively used the
349 natural environment in order to promote their mental and physical health, and to meet personal
350 goals and achievements (see Table 1). This section explores in more detail how the participants used
351 protected landscapes and trail running as a means to self-manage existing health problems, or to
352 protect against illness. The process is understood by Foucauldian theorists as producing oneself as
353 an ‘ideal healthy subject’, which was achieved by actively spending time outdoors in nature (Riggs,
354 2005; Rose, 2009).

355 [Insert Table 1 here]

356 Table 1: Reasons for exercising outdoors – top 4 ranked responses.

1 st Ranked Reason	2 nd Ranked Reason	3 rd Ranked Reason
-------------------------------	-------------------------------	-------------------------------

⁵ The paper builds on a previously published paper that highlights the corporeal ‘atmospheres’ of running in PAs as experienced through the ‘special qualities’ of PAs and the active use of PAs for well-being.

Physical health (37%)	Being outdoors/in nature (20%)	Physical health (22%)
Being outdoors/in nature (24%)	Challenge and/or meeting personal goals (20%)	Mental health (18%)
Mental health (10%)	Physical health (19%)	Challenge and/or meeting personal goals (17%)
Challenge and/or meeting personal goals (10 %)	Mental health (18%)	Mental health (16%)

357

358 Participants expressed a sense of wellbeing as a combination of aspects: the aesthetics of PAs,
359 meeting goals and the terrain. Trail running offered the ability to *"be out in the fresh air all*
360 *weathers"* (UK1P15) as well as *"satisfaction"*, *"a place to... lose yourself"*, *"challenge"*,
361 *"achievement"*, and *"it's therapeutic"* (NZ2P09). Other participants reported specific physical
362 benefits, such as good cardiovascular health and protection of knees and joints, as a result of
363 exercising in demanding terrain. However, despite common accounts about the physical and mental
364 health benefits of trail running, what was meaningful to an individual's wellbeing was adapted to
365 their personal understanding of what being-in-nature could offer them. For one person, even though
366 the benefit of running was shaped by rehabilitative need, it became more about experiencing *"a*
367 *high"*. For another, trail running helped with weight management and avoidance of antidepressants:
368 *"I'm two stone lighter and not on antidepressants any more."* (UK1P01) (see also Tylka et al., 2014)

369 Trail running was constructed as being qualitatively better and less competitive than road running.
370 Running in nature and being away from urban lives provided 'surplus' benefits, including: the ability
371 to enjoy nature, to demonstrate resilience to the environment (including bad weather), and to be
372 able to take advantage of isolation/solitary endeavours. This is consistent with the solitary gains
373 described by Nettleton (2013), which give rise to an *"intense sociality"* or shared 'existential capital'.
374 Thus, trail running is valued for how it shapes personal capacity via a shared sense of wellbeing and
375 purpose, rather than being valued for contributing to wellbeing per se.

376 *I started running as rehabilitation for my concussion, took me two and a half years to*
377 *recover, just at the end of my rehab now. Running is at the front of my mental cognitive*
378 *recovery...You catch the bug. Afterwards it's a high. Yeah. Mental health side of it is more*
379 *important for me than the physical side.* (NZ1P08)

380 The role of nature here is not passive. Instead, the emphasis is on how nature enables people to play
381 an active role in managing their health. For example, being active in nature was helpful in managing
382 stressful lives or jobs (UK3P2/NZ1P18), expressed as *"feeling more in control... more ready to face*
383 *things."* (UK3P23) Self-management through trail running involved having *"time away from the*
384 *children"* (UK1P12), *"time out from life"* (NZ2P07), *"good stress relief"*. (NZ1P18) It was said to build

385 flexibility, responsiveness and the capacity to meet challenges. It reveals too an alignment between
386 the skills needed to manage the challenges of the environment and the wellbeing discourses of self-
387 management (MacBride-Stewart, 2019).

