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RESEARCH ARTICLE

Trees for Climate Change, Biodiversity and People

Growing trees on farms: Navigating the goals and values of farmers

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Abstract

1. Agricultural landscapes represent critical contexts for advancing policy objectives related to tree cover expansion. This paper explores how farmers' values influence their willingness or ability to grow trees on farms.
2. Research is based on 49 interviews and two focus groups with farmers in England and draws on two social science research traditions to devise an analytical framework based on four value orientations—instrumental, relational, expressive and intrinsic.
3. Analysing the data through the lens of these value orientations reveals how tree growing both aligns with and diverges from farmers' values. While growing trees is not a primary occupational goal for most farmers, neither is it inconsistent with the worldviews of farmers navigating the realities of an agricultural landscape increasingly oriented towards the provision of public goods.
4. Instrumental values, particularly economic considerations, play a prominent role in farmers' decisions about growing trees. However, relational and expressive dimensions—including affiliations with particular trees, landscape aesthetics and opportunities for personal fulfilment—significantly shape farmers' perspectives. Intrinsic values, linked to an appreciation for the natural world and the farming way of life, further enrich these dynamics.
5. *Policy and practice implications.* Our findings emphasise the importance of engaging with the full spectrum of values that underpin farmers' decision-making about trees. The four value orientations provide a framework for understanding where, how and *why* trees matter to farmers. Policymakers and practitioners can use this framework to align initiatives, communications and support mechanisms with farmers' priorities, fostering greater integration of trees into agricultural landscapes.

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KEYWORDS

agriculture, England, farmer decision-making, farmer values, tree planting, trees on farms, values, woodland creation

1 | INTRODUCTION

Amid global efforts to increase tree cover, it is easy to obscure the highly situated and differentiated contexts in which this occurs. Social scientists have rightly emphasised the importance of attending to the 'local socioecological contexts' in which tree planting goals are set (Holl & Brancalion, 2020, p. 580) to ensure that benefits are maximised and trade-offs minimised. Success hinges, in part, on planting 'in the right place' (Staddon et al., 2021), but alongside environmental considerations, it is important to engage with the values individuals and communities hold in relation to trees and tree planting. Since individual and social values strongly influence action and motivation (Hitlin & Piliavin, 2004; Kluckhohn, 1951), understanding stakeholder values is vital for effective policy development. Here, we argue agricultural environments present an important social-ecological context for examining how tree-related policy agendas can better account for the value systems and practices of land managers.

Contemporary approaches to natural resource management highlight trees as key mediators of 'ecosystem services' (Potschin et al., 2016). Trees provide wildlife habitats, sources of sustenance and fuel, support for livelihoods and spaces for recreation and play. Research on these benefits spans diverse scales and contexts, from urban street trees (Tan et al., 2021) and city neighbourhoods (Nyelele et al., 2019) to agricultural and forested landscapes regionally and globally (Kuyah et al., 2016; Teixeira et al., 2019). Recent environmental discourse also emphasises the role of trees as carbon stores (Bastin et al., 2019), positioning growing trees as a cornerstone of climate mitigation strategies (IPCC, 2019). A broader trajectory of work in the social sciences and humanities explores the symbolic value of trees and their agency in the making and remaking of landscapes, places and environments (Cloke & Jones, 2002; Rival, 1998). Thus, as both natural and social entities, trees offer compelling insights into people's relationships with nature and society.

In the global north, environmental concerns have been steadily incorporated into farmers' management practices through the prescriptions and incentives of agri-environment schemes (AES) (Buller et al., 2017; Potter, 1998). However, a focus on trees within the farmscape is marginalised within a broader narrative of agri-environmental change, primarily centring on understanding styles and modes of participation in AES and improving uptake (Fish et al., 2003; Ingram et al., 2013; Wilson & Hart, 2001). Where research does foreground trees, it typically focuses on woodland creation, from behavioural, economic or agronomic perspectives (Valatin et al., 2016). Socio-psychological approaches, for example, explore how farmers' perceptions, attitudes and beliefs influence their motivation to adopt agroforestry (Duesberg

et al., 2013; Oduro et al., 2018; Zubair & Garforth, 2006). These studies demonstrate that farmers' decisions regarding tree planting are shaped by a complex array of economic, social and structural factors, suggesting that values are significant influencers in the decision-making process. This is important because it is widely recognised that financial incentives alone are insufficient to deliver agri-environment objectives (Torabi et al., 2016; Westaway et al., 2023). With mounting pressures on the farming industry, there is a need to design tree cover expansion schemes that account for farmers' motivations and values (Staddon et al., 2021; Swart et al., 2023; Westaway et al., 2023). Trees on farmland encompass a diversity of forms, including woodland, woodlots, hedgerows, in-field trees, lone trees, avenues, shelter belts and agroforestry systems. Given this diversity, we lack understanding of how trees might be viewed as significant (or not) in the broad context of agriculture and farmer behaviour, and how values relating to trees vary according to their configuration within the farm landscape.

In this paper, we explore how farmers' values impact their willingness or ability to grow trees. We understand values as what people consider good, important and desirable in their lives (Graeber, 2001), operating on the assumption that values are a crucial component in understanding farmers' decision-making processes, and that a wide range of values influences farmers' behaviours. We use the term 'growing' trees to cover planting trees and natural colonisation and regeneration, and the term 'planting' where we are talking specifically about the act of planting trees.

Our empirical focus is on England, where policy interest in trees straddles wider developments in agricultural policy reform. This includes the growing prominence of trees within governmental efforts to reimagine financial support for farmers from the perspective of public good provision, such as nature restoration and flood mitigation, through the mechanisms of the new Environmental Land Management schemes (UK Government, 2018). Alongside this agricultural policy context, the UK government's commitment to achieving net zero carbon emissions by 2050 and its 25 Year Environment Plan underscores the crucial role of trees in advancing nature recovery and climate goals. The Committee on Climate Change (2020) has recommended increasing tree cover in the UK from 13% to 17% by 2050, requiring at least 30,000 hectares to be established annually. It follows that agricultural land will be a key arena for realising these targets.

Drawing on in-depth qualitative research with farmers from different backgrounds, we explain how farmers' views on growing trees are enacted on a range of instrumental, expressive, relational and intrinsic grounds. We argue that while policy discourse tends to frame tree growing primarily as an instrumental concern, viable pathways to tree cover expansion must take account of

the wider set of values in which these instrumental concerns are embedded.

