



Research paper

# Care-farming as a catalyst for healthy and sustainable lifestyle choices in those affected by traumatic grief

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## Highlights

- Care-farming resulted in positive lifestyle changes that lasted beyond the intervention period.
- Participants noted significant pivots toward healthier eating, less wastefulness, and a propensity toward sustainable production practices.
- The emotional expression fostered during the intervention improved sleep outcomes for many participants.
- Care-farming expanded participants' sense of safety, social connection, and enhanced awareness of others and of nature.
- These improved connections fostered a giving and receiving of compassion and chances to re-narrate residual effects of trauma.

Abstract

Care-farms are increasingly utilized as a means of providing care, support, and therapy for a wide range of different populations, enabling people to cultivate social, physical, mental, and emotional well-being. This study explores the impacts of a care-farm intervention for traumatically bereaved individuals, a population at high-risk of poor physical and psychological outcomes. The study examines how a care-farming model can enable and encourage participants to cultivate healthy and sustainable lifestyles. Following their participation in a care-farming intervention, bereaved parents, siblings, and spouses described significant pivots toward healthier eating, improved sleep outcomes, and increased physical activity. Our results indicate that care-farming may have potential to influence positive changes to health and health behaviors that last beyond the intervention period.



## Keywords

Care farming; Grief; Trauma; Health behaviors; Nature; Ecotherapy

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## 1. Introduction

Care-farming is an increasingly well-established therapeutic intervention, embedding therapeutic processes within an agricultural landscape. It draws on, incorporates, and benefits from connections to green, eco, and nature based-therapies, utilizing biotic and abiotic elements of nature to promote social, physical, mental, and emotional well-being ([Haubenhofner et al., 2010](#)). Alongside the client specific benefits that care-farming generates, there is also evidence that participation in a care-farming program might support the adoption and development of resilience and longer-term healthy and sustainable lifestyle choices ([Braastad et al., 2007](#); [Knapik, 2017](#); [Leck et al., 2016](#)).

Recent work has seen the potential merits of care-farming for providing care, support, and therapy to people affected by trauma and grief ([Cacciatore et al., 2020](#); [Gorman and Cacciatore, 2017](#)). Those affected by traumatic bereavement commonly experience substantial social, emotional, cognitive, and physiological sequelae, including sleep and eating disturbances, substance misuse, social withdrawal, and increased risk of compensatory behaviors ([Cacciatore et al., 2014](#); [Felitti and Anda, 2010](#); [Murphy et al., 1999](#)). Building on [Gorman and Cacciatore \(2017, pp. 19–20\)](#), who suggest ‘there are serious opportunities and advantages to considering care-farming as a valuable option for helping individuals cope with traumatic grief’, this study explores how a care-farming model can enable and encourage participants – particularly those in a population at risk of adverse health behaviors – to cultivate healthy and sustainable lifestyles.

## 2. Literature review

### 2.1. Trauma and grief

Trauma and grief are well-known to poorly affect both physical and emotional health and behavioral patterns. Self-medication and other compensatory behaviors, as a means of coping with trauma, for example, is a well-recognized phenomenon with negative physical, psychological, and social effects (Harper et al., 2014; Mcfarlane, 1998) and significant economic ramifications (Felitti and Anda, 2010). The “compensatory behaviors” most often associated with traumatic stress, such as smoking, drug and alcohol use, sedentariness, and poor eating habits, adversely affect individuals, families, and social systems (Felitti and Anda, 2010, p. 86). Cacciatore et al. (2014) found that 25 % of bereaved parents experienced an increase in alcohol and/or drug use after the loss that is a “matter of clinical concern” (p. 20). Another large-scale epidemiological study reported an increase in premature mortality rates for bereaved mothers noting that “pathophysiological changes related to stress could increase susceptibility to infectious diseases, affect the risk and prognosis of cancer, and lead to diseases of the cardiovascular system. . . increasing smoking and alcohol intake, altering dietary patterns, and reducing physical activity” (Li et al., 2003, p. 366).

Nearly 35 % of grieving parents report a decline in their health since the loss, citing weight gain due to poor diet, stress induced migraines, frequent illnesses, and unhealthy lifestyle habits (Cacciatore et al., 2014). Buttressing these findings, Harper, O’Connor, and O’Carroll (2011) found that parents whose children have died are at least two times more likely to die or become widowed during the decade following the death of a child than non-bereaved parents. Up to 35 years later, mothers whose children have died have 1.2 times higher mortality rate than the non-bereaved. Researchers concluded that, in part, “the stress of the bereavement may involve significant physiological effects—for example, suppressing the immune system, thereby increasing one’s propensity to disease” and the use of “maladaptive coping strategies such as alcohol misuse” (Martin et al., 1992, p. 4). Those experiencing poor physical health are also more likely to experience “mental health” challenges. Murphy et al. (1999) found that bereaved mothers who reported health issues were 4.6 times more likely to be experiencing the psychological effects of trauma. Youth, too, are also negatively affected by trauma and grief, especially males. Those who experienced the premature death of a parent were at significantly more risk of developing functional impairment, alcohol misuse, and disruptive behaviors (Hamdan et al., 2013). Finding ways to improve care to grieving people, reducing poor physical and psychological outcomes is imperative. Sleep dysfunction is also widely recognized as a serious negative outcome of traumatic grief that can adversely affect emotional, mental, and physical health (Monk, Germain, & Reynolds, 2008). Even when controlling for time since loss, the death of a child significantly impairs sleep quality (Pohlkamp, Kreichbergs, & Sveen, 2019).

The ways in which a person copes with grief, as well as their subjective experience of social support, are some of the most salient predictors of poor physical and psychological outcomes (Juth et al., 2015). How a person tolerates their intense emotional reactions to loss may be more relevant to outcomes than the circumstances of death (Harper et al., 2014). Avoidant coping styles, often endorsed in Western culture, seem to prolong traumatic stress responses. The social environment, social constraints in the wake of grief, strongly influences poor psychological and physical outcomes in the bereaved, increasing risk of maladaptive behaviors (Juth et al., 2015) and dysregulated coping (Cacciatore and Thieleman, 2019). Conversely, effective social support and interpersonal and structural compassion promote affect tolerance, approaching behaviors, and restorative coping (Cacciatore and Thieleman, 2019).

## 2.2. Care-farming for health

Care-farms have been framed as important resources that can enable and support healthy lifestyles (Braastad et al., 2007; Leck et al., 2016) and healthy consumption practices (Knapik, 2017), “making use of everyday farming activities (relating to crops, animals, the farm environment and the natural landscape) to promote individual health and well-being” (Leck et al., 2013, p. 166). For Hassink et al. (2010, p. 428) the key features of care farms are realized through an ‘informal context and the provision of useful and diverse activities in a green environment where clients experience space and peacefulness’. Care farms involve the creation of a sense of community on the farm where participants are approached as ‘normal people’ rather than ‘patients’ and treated with respect and without prejudice (Hassink et al., 2010, p. 426).