388 For Foucault, the individual who manages their own health is tied to certain expectations and
389 demands about wellbeing. Similarly, the runners construct themselves as responsible, 'good' healthy
390 individuals, reflected in accounts about desiring to be – and becoming – a better, fitter, stronger
391 happier person, who can "*cope with anything*" (UK1P23):

392 *I feel so much stronger. My body feels and looks so much better, uh, yeah everything just feels*
393 *better. Life just feels better.* (UK1P11)

394 *Intense fitness... I just find it's quite like a combination of happiness combined with high*
395 *emotion.* (NZ1P15)

396 Most wellbeing research has focused on the socio-political aspects of accessibility and the proximity
397 of greenspaces. PAs generate a sense of escape from the pressures of everyday life and are
398 recognisably 'enjoyable' places to be. By focusing on why access is important and what trail running
399 offers, wellbeing is constructed as a moral discourse involving self-management and self-discipline
400 to improve one's self. Here trail running, both materially ("*stronger*", "*fitter*") and symbolically ("*top*
401 *of my game*", "*to be better and better*") became the means to do 'wellbeing' but also 'be well' or
402 'better than well'. This moral discourse to improve oneself and to become a better person was
403 expressed in terms of its benefits at work and at home: "*I think it has a wider benefit in the family... I*
404 *feel I'm being a good role model... and it makes me better at home*" (UK3P23); "*I think trailrunning is*
405 *also excellent for building resilience in kids as it has challenges*" (NZ survey data). Furthermore, trail
406 running here focuses on the moral agency of the individual to "*achieve doing something most people*
407 *think is impossible*" (UK2P10), and to take "*time for myself where it's only you on the trails and*
408 *you're just out enjoying being in the bush.*" (NZ2P02) There was also a tendency in this discourse to
409 view the negative aspects of nature (mud, wasps, stinging nettles) in positive ways, as contributing
410 to self-optimization (Hirons et al., 2016).

411 *1: We were running through the woods, we could hear the birds, we were saying running in*
412 *the woodland is so peaceful and good for your mental health.*

413 *2: We always call it tonic for the soul. Always. Feel like a different person when you get back*
414 *from running in the woods.*

415 *3: That factor, you're out there your body with nature... running on road, it's completely*
416 *different. Every step is different so you have to work on that. Fantastic!*

- 417 1: *Free isn't it, feeling free.*
- 418 2: *The greenery as well, something about the canopy of the trees, the surface, fertility of the*
- 419 *greenery is life affirming, I guess.*
- 420 1: *Its fresher air, isn't it, as well.*
- 421 2: *Calmer. (UK3P26)*

422

423 Many socioecological approaches assume that the relationship between the environment and
424 people is made up of a complex of linked elements – including biodiversity, aesthetics, culture,
425 geography, etc. (McLaren and Hawe, 2015). Yet in the interviews, PAs were represented as relatively
426 simple binaries. PAs were synonymous with beauty, clean air, challenge and remoteness; set against
427 other spaces that were not beautiful, polluted, managed/landscaped and urban. It is this simplified
428 natural environment that is linked to the benefits of wellbeing for society, such as improved health,
429 social networks, and the opportunity to de-stress. In short, nature is constructed as a powerful
430 resource for wellbeing. Representations of nature used to construct this sense of wellbeing are
431 overwhelmingly positive. They offer simplistic representations of the relationship between
432 individuals and the natural world, in order that nature appears as a picturesque resource for
433 running. The implication is that nature itself does not require in-depth explanation, and that nature
434 and its resourcefulness for wellbeing is relatively uncomplicated.

435

436 **Rights versus Responsibilities**

437 While 'nature' is important to users of PAs, ideas about environmental impact and ecological
438 sustainability are often overlooked in discussions about wellbeing. This is supported by Marzano and
439 Dandy (2012, p. iv) who note that "generally, users have little awareness of their impacts on wildlife
440 and [when aware] hold others responsible for negative impacts." Consistent with a socioecological
441 approach, a deeper questioning of these encounters with the environment might produce
442 alternative accounts of wellbeing. For example, user perspectives of impact rarely consider how
443 overuse or degradation caused by human factors lead to further reductions in wellbeing. For this
444 reason, sustainability and impact were asked about later in the interviews and survey for additional
445 insight into the question of wellbeing. The article now turns to an examination of individualisation in
446 the context of actions and discourses associated with recreational disturbance and environmental
447 protection.