2 | FARMER VALUES AND TREE GROWING

In this section, we situate our investigation within a broader conceptual frame, drawing on two traditions of research that seek to understand the determinants of farmer and land manager behaviour. Firstly, a body of rural social science which has sought to understand farmer values from the perspective of the sociology and geography of agricultural change. Here, the primary focus is farming systems, of which environmental issues are but one part. Secondly, a tradition of conservation social science which has sought to understand farmer values in relation to their role in transforming the natural world, not least with respect to the management of biodiversity and ecosystem services. Here, the focus is on processes of environmental change, within which farmers are construed as key actors due to their roles as land managers and custodians. These two traditions offer complementary perspectives for exploring farmers' values vis-à-vis their willingness and ability to grow trees.

In the context of rural social science, Gasson's (1973) study of the occupational goals and values of farmers represents a seminal contribution to behavioural research in Anglophone rural sociology and agricultural geography. Gasson's work queried the prevailing view of farmers' behaviour as either passive responses to the larger political economy of agriculture or as adhering to the normative tenets of neo-classical economic theory (Bowler, 1992; Ilbery, 1978). Instead, farmers were conceived more holistically: as thinking, feeling individuals whose goal setting and behaviour is underpinned by a range of values. For Gasson, the distinction between farmer goals and values is one between concrete efforts to achieve desirable future states (goals) and more abstract questions regarding what is considered worthwhile and important (values). These values were understood to be 'cultural products' expressed as individual value 'orientations', a terminology influenced by the work of Kluckhohn (1951), which sought to show how universal human values come to be embedded in, and differentiated through, cultural beliefs and practices (see also F. R. Kluckhohn & Strodtbeck, 1961). In the cultural context of farming occupations, Gasson suggested these orientations encompassed:

- An *instrumental orientation*, acknowledging the continuing importance of values arising from the economic relations of farming, such as maximising income.
- A *social orientation*, focusing on the interpersonal context in which values are reproduced, such as belonging to a (farming) community.
- An *expressive orientation*, concerned with values related to personal fulfilment in work, such as the chance to be creative and original.
- An *intrinsic orientation*, pertaining to values arising from the act of work itself, such as enjoyment of particular work tasks.

This cultural context to farming has undoubtedly changed since Gasson's formulation, where a key focus was on understanding the character, causes and consequences of the industrialisation of agriculture among global north producers; the so-called 'treadmill' (Ward, 1993). Perhaps unsurprisingly for Gasson's time and disciplinary context, the environmental dimension of farming is submerged within the focus on farming as a valued occupation. The closest approximation of an environmental value is an acknowledgment that farmers may have a 'preference for a healthy, outdoor, farming life' and the creation of 'congenial' surroundings (Gasson, 1973, p. 527). While Gasson's work does not explicitly address environmental concerns, it provides some suggestions for how we might connect willingness and ability to grow trees with the diverse values associated with farmers' inclinations to farm. For instance, alongside economic realities and rationalities we might ask how growing trees aligns with what Gasson describes as the 'prestige' and 'pride' farmers derive from their work, the importance they place on 'purposeful activity' and 'meeting a challenge', and their interest in exercising 'special abilities and aptitudes'. In other words, Gasson's work is generative of a set of considerations about how the act of growing trees may be understood as a function of occupational values.

The environmental context of this rural social science tradition emerges more explicitly in conjunction with changing economic arrangements for agriculture, particularly in the UK, not least the gradual transition away from subsidies and price support for intensive food production systems from the late 1980s onwards. Understanding farmers' attitudes and behaviours in terms of the uptake of agri-environment schemes has been an enduring concern (Fish et al., 2003; Ingram et al., 2013; Morris & Potter, 1995), intersecting with wider debates about what it means to be a 'good' farmer (Wheeler et al., 2018). Here, rural social science explores the deeper processes of socialisation and cultural identification that orientate farmers towards particular activities (Burton, 2004; Burton et al., 2020). From this starting point, farmers are shown to gain symbolic capital (Bourdieu, 1986) from demonstrating skilled role performance, which is evident to themselves and other farmers in the visual representations of their practices and often tied to the farmer's identity as a producer. In applied rural social science, the dynamics of being a 'good' farmer are central to models of farmer decision-making, particularly in attempts to understand why farmers may be resistant to change (Burton et al., 2008). Following this reasoning, the question of tree growing on farms is partly a question of whether farmers are being asked to revise perceptions of themselves; farmers may resist the transitions implied by these new environmental agendas on social, cultural or moral terms, even when they may be financially advantageous. Yet, since symbolic capital is a dynamic process that can evolve over time (Riley, 2016; Sutherland & Darnhofer, 2012), it follows that growing trees could also become a means by which farmers generate new forms of symbolic value. There is already some evidence that tree growing may provide contexts in which farmers gain prestige and recognition among their peers (Burton & Paragahawewa, 2011).

We complement this rural social science reading of farmers' values with traditions of work emerging from conservation social science. The consideration of diverse values about and of nature represents a key area of work in the conservation arena and has been subject to concerted treatment within global accounts of environmental change, most recently and notably summarised through the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES, 2022).

As Chan et al. (2025, p. 1273) explain, attending to the multiple values of nature has been energised by a recognition that economic approaches to environmental valuation are 'insufficient to enable or inform transformative change toward sustainability', a point that echoes the slavish adherence to neo-classical economic theory found so wanting by Gasson in rural social science. As primary agents in the interactions between people and nature, farmers remain important subjects of empirical concern in considering these economic and more-than-economic considerations (e.g. Byfuglien et al., 2024; Chapman & Deplazes-Zemp, 2024; Klebl et al., 2024). In its state-of-the-art review of these values, IPBES does not categorise farmers occupationally, but rather as members of 'indigenous people and local communities'. This conflation of farmers with Indigenous peoples and local communities is problematical with reference to land managers situated in the global north, but their general premise that farmers are individuals and groups who 'have their identity, livelihoods and knowledge systems usually directly tied to nature' (2022, p. 20) is important. From this perspective, farmers' values emerge from a particular register of 'worldviews', that is, the 'lenses through which individuals and social groups perceive, think about, interpret, inhabit and modify the world' (2022, p. 49). These worldviews are deeply rooted in the 'cultural traditions' of farming and influence both the broad values people hold towards the world and the specific values people develop in reference to nature.