Recent years have seen care-farming utilized as an intervention for multiple populations, including autism (Ferwerda-van Zonneveld et al., 2012), acquired brain injury (Hassink et al., 2007), dementia (Bruin et al., 2009; de Boer et al., 2015), substance addiction (Hine et al., 2008; Leck et al., 2015), emotional and mental unwellness (Elings and Hassink, 2008; Iancu et al., 2014), and within the criminal justice system (Elsey et al., 2018; Murray et al., 2016). There is a growing body of evidence relating to the potential health benefits that can emerge from participation within a care-farming program, ranging from client specific outcomes such as reduced depressive symptoms (Pedersen et al., 2012), impacts on recidivism (Pretty et al., 2013), and changing levels of independence (Kaley et al., 2018), to more general impacts on health and well-being, such as increasing social interaction (Iancu et al., 2014), improving confidence, and decreasing stress (Leck et al., 2015). Alongside these specific symptomatic approaches and outcomes, care-farms have also been linked to enabling a level of ‘flourishing across the life-course’ (Devine-Wright et al., 2019, p. 2). Murray et al. (2019, p. 7) discuss how participation in a care-farming scheme ‘appears to aid personal growth through meaningful, motivating, stimulating and calming interactions’, that can be ‘the precursors to changing behaviours’.

The access and contact with nature that care-farms provide can be critical to the adoption of beneficial lifestyle choices, with nature acting as a catalyst for emotional stability and health promotion (Pretty et al., 2013). Elings and Hassink (2008) found that being at a care-farm helped clients overcome issues of substance abuse through decreasing boredom and meaninglessness, with the farm providing a place of purpose. Contact with animals, as part of a care-farm experience, can stimulate the uptake of healthy behaviors (Hassink et al., 2017) and encourage participants to pursue more active lifestyles (Kaley et al., 2018). Physical exertion on care-farms can also lead to improvements in sleep hygiene; physically tiring work leads to sleeping well (Besterman-Dahan et al., 2018; Elings and Hassink, 2008; Leck et al., 2015) and can reduce ‘the inclination to engage in negative behaviors after having returned home’ (Leck et al., 2015, p. 753) (though Leck et al. do not qualify what kind of ‘negative behaviors they are referring to here). In Leck’s (2013) study of care-farm service users, 66 % (n = 153) indicated that they felt they were sleeping better since they started attending a care-farm. Importantly, Kaley et al. (2018) discuss how care-farming activities can confer health benefits beyond the farm setting itself, inspiring and encouraging attendees to continue activities and behaviors initiated on the farm, such as physical exercise and healthy eating. Exercise undertaken within the care-farm environment can provide the foundations of physical fitness, enabling and encouraging a commitment to physical activity in future (Elings and Hassink, 2008).

Similarly, much research on care-farming has reported how the intervention can lead to increases in self-

esteem (Elings and Hassink, 2008; Hine et al., 2008; Kogstad et al., 2014). As Pretty et al. (2009) note, self-esteem has implications for health behaviors and lifestyle choices, with high-levels of self-esteem being associated with healthy eating, physical activity, and reduced rates of smoking. Care-farms also act as places where participants are introduced to new ideas, particularly often in relation to healthy lifestyles and behaviors. Kaley et al. (2018) discuss how experiencing different tastes and flavors at a care-farm had led to improvements in people's general eating habits and diet. In a sample of 155 care-farm service users, 61 % indicated they felt their diet had improved since visiting a care-farm (Leck, 2013).

Studies suggest that care-farms may provide an important place for those affected by trauma and grief to cope with intense and enduring psychological symptoms and build resilience (Cacciatore et al., 2020; Gorman and Cacciatore, 2017). This study builds on this research to further explore the effects of a care farming model, taking a specific focus of how participation in care-farming might enable individuals – particularly those in a population at high risk of adverse health behaviors and outcomes – to develop healthy and sustainable lifestyle choices.

### 3. Methodology

This research was approved by Arizona State University's Institutional Review Board. Following ethical approval, a link to the study was sent to clients of a care-farm located in the Southwestern United States that serves grieving families. This care-farm is a program of a non-governmental organization and was created as a therapeutic community for the sole purpose of helping those who have experienced traumatic grief. The model is an egalitarian one that allows clients to guide the duration, variety, and intensity of their experiences at the care-farm. Located on ten acres backed by a river, the care-farm focuses on providing support, psychoeducation, and compassion to clients while intentionally increasing their awareness of animals who live on the care-farm. The culture of the care-farm includes that it is vegan, sustainable, and houses only animals rescued from varying degrees of abuse.

There were up to five providers working on the care-farm during the course of this study, each working with either an individual client, couple, or a family system as the client. Clients' time at the care-farm included being paired with a provider with extensive training in animal well-being and traumatic grief. Participants spent between three to fourteen hours at the care-farm,<sup>1</sup> depending on individual need, engaging in a combination of formal counseling, helping take care of the animals and the land, and immersing themselves in the natural environment of the care-farm. The focus of this counseling was around traumatic grief, but with psychoeducation comprising a large part of this, this also meant – at times – peripherally discussing broader health behaviors.

Once a month, clients had the opportunity to come together for a group meeting, special event, or a 'potluck.' The care-farm environment contains a number of elements that prompt different experiences. There are several formally designated "restorative spaces" including "The Quiet Place," a small grotto under a large Ash tree by a waterway where families paint stones and leave them in the rock wall; a heavily treed river area with swings, a firepit, and kayaks; a gazebo set in the middle of a small pasture. There were 30 animals on the care-farm during the period when this research was undertaken, including horses, donkeys, pigs, sheep, goats, dogs, and cats. Participants were encouraged to build a relationship with the animals that

unfolded in whatever way was comfortable and desirable for both them and the animals.

After their initial visit to the care-farm, clients were invited to take part in a study that had the stated intention of understanding the effects of a care-farm intervention on their subjective experience of trauma and grief. Within four weeks of their time on the care-farm, participants were sent a link to an online survey. The survey included a variety of qualitative, retrospectively reflective, open-ended questions relating to participants experiences and reflections of the care-farming intervention. It also specifically asked: Has your time at the care-farm changed any of your behaviors? For example, have your eating, drinking, or leisure habits changed in any way?