448 Starting from the question whether trail running has an impact on the environment, the quantitative
449 data showed that in the UK survey the majority of participants believed that trail running did not

450 have an impact (46%) or were unsure (23%), compared to 31% who believed it had an impact. In the
451 NZ data, the situation was reversed with most (65%) believing that trailrunning had an impact on the
452 environment, compared to a minority who did not believe it had an impact (20%), or were unsure
453 (10%). From the descriptive data we can argue that the runners had some sense of their impacts on
454 the environment, although this was less than we might expect in the UK context relative to NZ.

455

456 It was possible also to compare the qualitative accounts to assess how the discourses were shaped
457 by each country context. While the wellbeing discourses were relatively consistent between the two
458 groups, the discourses related to the environment were closely embedded in the concerns and
459 practices of each locale. In the UK there appeared to be less conflict between discourses of
460 wellbeing and the environment. However, in the NZ context the participants placed greater
461 emphasis on the need to balance personal health goals against the demands and requirements of
462 the environment.

463

464 One way of inviting people to reflect on the environment was to ask how they reduced their
465 environmental impact when running. Participants tended to understand impacts in terms of
466 protecting the environment from litter and erosion. In the survey data, both groups believed that
467 taking litter away with them was the most significant means of reducing environmental impact (27%
468 UK; 20% NZ). Litter was generally described in terms of "*not dropping gel packets or water bottles*"
469 (UK2P11), although there was a sense of social responsibility advocated in "*picking up other people's*
470 *litter*" (NZ2P07) and maintaining community goodwill (UK3P27). As such, protecting the environment
471 was about maintaining its aesthetic beauty, underpinned by a responsibility to remove matter that
472 was 'out of place'.

473

474 Biosecurity controls also featured highly in the NZ context, with 18% (NZ) compared to 4% (UK)
475 responding that there was a need to 'clean footwear/walking pole before going to a new
476 environment'. Biosecurity measures deal with the more intangible, less obvious aspects of
477 environmental protection that are usually put in place to prevent the human transmission of
478 pathogens that can kill plants or animals. The emphasis on biosecurity in the NZ context was not
479 unexpected because there had been details about a public campaign to protect native Kauri⁶ trees
480 included in information at the event, in pre-event emails, and at a control station in the park. Other
481 proposed biosecurity solutions – 'keeping to paths/tracks' (22% UK; 18% NZ) and not toileting near
482 water sources (12% NZ; 14% UK) – were identified by a small but comparable number in each place,

⁶ 'Kauri dieback' or 'Kauri dieback disease' – which the pathogen is commonly known as – was the most commonly reported environmental impact identified in the open questions of the NZ survey.

483 along with suggestions such as keeping events “low key” (UK3P19), “repairing or contributing to trail
484 maintenance” (NZ2P18), and ‘increasing the number of paths in use in an event’⁷. In contrast to the
485 discourse about littering, the emphasis on biocontrols was related instead to maintenance of the
486 biodiversity and ecology of the area, underpinned by a responsibility to protect the health of nature
487 itself. Few participants talked about this aspect explicitly, most stated the biocontrol was necessary
488 to protect nature’s aesthetic beauty.