According to this logic, farmer values manifest themselves in three primary ways:

- *Intrinsic values*, which are associated with the inherent worth or importance of nature.
- *Instrumental values*, relating to the ends which nature serves.
- *Relational values*, arise from the specificity of people's relationships with the non-human world.

Although the focus of IPBES is summative and generalistic with respect to valuing nature across diverse constituencies of people, like the work of Gasson (1973), this framing provides a good starting point for hypothesising how a conservation-oriented tradition might understand farmers' values in relation to particular environmental behaviours, such as growing trees. A key question is how growing trees can be aligned with the values that shape farmers' worldviews, and how these practices relate to the intrinsic, instrumental and relational values farmers specifically express in relation to nature. The act of growing trees might be positioned as a means to realise the economic goals of the farm business, or it may be embedded in farmers' judgements about the inherent worth of the natural

world. Furthermore, it may reflect farmers' capacity and inclinations to develop virtuous relationships with trees as elements of the non-human world, transcending the somewhat simplistic construction of intrinsic or utilitarian motivations towards nature (Justus et al., 2009). From this relational perspective, trees become objects of the farmer's 'ethic of active care' (Chapman et al., 2019, p. 470), acting as repositories of memory and symbols of deeply personal and emotional bonds with landscapes. Work in the agricultural and rural sphere is now emerging that approaches land manager actions as part of this broader relational field, with Riechers et al. arguing that 'a better understanding of relational values could be particularly important in a context of landscape change' (2021, p. 1043).

Although differing in focus, we suggest there is an important correspondence, both conceptually and linguistically, between the work of rural and conservation social science in their understanding of farmers' values. This correspondence provides a useful framework for examining values specifically in relation to the act of growing trees. Indeed, the notion within conservation social science that farmers express culturally informed 'worldviews' (IPBES, 2022) bears similarity with the logic of 'value orientations' that inform questions of occupational value (e.g. Gasson, 1973), as well as broader efforts to explain farmer behaviour in terms of normative appeals to 'good farming' (e.g. Burton et al., 2020). Equally, the constructs of intrinsic, instrumental and relational values used to define the 'specific' values of nature are analogous to the intrinsic, instrumental and social values that define the value 'orientations' of farm work. Thus, our study is based on a conceptual framework that integrates these two academic traditions, as illustrated in Figure 1. The framework makes the distinction between intrinsic and instrumental values, which guide the explanatory logic of both traditions. It recognises the potential for tree growing to be an expressive endeavour, and it duly expands Gasson's social value orientation to encompass virtuous relationships with trees, which we now term 'relational' (Chan et al., 2016; Klain et al., 2017). We use this framework to interrogate empirical work with farmers on values and trees.

3 | METHODS

Empirical research was conducted in two phases: the first allowing us to identify thematic areas and the second focusing on deepening our understanding and specifically exploring how they relate to trees. Our research was positively assessed by Forest Research's Research Ethics Committee (ID 14-2024). All participants received a participant information sheet and completed an online consent form.

3.1 | Phase 1

Phase 1 consisted of 28 interviews and two focus groups conducted between January and July 2022, involving 33 farmers. Research initially concentrated on two case study regions in northern England: North Yorkshire (seven interviews, one group, predominantly upland

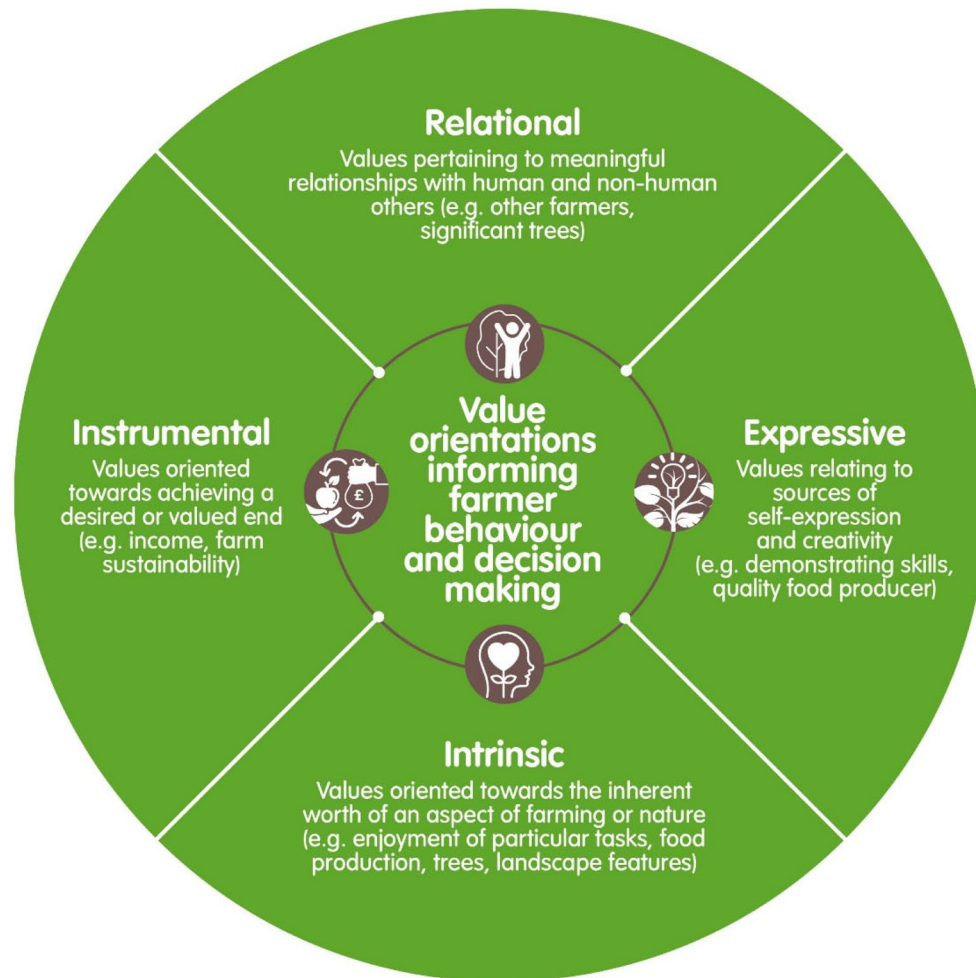


FIGURE 1 Four value orientations informing farmer behaviour and decision-making.

grazing livestock farmers) and Cumbria (12 interviews, one group, mainly dairy and upland grazing livestock farmers). Members of the project advisory group (policy and research professionals from Defra, Forestry Commission and Natural England) facilitated initial connections, and local farm advisors assisted with participant recruitment. To broaden our sample, we conducted an additional nine interviews across England, recruiting through social media and Farmer Cluster groups (organisations connecting local farmers).