The survey also invited participants to take part in a qualitative, semi-structured, research interview, and they had the option to affirm their interest in taking part in an interview (providing contact details for a follow-up). Participants who assented were randomly selected by an online random choice generator to attain sufficient data saturation (Creswell, 1998). For the purposes of this article, alongside the survey data (n = 120) we draw on 22 interviews with bereaved individuals. These interviews were conducted between 3–6 months following participants' attendance at the care-farm. Interviews were conducted by a member of the research team who was not involved in the delivery of the program. These interviews allowed participants to focus on areas they felt were most important about their subjective experiences at the care-farm, and frequently led to discussions where participants cited the care-farm experience as prompting the adoption of new behaviors. Interviews were recorded with participants' consent, transcribed, and then thematically analyzed – again, by a member of the research team not directly involved in the delivery of the program – alongside the qualitative survey responses, using NVivo. Initial coding and themes were then discussed amongst the wider the research team to ensure a level of triangulation. All participants have been ascribed pseudonyms.

#### 4. Results

*“There has been a shift in the food that I eat, with vegan and vegetarian options becoming more predominant. I'm continuing to exercise regularly, I try to maintain more healthy sleep habits. I am far more aware of when I consume alcoholic beverages now. I find myself checking in mentally to see if I am in a place where the glass of wine is being used as a numbing or coping tool or whether it is purely for enjoyment. I'm trying to spend more time in nature while I am not on the farm because I recognize it's positive influence on my well-being.” Elizabeth, survey respondent.*

The survey yielded a 68 % response rate and was sent to 176 clients of the care-farm. 120 participants fully completed the survey. Demographically, survey respondents were predominantly female (82.5 %, n = 99). Half the sample (n = 60) were between the ages of 36–55 and 30 % were between 18 and 35. All but six participants espoused a faith tradition, predominantly spiritual (34 %) and Christian (33 %). Most of the respondents were employed full or part time (n = 89) and income ranged from under \$25,000 per year to more than \$150,000 per year with most participants (60 %, n = 71) earning between \$50,000 and \$150,000 per year. All participants had experienced the traumatic death of a core family member with the majority (57 %, n = 66) having lost at least one child and most of the deaths being unexpected (68 %, n = 79). The majority of the participants experienced the deaths of babies and young children to age three (27 %, n = 32)

with the mean time since death being 3.29 years.

Of the 120 survey respondents, 59 (49 %) answered in an affirmative manner that they identified their participation in the care-farming program as having prompted a change in lifestyle and behavior. 30 (25 %) respondents did not answer the question, and 31 (26 %) did not attribute their experiences of the care-farm having changed their behavior. Though, for some responding in the negative, this was as they already felt they were practicing healthy behaviors. The behaviors and lifestyle choices that people's time on the farm prompted a shift in varied per individual respondent. Some, reported a move toward healthier choices across a wide variety of different aspects of their life, whilst others focused on more specific changes in a single domain. We present our results here, divided into the thematic areas of dietary changes, sleep and energy, physical activity and connection to nature, drawing on qualitative responses from the initial survey, and from conversations in the subsequent interviews that explored these themes in greater depth.

#### 4.1. Diet

Diet was one of the most common changes in behavior and lifestyle that those who had visited the care-farm as part of a therapeutic intervention remarked upon.

*"I feel like I've been eating healthier"* Beth, survey respondent.

*"I eat healthier now, less meat, more veggies. I also don't drink as much."* Hannah, survey respondent.

*"I am eating a more moderate and healthy diet and have reduced the amount of meat I consume."* Steve, survey respondent.

*"I think at the farm, it was a real gift to come away with that tool, in grief, where sometimes you just feel so overwhelmed, well what can I do, well I can make a good choice for myself, whether that be what I eat, what I do, who I surround myself with."* Nicole, interviewee.

For some, this pivot toward healthier dietary habits was very clearly linked to making progress in their journey with grief, with healthier choices becoming a symbol of a renewed commitment to self-care and survival in the face of trauma.

*"I have changed my eating because I now feel like I have to survive and my eating habits leading me that way."* Justin, survey respondent.

*"I am more mindful of being kinder to myself, going slower, finding ways to nourish myself not just make do"* Carol, survey respondent.

For others, the care-farm prompted a healthier attitude toward food, not simply in terms of consumption practices, but through providing a reconnection to food that inspired new engagements with cooking and meal preparation. Re-situating food within a positive emotional framework enabled people to develop a sense of motivation that could be applied to other aspects of their lives.

*"I was reminded of my passion for being vegetarian that I used to have and lost. I am not strictly vegetarian but I have started making more vegetarian meals."* Lisa, survey respondent.

Many of the responses within the qualitative data, from both interviews and surveys, point to the care-farm

prompting a shift toward a more (or even wholly) plant-based diet. Plant-based diets have been shown to be healthier for the individual (McEvoy et al., 2012) and also offer substantial environmental benefits (Pimentel and Pimentel, 2003).

*“I was vegetarian when I arrived and not long after I became a full vegan.”* Cait, survey respondent.

*“I have always tried to avoid eating meat when I can and prefer a lot of alternative dairy products, but it may have rejuvenated why I do these things.”* Judith, survey respondent.

The adoption of a plant-based diet and taking on the identity of ‘vegan’ or ‘vegetarian’ also offered participants the opportunity for emotional succor in the act of practicing care and compassion in their food choices – particularly at a time when they may feel the loss of an explicit care-giving identity in the face of traumatic loss.

*“I am definitely more mindful of what I eat due to time spent with the animals.”* Eve, survey respondent.

*“I think I’m eating healthier too. I was really upset when I heard a story about the cows and thought maybe I shouldn’t eat meat anymore. So I mostly haven’t.”* Zoe, survey respondent.

For many, this shift in dietary practices was prompted by a connection to the animals on the farm. For some, individual bonds with specific animals provoked them to exclude certain foods from their diet, whilst for others, time spent with animals led them to seek out opportunities to only consume animal products produced to certain standards – high welfare, organic, non-factory farmed, etc. For others, this played out as a commitment to adopt a more respectful approach to food and animal products, not wasting or overconsuming.

*“I definitely think I live more intentionally after visiting the care-farm. I find myself not throwing away as much food and altering how I think about what goes into my body.”* Francine, survey respondent.

In addition, a number of people who had spent time at the care-farm suggested that the intervention prompted a change in their relationship with alcohol consumption, as well as food.

*“I have stopped drinking alcohol except on special occasions. I have lost the weight that I gained, using food to comfort my pain.”* Emily, survey respondent.

*“Yes, in some ways they have. I no longer drink because I want to experience the full range of emotions and work through them in a healthy way.”* Stacey, survey respondent.

*“I actually drink less because I’m too busy dealing with my emotion.”* Charlotte, survey respondent.

## 4.2. Sleep and energy

Similar to other studies of care-farming (Elings and Hassink, 2008; Leck et al., 2015), many participants reported improvements in their sleeping habits. However, rather than improved sleep arising from physical exertion that this existing literature discusses, our respondents often attributed their better relationship with rest arising from the emotional labor undertaken while on the farm and since.