489 It is possible to see a divergence between the two country contexts in understandings about the
490 need for environmental protection for wellbeing. For the UK respondents, the need to protect and
491 sustain the environment for wellbeing was focused largely on individual responsibility. Protecting
492 the environment meant that individuals could keep running in PAs (“*you’re running on it, you have to*
493 *respect it.*”, UK2P11) In NZ, biosecurity controls were adhered to mostly for the benefit of the
494 environment and others:

495 *After these events you go home, clean [shoes]. It takes ten seconds out of your day, helps*
496 *preserve the trees as much as we can. (NZ2P12)*

497 *Done a bit [of travelling] with the mountain bikes. You do make sure [to get your bikes] clean*
498 *whenever you go from one area to anywhere else... [important to] society kinda to make the*
499 *effort. (NZ2P02)*

500 Other differences between the NZ and UK contexts emerged when questions were asked about the
501 future use of PAs for running (i.e. sustainability). In the UK context, sustainability was seen to be
502 equivalent to inclusivity – that is, protecting the environment was synonymous with providing
503 opportunities for a wider and more diverse group of people to meet their wellbeing goals. Examples
504 included providing formal infrastructures and informal networks for running: “more in schools” and
505 “having a running community”. This is consistent with the idea of ‘moral individualism’, which
506 suggests the possibility of responsibility for others while remaining strongly attached to achieving
507 one’s own aims (Dawson 2012; cited in Middlemiss, 2014). Sustainability is represented here in its
508 simplest terms as being maintainable, enduring and lasting, described in practical terms as having
509 “*more routes*” (UK1P05), “*improved trail signage*” and the “*promotion of off-road events*”
510 (UK2P09/UK3P23/UK4P07). As seen below, this would contribute to maintaining and/or expanding
511 the practice of running in natural environments:

⁷ A central role of Auckland Council lies in biodiversity and biosecurity, particularly in relation to the protection of indigenous species. Their biosecurity officers are able to close off tracks of land, access council funding for management and protection, and are involved in the issuing of licenses for events held in the region’s parks. Relationships between local rangers, Auckland Council and the Department of Conservation are expected and encouraged. In New Zealand, access to trails is not unrestricted – there are very stringent limits on access to private land, and NZ runners do not assume automatically to have access to land.

512 *Off-road? Having those permissions and ensuring they remain as paths and that kind of*
513 *thing. (UK1P15)*

514 *Just [make] it possible for anybody, doesn't matter who, where, what. (UK2P03)*

515 In the NZ context, sustainability reflected a social and educational approach, focused on restricting
516 human impact and protecting against environmental decline. It involved actions linking individual
517 responsibilities to 'national' cultural values – for instance, protection of New Zealand's 'clean green'
518 image ("*Our kids grow up with a sense of respect for their environment... we feel like we all own it*",
519 NZ2P07), as well as the 'adoption' of Maori values of the land as a taonga ('precious gift').

520 Respondents also suggested a range of strategies for sustainability reflecting a broad awareness of
521 the need to politically manage human relationships with nature. These included formal
522 infrastructural support ('boot cleaning stations', 'site signage'⁸), resourcing ('environmental
523 mitigation', 'rangers') and governance ('planning', 'oversight and intervention'). Educational
524 campaigns appeared to be endorsed particularly, encouraging individual responsibility through a
525 shared understanding of the issues, practices and bodies responsible for protection. In the NZ
526 context, there was a shared understanding that people needed to be aware of the impact humans
527 have on nature, potentially reducing opportunities for wellbeing benefits in the future.

528 *People need to understand either you follow the rules, or it gets closed completely. Those are*
529 *your two options. (NZ2P02)*

530 *Got to make sure the bush is still there, that industry doesn't go too far, building in the bush.*
531 *Making sure... there's enough public opinion... so no one wants to damage it or get rid of it.*
532 *(NZ2P12)*

533 An important observation can be made here. The discourse of individual responsibility has the
534 potential to conflict with the discourse of environmental protection and sustainability; however, the
535 'national' context is important here. In the UK, the relationship between wellbeing and the
536 environment showed greater potential for conflict, with individual rights and responsibilities
537 seemingly promoted above the need for environmental protection. In NZ there was more emphasis
538 on a shared responsibility to protect the environment, in order that communities could continue to
539 use PAs in the future.