We employed a purposive sampling strategy to identify the 'right' participants, ensuring we included farmers from diverse contexts and backgrounds (Guest, 2014). Recognising the potential for self-selection bias, we continually assessed the sample using six criteria: farmer age, length of time farming, farm business type, tenure, previous AES participation and farm size. We were then able to adapt our approach to meet any gaps.

Interviews lasted between 60 and 90 min and were conducted by phone or video call due to COVID-19 restrictions, making farm visits challenging. Although in-person interviewing is arguably more conducive to effective research (e.g. enabling researchers to better read and adapt to non-verbal cues and build rapport), research in this area is inconclusive. Lobe et al. (2022) argue that group-based

formats, rather than individual interviews, are more challenging to recreate virtually. Virtual interviewing may potentially exclude individuals lacking technological competence or access and can lead participants to experience digital fatigue faster than in-person interviewing (Keen et al., 2022). The option of telephone interviews helped reduce barriers to participation and provided opportunities to speak to a wider range of farmers than face-to-face interviews.

Interviews and focus groups were professionally transcribed. Discussions focused on understanding participants' farming contexts, their broad values, management approaches and objectives, but also more specifically how these values and approaches relate to growing trees on farms. We also asked explicitly about their ideas of being a 'good farmer' and how trees on farms fit with this conception.

Analysis initially took an inductive approach following Braun and Clarke (2006). Four researchers coded the 28 interviews and two focus groups using NVivo qualitative research software, focusing on what farmers value and why. After comparing and rationalising codes, we identified themes by grouping related codes in a mind map and by drawing connections between codes. This process led to the development of seven thematic areas of significance, which guided our research in Phase 2. As we coded the final few interviews, we

noticed that few new themes were emerging, indicating we were approaching 'theoretical saturation', often seen in qualitative research with non-probabilistic samples as an indication of a sufficient sample size (Guest, 2014).

3.2 | Phase 2

Phase 2 involved interviews with nine dairy farmers and 10 cereal farmers between January 2023 and February 2024. The focus on these farm business types was agreed with our project advisory group, given their relatively high land coverage and the underrepresentation of arable farmers in our initial sample. Recruitment was carried out by reaching out to participants from a farmer survey (part of the same research project) who had expressed interest in

TABLE 1 Farmer sample criteria and numbers.

Criterion	Category	Number	
		Phase 1	Phase 2
Age	<36	5	0
	36–50	8	6
	>50	20	13
Gender	Male	23	17
	Female	10	2
Time farming	Long time (responding 'family established' or '1st generation established' [Phase 1] OR over 10 years [Phase 2])	26	17
	New to farming (responding 'family new' or '1st generation new' OR under 10 years [Phase 2])	5	2
	No response	2	0
Farm business type (some farmers reported multiple types)	Arable—General cropping or cereals	3	10
	Pastoral—LFA Grazing	16	0
	Pastoral—Lowland grazing	4	0
	Pastoral—Dairy	9	9
	Mixed/Misc	2	0
Tenure	Poultry	1	0
	(Predominantly) Owned	10	12
	(Predominantly) Rented	5	3
AES participation	Mixed	18	4
	Yes	28	16
	No	4	2
Farm size	No response	1	1
	<100ha	9	1
	>100ha	24	18

participating in further research. Table 1 shows a breakdown of our full sample across both research phases.

The full dataset (from Phases 1 and 2) was coded using the seven themes as a deductive analytic framework, which provided a useful thematic structure of key priorities for farmers. This involved revisiting the data from Phase 1 to ensure consistency of coding. We then interrogated the themes through the four value orientations framework to explore how, and in what ways, farmers' concerns regarding growing trees on farms are manifested through the broader values they hold in relation to farming, farm landscapes and environmental protections.

4 | FINDINGS: VALUE ORIENTATIONS AND TREE GROWING

4.1 | Instrumental values

Our findings suggest that inclinations to grow trees intersect strongly with the instrumental rationalities governing enterprise behaviour. Farmers openly speculated on the potential benefits and trade-offs between growing trees and food production. For some, the prospect of growing trees was construed as conflicting with prevailing economic objectives. Ian, a dairy farmer in the Southwest, explained, 'It's bound to have influence on the fields and [...] on the production of those fields; how much grass they produce and how much milk we produce'. At its most extreme, tree planting was likened to the stripping and theft of productive land assets. Thus, Henry, a dairy farmer in the Northwest, boldly suggested that 'it's nicking land', further adding, 'there're no [economic] benefits to the farm planting trees; its only downsides'.

Yet, the expression of instrumental logics was rarely so dichotomous and emphatic. Rather, farmers actively and explicitly speculated on the possibility of incorporating tree growing into various enterprise scenarios and for different purposes. In this context, trees were non-exceptional with respect to the economic goals of farming and needed to be evaluated in those terms: 'If we're going to be planting more trees in productive land, then the trees should be productive' (Alistair, poultry, Cumbria). In making these instrumental arguments, farmers commonly regarded trees as playing important roles within existing farming systems, most notably providing 'shelter and shade' for livestock. Others considered growing trees as a way to create value out of marginal land. As William, a dairy farmer in Cumbria, put it:

A lot of people have bits of farm which you try and farm it because it's there, but it's a pain in the arse. It's where you're going to get stuck, it's where your crops are not going to grow ... I think there's a huge, missed opportunity with that for planting trees.

While some farmers speculated about the challenges of transitioning to systems where the instrumental value of trees could be actively harnessed and integrated into new economic practices, for others, this prospect was bewildering: 'You start putting in fruit trees, who is picking those? Where are we selling those apples or whatever it is? They're

putting in nuts or something like this, again, you need to find a market for all this' (Murray, cereals, Southeast).

In general, farmers conveyed a sense of cautiously executed marginal decision-making where the economic costs and benefits of food production over tree growing were being continually negotiated. As Darren and Jackie, market gardeners from Southern England, suggested, planting trees was the casualty of a straight-forward economic calculation, 'It wasn't going to generate enough to replace what we've lost; that would have been the problem'. As such, tree planting was considered as highly sensitive to the shifting dynamics of funding, garnered either directly through new markets or via state-sponsored agri-environmental schemes.