*“I felt really tired and drained. The first day I felt I had done a lot of hard work. Grief takes a lot of energy. I mean, and processing grief takes a lot of energy, you know, it can be more draining than manual labor in some ways.”* Katy, interviewee.

Whilst the initial process of attending the care-farm for support and counseling for their grief was often felt to be 'exhausting', some participants felt this was a productive form of exhaustion.

*"It's still very early. Right now, honestly, I feel exhausted from so much coming up. Good exhausted."* Gemma, survey respondent.

Time spent on the farm re-defined how people approached sleep. Engaging in the therapeutic and contemplative practices within the 'safe' space of the farm allowed people to go away and establish their own 'safe' space at home for healthier rest and sleep. This was often actively linked to making other healthier lifestyle choices surrounding mental, emotional, and physical self-care.

*"Yes, when I am tired I rest. My time at the farm made me feel safe about my emotions again so that I can continue forward."* Robert, survey respondent.

*"I don't wake up with the anxiety. I am sleeping better. It [grief] was embedded in my body. I got very restless and achy and all that kind of stuff, but I'm able now to sleep through it. Without that nightmare coming up. So I think that's a big accomplishment."* Sarah, interviewee.

*"I do still have some things that keep me up at night, but I can go back to sleep. So if I wake up at two o'clock because I'm old and I have to go to the bathroom, or I drank seven cups of coffee a day, I can get back to sleep. So I'm more restful."* Jacob, interviewee.

For others, engaging with their emotions whilst at the farm allowed them to make the link between their grief and feelings of low energy, and thus begin a journey toward coping with these physical symptoms in healthy ways.

*"It has not changed my grief, rather it allowed me to acknowledge it more fully. I am able to recognize the side effects of avoiding the topic in my mind, like anxiety (fear), worry, lack of energy."* Donna, survey respondent.

However, for many other participants, their time on the farm left them feeling 'energetic', physically and mentally able to fulfil different tasks, overcoming bodily and emotional tiredness.

*"I felt like I was actively dealing with my grief in a healthy way. I felt awake and energetic. I certainly experienced the entire model of therapy to be one that promotes peace, calm and the opportunity to intently focus on my grief while allowing respites from the intensity when needed."* Rebecca, survey respondent.

*"Yes, I have deeper understanding of my loss and a renewed energy to discuss and share about my loss."* Steve, survey respondent.

### 4.3. Connection to nature and physical activity

The care-farm intervention also inspired new (and renewed) interest in the natural environment. The farm setting gave people a safe foundation on which to redefine a relationship with being outdoors, opening up opportunities for future encounters.

*"I think when she passed, I found myself not getting out in nature because I was so depressed. I forgot that."* Diane, interviewee.

Part of this is simply about giving people time, space, and permission, to slow down and spend time with nature. Yet equally, enabling participants to reframe their understandings and imaginations of what 'nature'

is. Rather than grand narratives of wilderness landscapes and national parks, people came to appreciate their 'everyday' relationships with the natural world, what [Pinder \(2011, p. 233\)](#) describes as 'the ordinary, routine and repetitive aspects of life that are pervasive and yet frequently overlooked and taken-for-granted'. The connections that participants developed at the care-farm enabled them to be more attuned to their surroundings at home, prompting new ways to experience nature.

*"I think I feel more connected to animals and even nature. Even the trees in our yard that I barely noticed before, I now notice."* Zoe, survey respondent.

*"I'm noticing plants and trees and animals and sounds like I've never noticed them before"* Jason, interviewee.

*"While I have been called to nature for most of my life, I have found myself more compelled to be outdoors since I began spending time at the care-farm."* Linda, survey respondent.

The time outdoors on the farm also led many participants to develop associations between green spaces and a sense of safety and well-being. These associations led people to seek out opportunities to continue to spend time outdoors amongst nature, even once they had left the farm.

*"So I have really made a concerted effort to get outside more. Sometimes that means stepping out of my comfort space because I know I'm gonna feel better going into nature"* Sophia, interviewee.

Others tried to recreate the therapeutic spaces of the care-farm at home, developing small gardens and planting trees as an opportunity to memorialize their loved ones, often inspired by elements they had engaged with on the farm.

*"It made me want to do more things in remembrance of [deceased]. Like we'll make her garden which I would've never really thought of except seeing the care-farm out there."* Alice, interviewee.

*"I have all this yard and I've never been a gardener before, but [the provider] talked about the therapeutic nature of gardening and just being with the earth and soil and so I planted a garden and I planted some shrubs and, and I've been nurturing those. There's something about seeing something grow and planting that is just life affirming. There's just something about doing something with your own hands that creates something and it's probably that whole maternal instinct of wanting to grow and nurture, But I got that from the care-farm and those are pretty powerful pieces that I've incorporated into my work that have been extremely meaningful to me."* Melissa, interviewee.

Alongside – and interrelated to – the benefits arising from new connections to nature ([Mayer et al., 2009](#); [Zelenski and Nisbet, 2014](#)), participants also reflected that their experiences at the farm prompted an uptake of physical activity in the outdoors after they returned home.

*"I'm getting sunshine every day. I'm walking. And I'm trying to be more mindful of what I do."* Sally, survey respondent.

*"I know I need to practice more mindful eating and prioritize getting out and moving more."* [Vanessa](#), survey respondent.

Again, there is a sense of a renewed commitment to self-care that emerges from these quotes, prompted by the formal therapeutic intervention at the care-farm, but reinforced and being put into practice through participants' experiences of enjoying the physical farm-work activities undertaken. Similarly, these activities

on the farm – in the same way that they reframe understandings of ‘nature’ – also can reshape how people conceptualize ‘exercise’. Walking with the myriad of free-roaming animals on the farm decouples physical activity from formal (and often, negative) connotations of what it means to be physically active.

## 5. Discussion

The results of this study fit into broader efforts to develop a wider variety of psychosocial<sup>2</sup> approaches for supporting traumatically bereaved individuals (Cacciatore et al., 2020; Gorman and Cacciatore, 2017; Lin et al., 2014; Machado and Swank, 2018; Symington, 2012). Our work here also further expands the evidence base for the potential of care farming style interventions, responding to calls by Hemingway et al. (2016, p. 23) that such is critical in order to validate ‘care-farming as a public health intervention and in relation to health policy’. Particularly, our focus has been on how a care-farm model might enable individuals to adopt behaviors that can lead to the development of longer-term resilience, and overall better health and well-being.