540

541 Whether the PA is discursively constituted as a wilderness or an area of human activity appears to
542 play a role in how people act in relation to environmental protection. The idea of the environment

⁸ Site signage refers to having a sign at the entrance to a park area and or trail. This differed from the UK context where there was an expectation (and probably more of a need for) continuous signage along the trail.

543 having an ‘undisturbed and ordinary’ nature resonated more in the NZ context where there was a
544 distinct discursive separation between protected and other landscapes. Wilderness areas – referred
545 to as ‘the bush’ – were defined as “*getting out of the city*” (NZ2P15) and “[*not seeing*] a house... *feel*
546 *like you’re a million miles away*” (NZ2P19). In this context the opportunity to use native bush was
547 not assumed to be an automatic right, and responsible use was regarded as a key part of the activity.

548

549 *Access is really important... to places you cannot normally go... There’s definitely issues and I*
550 *think everybody’s conscious of that. Trail runners in particular. We are lucky to have this*
551 *playground, they’re cautious... rubbish, don’t do that.* (NZ1P08)

552 In the UK context, the boundaries between urban, peri-urban and rural spaces were less distinct
553 (“*We’re fortunate in this part of the world, we all live in a mile or two of some public byway or*
554 *footpath*”, UK4P07). Here nature acts as a temporary, proximal and necessary refuge where the right
555 to access is supported by legislation (right of way, right to roam). In this context, the use of
556 protected areas for wellbeing was commonly viewed as a proprietary right, rather than a privilege⁹,
557 with some evidence that instrumental and self-interest concerns are being prioritised over
558 environmental ones (Middlemiss, 2014):

559 *I like the exploration. The fact that you’re off-froad means you can cross the fields, use all the*
560 *public footpaths.* (UK3P19)

561 *The running routes is a really quite key thing. [Locally marked routes] gets you off the road,*
562 *no worry about faffing around with maps... Join it in lots of different places.* (UK3P18)

563 Using a socioecological frame, it is argued that the relationships between wellbeing and
564 environmental protection are constituted through discourses related to inclusion and rights, and to
565 protection and responsibilities. With wellbeing being represented as the agency to act in accordance
566 with self-management and self-responsibility, the wellbeing discourse is further shaped by the socio-
567 political or country context of the PA. This context can shape the extent to which a PA is constructed
568 as proximal, or as a relative ‘wilderness’, and it can shape the extent to which wellbeing is aligned
569 with individual and shared rights and responsibilities. Thus, wellbeing in the context of PAs may be
570 linked to unlimited rights and use, or alternatively around the need to act cautiously when running in
571 protected areas.

572

⁹ In the UK, the Countryside and Rights of Way Act 2000, supports ‘rights of way’ and the ‘right to roam’. Respectively, they refer to the legal right to use a path through the grounds of a property owned by another person, and the right to use open access land, including mountains, moors, heaths, downs and common land. Rights of way are usually signposted and appear on Ordnance Survey maps.

573 **Environmental Self-interest?**

574 A socioecological approach is used here to consider what these discourses about wellbeing and
575 environmental protection tell us about how runners understand the conflicts between conservation
576 and human activities in PAs (Hamin, 2002). These conflicts are addressed rarely in the wellbeing
577 literature or, when they are, users of PAs tend to blame others for any damage (Marzano and
578 Dando, 2012). The conflicts appeared in the interviews as claims that some level of damage is
579 “unavoidable” (UP3P11). Others noted their right to exercise in places of their own choice. Notably,
580 direct (hardware) and indirect (values, code of conduct) instruments of environmental protection
581 were not always supported by off-road runners, who wanted to preserve the remote-nature
582 experience and challenge, along with the ‘natural’ feel of the terrain.

583 *I try to but I am a bit naughty, if it looks like I can get round someone I run over tree trunks and*
584 *things. (NZ1P16)*

585

586 Attempts to make PAs more accessible or sanitize and gentrify the tracks (NZ2P05) were also
587 rejected by some of the trail runners. These runners in particular seemed critical of efforts that
588 might change their experience of trail running.