I haven't gone into a scheme because, at the minute, my sheep are performing well and they're offering me more income than the scheme would offer. In future, if that does change, I will have to look at planting more trees and going into a scheme.

(Michael, sheep, Cumbria)

At the end of the day if we're not making enough money out of food producing then we'd look at carbon farming, you know, because we've got to.

(Sarah, dairy, Southwest)

As these farmers suggest, the potential for growing trees is highly mediated by the way trees are constructed as objects of economic value. However, this was not necessarily reducible to the challenge of integrating, aligning and reconciling trees with the norms of food production, but with a range of ecological functions and services. As Miles, a sheep farmer in Yorkshire, puts it:

Planting trees, they do bring key advantages like reducing your soil erosion, shelter for livestock, protects communities living down the stream from any risk of flooding, then boosting diversity as well. It brings so many key advantages and benefits and obviously carbon as well.

Or, for Dean (grazing livestock, Cumbria):

I enjoy the fact that I have it [tree cover] on the farm. We've got a couple of—we call them becks round here—but streams that run through the farm and they've got quite a lot of tree cover on the curtilage. I've always wanted to keep trees on the beck banks. It stops erosion.

In conclusion, instrumentalism with respect to growing trees extends beyond their role as productive entities to include an appreciation of the diverse benefits trees might confer upon farm enterprises, the surrounding landscapes and the communities they are part of.

4.2 | Relational values

Importantly, these instrumental considerations can be seen to interact with relational understandings of trees within landscapes; in some cases, serving to reinforce instrumental logics, and in other cases tempering and overriding them. For instance, some respondents turned to specific trees in particular places to convey how trees accrued significance in their lives, with some respondents going to considerable lengths to protect valued trees, even at the expense of realising productive objectives. So, while some viewed growing trees as interfering with economic objectives, farming practices were also interpreted as threatening the existence of singularly important trees in a landscape:

There's only one tree—a big, ancient oak—it must have been there a couple of hundred years, fabulous looking tree. So, what we've done to protect that tree ... it's at the pointed end of a field. But we have taken that end of the field out of production. It's only an acre or so ... half a hectare. And it protects that tree and its roots from any cropping. It's been there a couple of hundred years; it can stay a bit longer I think.

(Aaron, cereals, East Midlands)

One of my favourite trees that I remember from childhood blew down last year and that was a bit of a shame. There are one or two other, what I would call iconic trees ... they're not particularly majestic specimens. We've got one gnarly twisted old rowan tree that is just pleasing, shall we say, at certain times of the year when it's hung with fruit, etc ... there are familiar trees and they're a presence throughout your lifetime one way or another. If you stop to look and think about them, yes, they are significant.

(Dean, sheep, Cumbria)

Relationships with particular trees in particular places therefore serve to amplify the tension between trees and the economic logics guiding farm enterprises, while also highlighting the cultural, historical and aesthetic importance of trees and farmers' relationships to them. When Allan, a dairy farmer from Southeast England, suggests, rather matter-of-factly, that trees 'don't contribute anything to the profit of the business, but we just like to see them', he is pointing to the wider, non-economic, more relational context in which arguments for tree growing could be made.

We see this logic echoed in diverse farming contexts: growing trees cleaves to a wider relational sphere in which aesthetic values, wildlife conservation, personal productivity and positive social relations are bound together and continuously reproduced.

If you're happy in your landscape, happy in your work, and it might be because you're surrounded

by nice green things that you're nurturing, then you are more productive. So, I don't know if I would be happy farming in a treeless world (laughs). I'm certainly glad of going into the shade on a day like today.

(Sheila, dairy, East Midlands)

I'm not planting up trees because I'm looking to get timber from them in 30-40 years' time or whatever. I'm planting them because I just enjoy them being there. I liked having the areas of trees, I think it's good for wildlife, it just enhances the area in general. So I think it's less financial probably and more just, yeah, for the good of the community if you want and for the good of me and my family.

(Murray, cereals, Southeast)

Interestingly, a small number of farmers felt that growing trees did not fit with or extend the character of their landscape. In these cases, aesthetic dimensions of landscape history reflect farmers' often deep attachment to and relationship with their locales. As Jane, a young mixed farmer in Yorkshire, suggested, 'We wouldn't even plant up an acre with trees because it wouldn't fit our landscape'. Or, as Ross, a sheep farmer also from Yorkshire, suggested, 'We don't want to wreck our dale; we don't want to make it look bad'.

Alongside these aesthetic dimensions of relationality, the importance of social relations in our findings is also worth emphasising. Much has been written about how farming values are mediated by professional norms and identities, through which notions of 'good farming' are culturally reproduced. Our interviews suggest that tree growing is both enabled and constrained by such dynamics of social identification. In some contexts, growing trees was construed as a practice that distinguished farmers as contributing to a public good. For example, George, a dairy farmer from the Southeast, explained that:

As a landowner and a farmer, I want to be seen to be doing the right thing. And so, I suppose, the tree planting initiative was really started by me belonging to the Tesco's sustainable dairy group and you got points then for planting trees, particularly outside your farm entrance, so that you portrayed this, you know, this very wholesome kind of farm.

However, in other cases, we turn full circle: growing trees was not only viewed as interfering with farming objectives at the economic level, but also as contradicting the guiding purpose and meaning of being a farmer. Elisa, a sheep farmer from Yorkshire, implored, 'Surely, we're about food production, not planting trees?' The instrumental benefits arising from growing trees could thus be overridden because they were seen to contravene deeply held notions of good farming. As Miles, a sheep farmer from Yorkshire, explained:

If we were to fill up all that land with trees and someone was to come to me and say, "I'm a good farmer", I would disagree because that's just re-wilding, it's not farming ... [Other farmers may see tree planting as] the easy way out ... going for the £10,000 a hectare paycheck.

In sum, alongside instrumental considerations, attitudes towards growing trees are implicated in how farmers define themselves in relation to one another and to their surroundings. Relational values often reinforce logics that position growing trees as inconsistent with, if not contravening, the economic imperatives of farming and dominant understandings of what it means to be a farmer. At the same time, these relational values highlight how growing trees can be aligned with positive identifications built around the provision of wider public goods, and close, affiliative relationships with individual trees on farms.