Care-farming is a highly situated practice, and the elements of the farm that are important for success will emerge through each individual’s interactions and relationships with different features of the farm. However, previous research has shown that the key elements of the care-farm for supporting traumatically bereaved individuals are the “restorative spaces” of the care-farm (the landscape, atmospheres, and natural milieu of the farm, and how people interpret and interact with these elements, in metaphorical, embodied, and sensuous ways), the “community” of the care-farm (being in a place where grief is accepted and depathologized, with others who can empathize and relate, and where it is acceptable to talk about grief and trauma), and the connection to animals (both the animals as a metaphor and signifier that instill hope, but also the opportunity to develop empathy and compassion through encounters and relationships with animals) (see also Cacciatore et al., 2020). Additionally, the relationships developed with providers are clearly important, however, this intervention does not emphasize counseling above place; rather, counseling is one part of a whole approach to the creation of a therapeutic place and community.

The biopsychosocial benefits of care-farming are well documented in the literature (Cacciatore et al., 2020; Ellingsen-Dalskau et al., 2015; Gorman, 2017a; Hine et al., 2008; Iancu et al., 2014; Leck et al., 2015; Pedersen et al., 2012). Given that the population in this study is at particularly high risk of adverse health behaviors and outcomes, these data, though self-reported, attest to the potential of care-farming as a useful intervention for health improvements in those affected by trauma and grief. Responses from participants indicate that people see their time at the care-farm as an anchor through which to cultivate new behaviors. The opportunity to develop novel social interaction after traumatic grief appears key to helping these clients reassess and reshape lifestyle choices.

A number of participants interpreted their experiences on the farm through the ‘energy’ that being on this care-farm involved, or elicited. A growing swathe of literature encourages attending more seriously to ‘what research participants reveal about the energies energizing their own life-world’ (Philo et al., 2015, p. 43). ‘Energies’ – even if only in the thought-worlds of particular peoples and places - hold implications for health and well-being (Philo et al., 2015). Foley (2011) discusses the nexus of body-landscape-energy, and the need to account for places’ affective reputations as sites of renewed energies. That is, whilst encounters with the

care-farm may be quite 'ordinary' (in terms of biomedical understandings), the deeper meanings associated with, and expected of, the place of the farm itself, can lead to an affordance of well-being and (re)new(ed) capacities (Foley, 2011; Philo et al., 2015). Whilst a focus on 'energies' may not enamor healthcare providers keen to see quantifiable evidence about the efficacy of care-farming (Hine et al., 2008), it does offer a route to take seriously 'the beliefs, practices, values, and social processes that can shape how health and well-being are understood and practiced' (Hinchliffe et al., 2018, p. 3).

The importance that a connection to nature can play for individuals affected by trauma, grief, and other forms of psychological and experiential distress is one that is increasing in prominence, both in practice and academic literature (Besterman-Dahan et al., 2018; Cacciatore et al., 2020; Gorman and Cacciatore, 2017; Greenleaf and Roessger, 2017; Lin et al., 2014; Machado and Swank, 2018; Symington, 2012). Here though, there is perhaps a need for greater attention to the lingering ways that trauma shapes relationships and possibilities with 'natures' (Coddington and Micieli-Voutsinas, 2017). In the same way that 'trauma studies' has undergone a 'spatial turn' (Coddington and Micieli-Voutsinas, 2017), perhaps there is also need for an 'animal turn' (Weil, 2010; Wilkie, 2015; Wolfe, 2011). Such would involve an increased focus on the interrelationships and entanglements between humans and other animals, and trauma, in all of its guises and contexts. In practice, this might mean considering the potential for enhanced connections and compassion with animals to promote restorative coping and re-narrate 'ongoing and residual effects of trauma' (Coddington and Micieli-Voutsinas, 2017).

Of particular note for scholars of care-farming systems are the changes in dietary habits prompted by the encounters with animals as part of therapeutic program. Whilst scholarship on care-farming has discussed in detail the benefits which people with different conditions can gain from participation in a care-farming scheme, this has had a somewhat reductive effect, conceptualizing people solely through the lens of their health (or, judicial) status. Yet these statuses are just one aspect of identify. The agricultural context of care-farming may also exclude those who have specific perspectives regarding the farming of livestock for food. We wish to raise the question of how accessible, and indeed, appropriate, a care-farming program may be to individuals practicing vegetarianism or veganism? Particularly if, as discussed by our participants, care-farming systems are themselves prompting these changes in food politics and perhaps, one day, policies.

## 6. Limitations

This is a small study and these results are limited in their generalizability by the lack of a comparison group that would strengthen the validity of findings. The sample of participants may be very different from other groups of grieving individuals or non-grieving individuals. What counts as a therapeutic place for one person may not for another (Gorman, 2017b). The uniquely situated environment and resources of the care farm studied – and particularly, the importance of the attitudes and experiences of the providers in supporting traumatically bereaved individuals – is something that is difficult, if not impossible, to completely replicate elsewhere.

However, whilst we cannot definitively claim that the care-farm has led to improved health behaviors, the intentionality expressed by participants is notable and encouraging. For participants in our study, there was often renewed sense of purpose present in their descriptions of their changed relationships with diet, sleep,

and physical activity. The therapeutic processes undertaken at the farm as part of the formal intervention gives people the space, and confidence, to unpack and engage with emotions that might be prompting adverse health behaviors undertaken to alleviate or avoid painful emotions and memories.

## 7. Conclusion

Care-farms are continuing to grow in popularity, linked to wider movements toward greater implementation of 'green care' (Haubenhofner et al., 2010; Sempik, 2008) and 'social prescribing' (South et al., 2008). We have shown here that, as an intervention, care-farming offers significant potential as a means of providing well-being opportunities to those traumatically bereaved. Additionally, our work here attests to the capacity for care-farming to enable and encourage individuals – particularly those at risk of adverse health outcomes – to seek out further opportunities to improve their subjective health and well-being. Further research into care-farming is required, particularly, studies which adopt a more longitudinal approach, tracing the impacts of this style of therapeutic intervention across and throughout the life course.

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## Declaration of Competing Interest

The authors declare that they have no known competing financial interests that could have appeared to influence the work reported in this paper. The second author volunteers to help manage the family services at the care-farm for the international NGO.