589

590 *You need to make it accessible to everyone but... I think they make it too accessible. (NZ2P21)*

591 *It's in your interests, if you're running over the same terrain you want to keep it looking good.*
592 *(UK3P19)*

593 Despite an interest in retaining PAs as ‘healthy spaces’, getting people to appreciate the role of
594 environmental protection may be challenging. Trail runners appear to have both short-term and
595 long-term interests that remain focused on preserving the terrain, its isolation, and ‘back-to-nature’
596 qualities, along with a desire to be able to continue to run in similar ways in the future. While this
597 self-interest appears related to environmental protection in the long term, particular instruments of
598 environmental protection are only acceptable as long as they do not impact significantly on the
599 personal experience of running. That is, they are suggestive of an environmental self-interest. The
600 extent then to which individual wellbeing dominates or even undermines discourses of
601 environmental protection may require closer consideration to appreciate users long-term
602 engagement in these spaces.

603

604 **CONCLUSIONS**

605 From the perspective of trail runners, PAs represent the ideal environment for achieving wellbeing.
606 Participants actively used PAs to promote their mental and physical health, and to meet personal
607 goals and achievements. This experience of wellbeing is largely underpinned by discourses of
608 individualism, personal responsibility or rights and a sense of personal wellbeing (Roper, 2012). In
609 this study, wellbeing is regarded as more than the achievement of good health; it includes its
610 optimization and the realization of individual goals. Nature itself has an important role in the ways in
611 which trail runners actively manage their health. However, this study has found evidence of
612 discourses that reflect not only a simplification of the natural environment but also a sense of
613 rightness and legitimacy in being able to use PAs for wellbeing, The question the study raises is the
614 extent to which these individual rights take precedence above the need for environmental
615 protection.

616 This concern is stressed within the policy landscape when it is suggested tensions are emerging
617 between meeting wellbeing and conservation goals of PAs (Carrington, 2019). The global
618 consequences of such a shift are not reported on in this article; rather, it has sought to gain some
619 insight into the wellbeing and environmental protection discourses that shaping everyday
620 understandings of PAs as desirable spaces. It has also considered these the desirability of PAs for
621 wellbeing in two different country contexts (NZ and UK). The analysis suggests that while regular
622 users of PAs, in this case trail runners, do have some awareness of the need for environmental
623 protection, it is less than we might expect at the present time. In part, trail runners tended to draw
624 on discourses positively constructing PAs as a resource for wellbeing, while simplifying the impacts
625 of their activity on the natural environment. Participants tended to represent nature in simple and
626 uncomplicated ways, and their accounts appeared relatively untroubled by accounts about human
627 impact or degradation. By implication, it was necessary in this research to ask probing questions
628 about their possible impact on the environment.

629 In both contexts (NZ, UK), participants understood trail running to have an impact on the
630 environment, but to what extent they felt that environmental protection should or did curb or limit
631 trail running was influenced both by the local context and the degree to which individual goals
632 superseded the instruments of protection. In the New Zealand context, PAs used for trail running
633 were perceived as 'wilderness' spaces. Environmental protection was understood to be a shared
634 responsibility, and discourses about restricting use were dominant. In the UK context, the use of PAs
635 was regarded as a right, with the expectation that they were accessible and available nearby, with a
636 focus on expansion to more users rather restricting use. In short, understandings of the relationship

637 between wellbeing and protection in PAs was shaped by local cultural and political rationalities
638 about rights and responsibilities. Therefore, the capacity of societies to understand the shared goals
639 of PAs for the future may imply paying close attention to the diverse types of PAs and how these
640 align with discourses of rights and responsibilities. This study suggests treating discourses about
641 environmental self-interest cautiously because of their emphasis on the individual rather than on
642 environmental protection.

643

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801 **IMAGES**

802 **Image 1: Event Trail (NZ)**

803 **Image 2: Event Finish**

804 **Image 3: Waterstop (UK)**

805 **Image 4: Event Marquee**