4.3 | Expressive values

Farming as a meaningful form of self-expression and personal fulfilment, described here as expressive value, can be seen as closely related to the instrumental values associated with farming, collectively contributing to farming as a 'way of life'. When considering farmers' views on growing more trees on their farms, the idea of growing trees did not immediately give rise to a sense of personal satisfaction or pride traditionally associated with farming objectives and, by extension, demonstrating the skills of a 'good farmer'. Farmers emphasised a duty to 'feed the nation' (Brian, dairy, Cumbria), with some suggesting that taking land out of food production is a 'scandal' (Ross, sheep, Yorkshire) or even a 'crime' (Josh, tenant sheep farmer, Yorkshire). Growing trees on farms was viewed in some cases as directly at odds with the 'skillset' of farmers, as Louise, a livestock farmer, put it: 'I guess most farmers would not see managing woodland or they wouldn't want to acquire a lot of woodland, because that's not where their skillset is'.

Importantly, pride and recognition of the skill and hard work demanded of farmers to fulfil their roles were articulated as 'a privilege' deserving of 'respect', suggesting that it is the activities inherent to farming itself that enable the strongest forms of expressive value:

It's probably the most privileged job you can be in ... quite literally feeding the nation.

(Jane, young mixed farmer, Yorkshire)

We've got to show respect for the people who actually put their time and sweat into making this environment as it is today.

(Samuel, sheep, Yorkshire)

In this context, growing trees shifts the role farmers play in the landscape and may challenge their ability to demonstrate good farming

through skilled work, thus limiting their potential for personal fulfilment. The potential for tree growing to be an expressive endeavour is thus both an opportunity and a challenge for farmers faced with current imperatives to incorporate more trees on their land. One arena in which this presented itself was in how farmers reflected on the renewed interest in hedges on farms, and deliberated on their future significance in terms of skills:

We've been doing the hedges for a long time. And yet, a lot of people have just sort of started on that journey ... I mean, there are a few neighbours still do it but they get contractors in. So, the skill has been lost, really. It only takes one generation to not do it and then they can't pass it on to the next. Because it is quite a skilled job, hedge laying ... that will bring problems in 10 or 15 years that these hedges are going to want laying.

(Phillip, dairy, Cumbria)

In articulating a commonly reported problem regarding hedge laying, Phillip went on to highlight an important aspect of realising new forms of self-expression through the new imperatives of tree planting. He explained farmers' reticence at seeking knowledge of hedgerow planting, stating that:

It isn't the sort of gung-ho, macho farmer type of thing to be doing. So, they will just sort of ask [indirectly] about how we're managing the hedge and where should they start and stuff.

New forms of agri-environmentalism, such as tree planting projects may not immediately appear to align with traditional farming norms—the 'goals and values' that Gasson highlighted as central to farming. Yet, regaining 'lost' skills (such as hedge laying) could be one avenue to invigorate the special abilities and aptitudes that enable satisfying self-expression, creating opportunities for 'pride and prestige' that, in some cases, were present in farmers' relationships with hedgerows:

We're very proud of our hedgerow network, we've got a really good hedgerow network, much of it is very old. There was not an enclosure act, so some of the hedges are probably 15th century onwards.

(Sheila, dairy, East Midlands)

Despite the challenges of finding expressive value in non-traditional farming activities, like increasing trees on farms, expressive value was evident in farmers' reports on how they were realising personal objectives in relation to more environmentally friendly practices. For many, it was evident that wider environmental discourses were being incorporated into farming decisions and valued as such, with trees holding a central role. In this regard, 'doing my bit' for nature may be understood as expressive value, where personal and social objectives

lead to a sense of fulfilment and satisfaction from achieving something worthwhile:

I think I make a positive impact. We've got trees in different stages of development. Okay, we've got mature trees, but we've got trees that are growing, so they're absorbing carbon. Where all the things that we're doing are positive for biodiversity, keeping the rides wide, encouraging butterflies, moths, you know, I think I'm doing my bit.

(Louise, grazing livestock, region not recorded)

I suppose I feel like I'm getting something out of doing it as well. It's not just a case of planting trees for planting trees' sake, but I feel like I'm benefitting. It's quite a tangible outcome. It's lovely, when the spring comes again and all the leaves start coming out on them. Some of them are now twice as high as the guards that are surrounding them, so you get this sense now that you've created a woodland. It's not just a field of grass with plastic poles sticking out of it, which is good.

(Peter, dairy, Cumbria)

The extent to which growing trees on farms contributes to personal growth and fulfilment is a dimension of farmer values that remains underexplored. It is significant nevertheless, as we find nascent forms of this in farmers' narratives. As farming increasingly becomes the focus for environmental agendas, it is interesting to observe how new avenues for self-expression may arise from this.

4.4 | Intrinsic value

The idea that growing trees may be a source of personal fulfilment leads to questions of intrinsic value, where farming activities are valued in their own right. According to Gasson, this includes farmers' preferences for a healthy, outdoor life, for engagement in purposeful, hardworking activities and the validation of a way of life that is independent and free from supervision. These intrinsic motivations were, for Gasson, the dominant set of values that characterised the farming role. While our research did not reveal farmers explicitly conceiving of growing trees in these terms, intrinsic value surfaced when trees were understood as integral components of the wider natural world and significant beyond a prescribed human benefit. At one level, it was common for farmers to make general allusions to the value of trees for the environment. They speak, for instance, of the role trees play in 'increasing', 'enhancing' and 'improving' nature and biodiversity, thus recognising the flourishing of natural systems as an end in itself. As Henry, a dairy farmer in the Northwest, stated: 'I like

planting trees; it's good for the environment'. Farmers sometimes also spoke of trees as companions in the landscape, as Peter, a dairy farmer from Cumbria, explained: 'I mean, I guess they're there sharing the landscape with us in a way, aren't they? They're part of it. They're a great part of that, and life's better for them being there'. Beyond these philosophical engagements with the place of trees, an appreciation for trees in their own right was often expressed through aesthetic judgements that were connected to trees' lifecycle through the seasons:

Then there are other trees that you just like to sit and look at, because as they sway in the wind or as they go from ... if they're deciduous from no leaves to their first leaves to maybe, you know, a crop of ... I don't know, like an ash tree.

(Darren, market garden, Southern England)

More generally, farmers conveyed a strong aesthetic sense of the value of trees, seeing them as intrinsically 'good to look at'. As Patrick (organic mixed farming, Yorkshire) said, the 'benefit is just looking at them really [...] it's the joy of life really'. Such sentiments are close to the 'connection of care for the natural world' that O'Neill (1992, p. 133) suggests is central to an ethics of intrinsic value. Farmers' appreciation for the worth of trees as an aesthetic (natural) entity was also described in terms of their benefits to livestock and wildlife. This highlights the multiple forms of intrinsic value that trees can embody:

The intention was very much to introduce more hedgerows and more trees, freestanding trees in the pastures. Both as shelter, as landscape features, also as something for the livestock to browse and to gain nutrition from.