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### Recommended articles

## References

Besterman-Dahan et al., 2018 K. Besterman-Dahan, M. Chavez, E. Njoh

**Rooted in the community: assessing the reintegration effects of agriculture on rural veterans**

Arch. Phys. Med. Rehabil., 99 (2018), pp. S72-S78, [10.1016/j.apmr.2017.06.035](https://doi.org/10.1016/j.apmr.2017.06.035) ↗

 [View PDF](#) [View article](#) [View in Scopus](#) ↗ [Google Scholar](#) ↗

Braastad et al., 2007 B.O. Braastad, C. Gallis, J. Sempik, S. Senni, T. van Elsen

**COST action 866 "Green care in agriculture" – a multi-disciplinary scientific network**

Green Care in Agriculture: Health Effects, Economics and Policies, University Studio Press, Vienna (2007), pp. 13-24

[View in Scopus ↗](#) [Google Scholar ↗](#)

[Bruin et al., 2009](#) S.R.D. Bruin, S.J. Oosting, Y. Kuin, E.C. Hoefnagels, Y.H. Blauw, L.C.D. Groot, J.M. Schols

### Green care farms promote activity among elderly people with dementia

J. Hous. Elderly, 23 (2009), pp. 368-389

[CrossRef ↗](#) [Google Scholar ↗](#)

[Cacciatore and Thieleman, 2019](#) J. Cacciatore, K. Thieleman

### Normal complications and abnormal assumptions after perinatal death

MCN Am. J. Matern. Nurs., 44 (2019), pp. 6-12, [10.1097/NMC.0000000000000486 ↗](#)

[View in Scopus ↗](#) [Google Scholar ↗](#)

[Cacciatore et al., 2014](#) J. Cacciatore, J.R. Lacasse, C.A. Lietz, J. McPherson

### A parent's tears: primary results from the traumatic experiences and resiliency study

OMEGA-J. Death Dying, 68 (2014), pp. 183-205

[Google Scholar ↗](#)

[Cacciatore et al., 2020](#) J. Cacciatore, R. Gorman, K. Thieleman

### Evaluating care farming as a means to care for those in trauma and grief

Health Place 62 (2020), p. 102281, [10.1016/j.healthplace.2019.102281 ↗](#)

 [View PDF](#) [View article](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

[Coddington and Micieli-Voutsinas, 2017](#) K. Coddington, J. Micieli-Voutsinas

### On trauma, geography, and mobility: towards geographies of trauma

Emot. Space Soc., 24 (2017), pp. 52-56, [10.1016/j.emospa.2017.03.005 ↗](#)

 [View PDF](#) [View article](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

[Creswell, 1998](#) J.W. Creswell

### Qualitative Inquiry and Research Design: Choosing Among Five Traditions

Sage Publications, Inc, Thousand Oaks, CA, US (1998)

[Google Scholar ↗](#)

[de Boer et al., 2015](#) B. de Boer, J. Hamers, H. Beerens, S. Zwakhalen, F. Tan, H. Verbeek

### Living at the farm, innovative nursing home care for people with dementia—study protocol of an observational longitudinal study

BMC Geriatr., 15 (2015), p. 144

[View in Scopus ↗](#) [Google Scholar ↗](#)

[Devine-Wright et al., 2019](#) H. Devine-Wright, M. Baybutt, R. Meek

### Producing food in English and Welsh prisons

Appetite, 143 (2019), Article 104433, [10.1016/j.appet.2019.104433 ↗](#)

[Elings and Hassink, 2008](#) M. Elings, J. Hassink

**Green care farms, a safe community between illness or addiction and the wider society**

*Ther. Communities*, 29 (2008), pp. 245-260

[Google Scholar ↗](#)

[Ellingsen-Dalskau et al., 2015](#) L.H. Ellingsen-Dalskau, M. Morken, B. Berget, I. Pedersen

**Autonomy support and need satisfaction in prevocational programs on care farms: the self-determination theory perspective**

*Work*, 53 (2015), pp. 73-85

[Google Scholar ↗](#)

[Elsley et al., 2018](#) H. Elsey, T. Farragher, S. Tubeuf, R. Bragg, M. Elings, C. Brennan, R. Gold, D. Shickle, N. Wickramasekera, Z. Richardson, J. Cade, J. Murray

**Assessing the impact of care farms on quality of life and offending: a pilot study among probation service users in England**

*BMJ Open*, 8 (2018), pp. 1-11

[CrossRef ↗](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

[Felitti and Anda, 2010](#) V.J. Felitti, R.F. Anda

**The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders and sexual behavior: implications for healthcare**

R.A. Lanius, E. Vermetten, C. Pain (Eds.), *The Impact of Early Life Trauma on Health and Disease*, Cambridge University Press, Cambridge (2010), pp. 77-87, [10.1017/CBO9780511777042.010 ↗](#)

[Google Scholar ↗](#)

[Ferwerda-van Zonneveld et al., 2012](#) R. Ferwerda-van Zonneveld, S. Oosting, A. Kijlstra

**Care farms as a short-break service for children with Autism Spectrum disorders**

*NJAS-Wageningen J. Life Sci.*, 59 (2012), pp. 35-40

 [View PDF](#) [View article](#) [CrossRef ↗](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

[Foley, 2011](#) R. Foley

**Performing health in place: the holy well as a therapeutic assemblage**

*Health Place*, 17 (2011), pp. 470-479, [10.1016/j.healthplace.2010.11.014 ↗](#)

 [View PDF](#) [View article](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

[Gorman, 2017a](#) R. Gorman

**Smelling therapeutic landscapes: embodied encounters within spaces of care farming**

*Health Place*, 47 (2017), pp. 22-28

 [View PDF](#) [View article](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

[Gorman, 2017b](#) R. Gorman

## Therapeutic landscapes and non-human animals: the roles and contested positions of animals within care farming assemblages

Soc. Cult. Geogr., 18 (2017), pp. 315-335

[CrossRef ↗](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

Gorman and Cacciatore, 2017 R. Gorman, J. Cacciatore

## Cultivating our humanity: a systematic review of care farming & traumatic grief

Health Place, 47 (2017), pp. 12-21

 [View PDF](#) [View article](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

Greenleaf and Roessger, 2017 A.T. Greenleaf, K.M. Roessger

## Effectiveness of care farming on veterans' life satisfaction, optimism, and perceived loneliness

J. Humanist. Couns., 56 (2017), pp. 86-110

[CrossRef ↗](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

Hamdan et al., 2013 S. Hamdan, N.M. Melhem, G. Porta, M.S. Song, D.A. Brent

## Alcohol and substance abuse in parentally bereaved youth

J. Clin. Psychiatry, 74 (2013), pp. 828-833, [10.4088/JCP.13m08391 ↗](#)

[View in Scopus ↗](#) [Google Scholar ↗](#)

Harper et al., 2011 M. Harper, R.C. O'Connor, R.E. O'Carroll

## Increased mortality in parents bereaved in the first year of their child's life

BMJ Support. Palliat. Care, 1 (2011), pp. 306-309, [10.1136/bmjspcare-2011-000025 ↗](#)

[View in Scopus ↗](#) [Google Scholar ↗](#)

Harper et al., 2014 M. Harper, R.C. O'Connor, R.E. O'Carroll

## Factors associated with grief and depression following the loss of a child: a multivariate analysis

Psychol. Health Med., 19 (2014), pp. 247-252, [10.1080/13548506.2013.811274 ↗](#)

[View in Scopus ↗](#) [Google Scholar ↗](#)

Hassink et al., 2007 J. Hassink, Ch. Zwartbol, H.J. Agricola, M. Elings, J.T.N.M. Thissen