(Alexander, grazing livestock and previously arable, East)

I'm well up for trees being planted ... Helping the wildlife out ... sucking in a bit of carbon at the same time, but then producing good healthy food as well for us.

(Miles, grazing livestock, Yorkshire)

Similar to the earlier appeals to the 'gung-ho, macho kind of farmer thing', the potential for growing trees to contribute to the inherent worth of farming is often complicated by the overlapping of instrumental, expressive and relational discourses that arise when speaking of farming as a meaningful act or a way of life.

5 | DISCUSSION

Within UK agricultural policy, trees are widely regarded as instruments for advancing sustainable farming and land management

(Defra, 2024). However, recurring concerns around the UK's ability to produce food mean that extending environmental protections through farming and maximising farm productivity do not immediately make for easy bedfellows. Internationally, policymakers are facing growing questions around land use priorities and how best to balance food production with environmental imperatives. This issue manifests in multiple contexts, from debates about the sustainable intensification of agriculture to issues of land sparing and land sharing, and into wider agendas for ecosystem restoration in which calls to grow more trees have increased.

While a substantial body of literature explores the complexities of farmers' non-economic motivations and decision-making, the policy and practical application of these insights remain a significant challenge (Hill & Bradley, 2023). Against this background, our research demonstrates the range of things farmers care about in relation to trees and how they fit into wider worldviews, but also some of the challenges and opportunities that arise for policy initiatives aimed at increasing tree cover on farms. Values are complex and interconnected. Adopting the lens of the four orientations has allowed us to retain and reflect this complexity without overplaying and overformalising the distinctions between different aspects of value. Overall, we suggest an instrumental value orientation remains important in farmers' worldviews, a finding echoing related scholarship on agroforestry and afforestation (Fleming et al., 2019; Kaine et al., 2023). However, we also argue that this needs to be interpreted alongside other value orientations, which can both reinforce and challenge this mindset.

Running a good or successful farm business is not solely about financial viability but also about how to operate in a 'good' or 'right' manner. In much the same way that Gasson demonstrated the importance of non-economic drivers, our findings show that tree growing sits outside the prevailing economic logic of farm enterprises. This alternative logic interacts powerfully with the relational and expressive dimensions of farmer identity and of farmers' recognition of trees' intrinsic value. While growing trees can be viewed as inconsistent with the strategic and marginal decisions of established business models—interfering with productive spaces, presenting uncertainties and risks vis-à-vis new enterprises (e.g. growing fruit or nut crops)—this practice can also be understood as relationally important to farmers. Fleming et al., for example, demonstrate how trees are considered 'essential' by many farmers and important to plant 'regardless of time, effort or cost' (2019, p. 9). Contrary to prevailing concerns that tree growing undermines productivity, farmers in our study displayed significant appreciation of and affiliations for trees within their farmscapes. The value of particular trees in particular places, for instance, was commonly asserted, both as objects of beauty and as familiar companions in the landscape. The aesthetic values expressed by farmers in this study remain significant but under explored. Aesthetic experience has been shown to be closely related to intrinsic and instrumental values of nature, which, in turn, influence social acceptance of environmental management programmes (Ford et al., 2014). A fruitful avenue for further research is how the aesthetic considerations

might be factored into tree planting initiatives, for instance, through greater recognition of, and appeals to, the importance of landscape character.

Growing trees also reinforced farmers' social identity when, as members of formal networks, they were incentivised to plant trees for the public good. This appreciation for trees on farms extends beyond personal benefits to livestock, wildlife and the land itself. It encompasses widely recognised notions of care inherent to the stewardship identity of farming (Chapman et al., 2019), and points to the importance of 'co-benefits' to farmers when participating in environmental schemes (Torabi et al., 2016).

Investment in and support for professional social networks or peer learning programmes can be a key enabler of participation in environmental management programmes (Mould et al., 2020; Reid, 2017), offering farmers opportunities beyond the institutionalised frameworks of government schemes. Furthermore, many farmers have accommodated the public goods narrative within which tree planting is situated, recognising the potential for alternative income sources. Such narratives were cited by participants in decisions about growing new trees, re-establishing hedgerows and appreciating the intrinsic benefits of trees. As such, personal fulfilment, enjoyment or satisfaction derived from these activities creates opportunities for self-expression through new skills and initiatives that ally with environmental policy agendas and farming priorities. In such cases, environmental values can become established norms for farmers (Wheeler et al., 2018).

Understanding farmer behaviour through a values lens recognises the competing and coalescing values at play and presents an important contribution to research and policy interested in up-scaling tree planting on farms. One important avenue for future research lies in the application of these findings to a focus on the intentions of farmers to become involved with policy programmes in the first place. Barriers to tree planting may not be the most effective vehicle for engaging farmers (Kaine et al., 2023); shifting attention from understanding values as a way of addressing barriers to understanding how values and intentions interact might save the costs of policy efforts to 'change' behaviours, as noted in Kaine et al.'s (2023) research on farming in New Zealand. As we found, farmers may value and embrace trees but also at times actively oppose them where they are deemed financially impractical or are not seen to 'fit' with the character of a landscape. These sites of conflict illuminate the nuanced decision-making processes farmers employ when navigating business concerns, care for the land and intimate knowledge of the landscapes they farm, and contribute to policy formation by removing assumptions that barriers are simply hurdles to overcome. Overall, an empirical focus on the way values play out across different types of tree contexts on farms will bring more nuance to our understanding of farmer receptivity to growing trees.

In England, the intersection of these different value orientations suggests a trajectory of farmer behaviour well-aligned with policy ambitions to grow more trees on agricultural land, provided that policy is able to 'meet' farmers on this basis. As Chapman et al. (2019) and others (Fleming et al., 2019) argue, programmes are more likely

to succeed where they resonate with farmers' values, by enabling the types of environmental activities farmers value, delivered in ways that appreciate local and individual contexts. This often means working through trusted advisors and using language that aligns with the values farmers prioritise. Such approaches are essential to fostering the changes required to increase tree cover on farms and achieve socio-environmental policy imperatives in England and beyond.