## Current status and potential of care farms in the Netherlands

Njas - Wageningen J. Life Sci., 55 (2007), pp. 21-36

 [View PDF](#) [View article](#) [CrossRef ↗](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

Hassink et al., 2010 J. Hassink, M. Elings, M. Zweekhorst, N. van den Nieuwenhuizen, A. Smit

## Care farms in the Netherlands: attractive empowerment-oriented and strengths-based practices in the community

Health Place, 16 (2010), pp. 423-430

 [View PDF](#) [View article](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

Hassink et al., 2017 J. Hassink, S.R. De Bruin, B. Berget, M. Elings

### Exploring the role of farm animals in providing care at care farms

Animals, 7 (2017), p. 45

[CrossRef ↗](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

Haubenhofner et al., 2010 D.K. Haubenhofner, M. Elings, J. Hassink, R. Hine

### The development of green care in western European countries

Explor. J. Sci. Heal., 6 (2010), pp. 106-111

 [View PDF](#) [View article](#) [Google Scholar ↗](#)

Hemingway et al., 2016 A. Hemingway, C. Ellis-Hill, E. Norton

### What does care farming provide for clients? The views of care farm staff

NJAS-Wageningen J. Life Sci., 79 (2016), pp. 23-29

 [View PDF](#) [View article](#) [CrossRef ↗](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

Hinchliffe et al., 2018 S. Hinchliffe, M.A. Jackson, K. Wyatt, A.E. Barlow, M. Barreto, L. Clare, M.H. Depledge, R. Durie, L.E. Fleming, N. Groom, K. Morrissey, L. Salisbury, F. Thomas

### Healthy publics: enabling cultures and environments for health

Palgrave Commun., 4 (2018), pp. 1-10, [10.1057/s41599-018-0113-9](https://doi.org/10.1057/s41599-018-0113-9) ↗

[View in Scopus ↗](#) [Google Scholar ↗](#)

Hine et al., 2008 R. Hine, J. Peacock, J.N. Pretty

### Care farming in the UK: contexts, benefits and links with therapeutic communities

Ther. Communities, 29 (2008), pp. 245-260

[View in Scopus ↗](#) [Google Scholar ↗](#)

Iancu et al., 2014 S.C. Iancu, M.B. Zweekhorst, D.J. Veltman, A.J. van Balkom, J.F. Bunders

### Mental health recovery on care farms and day centres: a qualitative comparative study of users' perspectives

Disabil. Rehabil., 36 (2014), pp. 573-583

[CrossRef ↗](#) [View in Scopus ↗](#) [Google Scholar ↗](#)

Juth et al., 2015 V. Juth, J.M. Smyth, M.P. Carey, S.J. Lepore

### Social constraints are associated with negative psychological and physical adjustment in bereavement: social constraints and adjustment in bereavement

Appl. Psychol. Health Well., 7 (2015), pp. 129-148, [10.1111/aphw.12041](https://doi.org/10.1111/aphw.12041) ↗

[View in Scopus ↗](#) [Google Scholar ↗](#)

Kaley et al., 2018 A. Kaley, C. Hatton, C. Milligan

### Therapeutic spaces of care farming: Transformative or ameliorating?

Soc. Sci. Med. (2018), [10.1016/j.socscimed.2018.05.011](https://doi.org/10.1016/j.socscimed.2018.05.011) ↗

[Google Scholar ↗](#)

[Knapik, 2017](#) W. Knapik

### Community-based Social Farming (CSF) and its educational functions

Problems of Small Agricultural Holdings/Problemy Drobnych Gospodarstw Rolnych, 2 (2017), pp. 17-31, [10.15576/PDGR/2017.2.17](#) ↗

[View in Scopus](#) ↗ [Google Scholar](#) ↗

[Kogstad et al., 2014](#) R.E. Kogstad, R. Agdal, M.S. Hopfenbeck

### Narratives of natural recovery: youth experience of social inclusion through green care

Int. J. Environ. Res. Public Health, 11 (2014), pp. 6052-6068

[CrossRef](#) ↗ [View in Scopus](#) ↗ [Google Scholar](#) ↗

[Leck, 2013](#) C. Leck

### The Impact of Care Farming in the UK

University of Worcester (2013)

[Google Scholar](#) ↗

[Leck et al., 2013](#) C. Leck, D. Upton, N. Evans

### Social Aspects of Green Care, in: Green Care: for Human Therapy, Social Innovation, Rural Economy, and Education

(2013), pp. 155-188

[View in Scopus](#) ↗ [Google Scholar](#) ↗

[Leck et al., 2015](#) C. Leck, D. Upton, N. Evans

### Growing well-beings: the positive experience of care farms

Br. J. Health Psychol., 20 (2015), pp. 745-762

[CrossRef](#) ↗ [View in Scopus](#) ↗ [Google Scholar](#) ↗

[Leck et al., 2016](#) C. Leck, D. Upton, N. Evans

### Social Return on Investment: Valuing health outcomes or promoting economic values?

J. Health Psychol., 21 (2016), pp. 1481-1490, [10.1177/1359105314557502](#) ↗

[View in Scopus](#) ↗ [Google Scholar](#) ↗

[Li et al., 2003](#) J. Li, D.H. Precht, P.B. Mortensen, J. Olsen

### Mortality in parents after death of a child in Denmark: a nationwide follow-up study

Lancet, 361 (2003), pp. 363-367, [10.1016/S0140-6736\(03\)12387-2](#) ↗

 [View PDF](#) [View article](#) [View in Scopus](#) ↗ [Google Scholar](#) ↗

[Lin et al., 2014](#) Y.-J. Lin, C.Y. Lin, Y.-C. Li

### Planting hope in loss and grief: self-care applications of horticultural therapy for grief caregivers in Taiwan

Death Stud., 38 (2014), pp. 603-611, [10.1080/07481187.2013.820231](#) ↗

[View in Scopus](#) ↗ [Google Scholar](#) ↗

[Machado and Swank, 2018](#) M.M. Machado, J.M. Swank

### Therapeutic gardening: a counseling approach for bereavement from suicide

Death Stud. (2018), pp. 1-5, [10.1080/07481187.2018.1509908](#) ↗

0

[Google Scholar](#) ↗

[Martin et al., 1992](#) J.K. Martin, T.C. Blum, P.M. Roman

### Drinking to cope and self-medication: characteristics of jobs in relation to workers' drinking behavior

J. Organ. Behav., 13 (1992), pp. 55-71, [10.1002/job.4030130106](#) ↗

[View in Scopus](#) ↗ [Google Scholar](#) ↗

[Mayer et al., 2009](#) F.S. Mayer, C.M. Frantz, E. Bruehlman-Senecal, K. Dolliver

### Why is nature beneficial?: the role of connectedness to nature

Environ. Behav., 41 (2009), pp. 607-643, [10.1177/0013916508319745](#) ↗

[View in Scopus](#) ↗ [Google Scholar](#) ↗

[McEvoy et al., 2012](#) C.T. McEvoy, N. Temple, J.V. Woodside

### Vegetarian diets, low-meat diets and health: a review

Public Health Nutr., 15 (2012), pp. 2287-2294, [10.1017/S1368980012000936](#) ↗

[View in Scopus](#) ↗ [Google Scholar](#) ↗

[Mcfarlane, 1998](#) A.C. Mcfarlane

### Epidemiological evidence about the relationship between PTSD and alcohol abuse: the nature of the association

Addict. Behav., 23 (1998), pp. 813-825

 [View PDF](#) [View article](#) [View in Scopus](#) ↗ [Google Scholar](#) ↗

[Murphy et al., 1999](#) S. Murphy, J. Lohan, T. Braun, L.C. Johnson, K.C. Cain, R.D. Beaton, R. Baugher

### Parents' health, health care utilization, and health behaviors following the violent deaths of their 12-To 28-Year-Old children: a prospective longitudinal analysis

Death Stud., 23 (1999), pp. 589-616

[View in Scopus](#) ↗ [Google Scholar](#) ↗

[Murray et al., 2016](#) J. Murray, H. Elsey, R. Gold

### Care farming and probation in the UK

J. Barton, R. Bragg, C. Wood, J. Pretty (Eds.), Green Exercise: Linking Nature, Health and Well-Being (2016), p. 114

[View in Scopus](#) ↗ [Google Scholar](#) ↗

[Murray et al., 2019](#) J. Murray, J.F. Coker, H. Elsey

### Care farming: rehabilitation or punishment? A qualitative exploration of the use of care farming within community orders

[Pedersen et al., 2012](#) I. Pedersen, C. Ihlebæk, M. Kirkevold

### **Important elements in farm animal-assisted interventions for persons with clinical depression: a qualitative interview study**

Disabil. Rehabil., 34 (2012), pp. 1526-1534

[CrossRef](#) ↗   [View in Scopus](#) ↗   [Google Scholar](#) ↗

[Philo et al., 2015](#) C. Philo, L. Cadman, J. Lea

### **New energy geographies: a case study of yoga, meditation and healthfulness**

J. Med. Humanit., 36 (2015), pp. 35-46, [10.1007/s10912-014-9315-3](https://doi.org/10.1007/s10912-014-9315-3) ↗

[View in Scopus](#) ↗   [Google Scholar](#) ↗

[Pimentel and Pimentel, 2003](#) D. Pimentel, M. Pimentel

### **Sustainability of meat-based and plant-based diets and the environment**

Am. J. Clin. Nutr., 78 (2003), pp. 660S-663S, [10.1093/ajcn/78.3.660S](https://doi.org/10.1093/ajcn/78.3.660S) ↗

[Google Scholar](#) ↗

[Pinder, 2011](#) D. Pinder

### **Everyday Life. The Dictionary of Human Geography**

(2011)

[Google Scholar](#) ↗

[Pretty et al., 2009](#) J. Pretty, C. Angus, M. Bain, J. Barton, V. Gladwell, R. Hine, S. Pilgrim, M. Sellens

### **Nature, Childhood, Health and Life Pathways. Interdisciplinary Centre for Environment and Society**

University of Essex., Colchester (2009)

[Google Scholar](#) ↗

[Pretty et al., 2013](#) J. Pretty, C. Wood, R. Hine, J. Barton

### **Nature for rehabilitating offenders and facilitating therapeutic outcomes for youth at risk**

N. South, A. Brisman (Eds.), International Handbook of Green Criminology (2013)

[Google Scholar](#) ↗

[Sempik, 2008](#) J. Sempik

### **Green care: a natural resource for therapeutic communities**

Ther. Communities, 29 (2008), pp. 221-227

[View in Scopus](#) ↗   [Google Scholar](#) ↗

[South et al., 2008](#) J. South, T.J. Higgins, J. Woodall, S.M. White

### **Can social prescribing provide the missing link?**

Prim. Health Care Res. Dev., 9 (2008), pp. 310-318, [10.1017/S146342360800087X](https://doi.org/10.1017/S146342360800087X) ↗

[View in Scopus ↗](#) [Google Scholar ↗](#)

[Symington, 2012](#) A. Symington

### Grief and horses: putting the pieces together

J. Creat. Ment. Health, 7 (2012), pp. 165-174, [10.1080/15401383.2012.685017 ↗](#)

[View in Scopus ↗](#) [Google Scholar ↗](#)

[Weil, 2010](#) K. Weil

### A report on the animal turn

differences, 21 (2010), pp. 1-23, [10.1215/10407391-2010-001 ↗](#)

[View in Scopus ↗](#) [Google Scholar ↗](#)

[Wilkie, 2015](#) R. Wilkie

### Multispecies scholarship and encounters: changing assumptions at the human-animal Nexus

Sociology, 49 (2015), pp. 323-339, [10.1177/0038038513490356 ↗](#)

[View in Scopus ↗](#) [Google Scholar ↗](#)

[Wolfe, 2011](#) C. Wolfe

### Moving forward, kicking back: the animal turn

Postmedieval, 2 (2011), pp. 1-12, [10.1057/pmed.2010.46 ↗](#)

[Google Scholar ↗](#)

[Zeisel et al., 2016](#) J. Zeisel, B. Reisberg, P. Whitehouse, R. Woods, A. Verheul

### Ecopsychosocial interventions in cognitive decline and dementia: a new terminology and a new paradigm

Am. J. Alzheimers Dis. Other Demen., 31 (2016), pp. 502-507, [10.1177/1533317516650806 ↗](#)

[View in Scopus ↗](#) [Google Scholar ↗](#)

[Zelenski and Nisbet, 2014](#) J.M. Zelenski, E.K. Nisbet

### Happiness and feeling connected: the distinct role of nature relatedness

Environ. Behav., 46 (2014), pp. 3-23, [10.1177/0013916512451901 ↗](#)

[View in Scopus ↗](#) [Google Scholar ↗](#)

---

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2022, European Countryside

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2022, The Routledge Handbook of Methodologies in Human Geography

## Exploring the Effects of the Human–Animal Relationship on Care-Farms in the Context of Trauma Histories

2022, Anthrozoos

## Can Physical Activity Support Grief Outcomes in Individuals Who Have Been Bereaved? A Systematic Review

2021, Sports Medicine - Open

- 1 At the time of this study, the care-farm did not have capacity for participants to stay overnight, however, following indication from the community in question that this would be valuable, investment in onsite capacity has been made in order to enable this.
- 2 And perhaps here, [Zeisel et al.'s \(2016\)](#) term, ecopsychosocial might be more applicable.

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