6 | CONCLUDING REMARKS

Agendas for tree growing provide a new context for a longstanding challenge in agri-environmentalism: how to encourage farmers to integrate environmental objectives into systems of food production. While growing trees is not a primary occupational goal for farmers today, neither is it inconsistent with the values and worldviews of farmers who are navigating the realities of a changing agricultural landscape. As these environmental agendas become embedded and normalised within farming, it is worth noting the new avenues for self-expression that tree growing engenders in response. Farmers' evident appreciation for and affiliation with trees highlights their role as more than just policy instruments; trees are also meaningful relationships within farming systems.

The challenge for those involved in promoting the growing of trees on farms lies in conveying how growing trees aligns with the things farmers care about while supporting their capacity to integrate trees into their farming systems. In other words, recognising and understanding values helps identify opportunities for where policy can align with things that matter to farmers. By doing so, tree cover expansion can move from a perceived external imposition to an accepted and valued component of farming practice.

AUTHOR CONTRIBUTIONS

Stephen McConnachie, Maddy Pearson and Grace van der Wielen conceived the ideas and designed the methodology for the empirical research; Stephen McConnachie, Maddy Pearson and Grace van der Wielen collected the empirical data; Stephen McConnachie, Maddy Pearson, Harry Marshall and Grace van der Wielen analysed the empirical data; Robert Fish, Holly Harris and Stephen McConnachie led the conceptual development of the paper, while all authors contributed to its evolution; Robert Fish, Holly Harris and Stephen McConnachie led the writing of the manuscript. All authors contributed critically to the drafts and gave final approval for publication.

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CONFLICT OF INTEREST STATEMENT

Robert Fish is a lead editor of *People and Nature* and a coordinating editor of the special feature on Trees for Climate Change, Biodiversity and People. Robert Fish was not involved in the peer review and decision-making process of this manuscript. The other authors report no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data were collected as interview transcripts. Participants did not provide consent to share transcripts outside of the research team. The resources required for Forest Research to anonymise the data and ensure compliance with data subjects' rights under the Data Protection Act (2018) and General Data Protection Regulations (GDPR) are not reasonable or proportionate at this time. As such, the risk of disclosure and potential harm to those individuals is high. Forest Research is currently working to ascertain how best to manage this data set, including the identification of an appropriate archive.

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REFERENCES

- Bastin, J. F., Finegold, Y., Garcia, C., Mollicone, D., Rezende, M., Routh, D., Zohner, C. M., & Crowther, T. W. (2019). The global tree restoration potential. *Science*, 364(6448), 76–79. <https://doi.org/10.1126/science.aax0848>
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood Press.
- Bowler, I. R. (1992). 'Sustainable agriculture' as an alternative path of farm business development. In I. R. Bowler, C. R. Bryant, & M. D. Nellis (Eds.), *Contemporary rural systems in transition, Vol. 1: Agriculture and environment* (pp. 237–253). CAB International.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Buller, H., Wilson, G. A., & Holl, A. (2017). *Agri-environmental policy in the European union*. Taylor and Francis.
- Burton, R. J. F. (2004). Seeing through the 'good farmer's' eyes: Towards developing an understanding of the social symbolic value of 'productivist' behaviour. *Sociologia Ruralis*, 44(2), 195–215. <https://doi.org/10.1111/j.1467-9523.2004.00270.x>
- Burton, R. J. F., Forney, J., Stock, P., & Sutherland, L. A. (2020). The good farmer: Culture and identity in food and agriculture. In *The good farmer: Culture and identity in food and agriculture*. Routledge. <https://doi.org/10.4324/9781315190655>
- Burton, R. J. F., Kuczera, C., & Schwarz, G. (2008). Exploring farmers' cultural resistance to voluntary agri-environmental schemes. *Sociologia Ruralis*, 48(1), 16–37. <https://doi.org/10.1111/j.1467-9523.2008.00452.x>
- Burton, R. J. F., & Paragahawewa, U. H. (2011). Creating culturally sustainable agri-environmental schemes. *Journal of Rural Studies*, 27(1), 95–104. <https://doi.org/10.1016/j.jrurstud.2010.11.001>
- Byfuglien, A., Hiron, M., & Milford, A. B. (2024). From values to actions in agriculture: A web of actors shape Norwegian farmers' enactment of relational values. *People and Nature*, 6(3), 1320–1333. <https://doi.org/10.1002/PAN3.10640>
- Chan, K. M. A., Balvanera, P., Benessaiah, K., Chapman, M., Díaz, S., Gómez-Baggethun, E., Gould, R., Hannahs, N., Jax, K., Klain, S., Luck, G. W., Martín-López, B., Muraca, B., Norton, B., Ott, K., Pascual, U., Satterfield, T., Tadaki, M., Taggart, J., & Turner, N. (2016). Why protect nature? Rethinking values and the environment. *Proceedings of the National Academy of Sciences of the United States of America*, 113(6), 1462–1465. <https://doi.org/10.1073/pnas.1525002113>
- Chan, K. M. A., Gould, R. K., Maller, C., Fish, R., Hails, R. S., & Gaston, K. J. (2025). The multiple values of nature show the lack of a coherent theory of value—In any context. *People and Nature*, 7(6), 1272–1285. <https://doi.org/10.1002/PAN3.70039>
- Chapman, M., & Deplazes-Zemp, A. (2024). Moving beyond stewardship to partnership with nature: How Swiss alpine farmers' relationships to nature and relational values are co-constituted. *Ecosystems and People*, 20(1), 2374757. <https://doi.org/10.1080/26395916.2024.2374757>
- Chapman, M., Satterfield, T., & Chan, K. M. A. (2019). When value conflicts are barriers: Can relational values help explain farmer participation in conservation incentive programs? *Land Use Policy*, 82(July 2018), 464–475. <https://doi.org/10.1016/j.landusepol.2018.11.017>
- Cloke, P., & Jones, O. (2002). *Tree cultures: The place of trees and trees in their place*. Routledge.
- Committee on Climate Change. (2020). *Land use: Policies for a Net Zero UK*. <https://www.theccc.org.uk/publication/land-use-policies-for-a-net-zero-uk/>
- Defra. (2024). *Spotlight on new actions: agroforestry and improvements to our trees and woodland offer*. <https://defrafarming.blog.gov.uk/2024/01/23/spotlight-on-new-actions-agroforestry-and-improvements-to-our-trees-and-woodland-offer/>
- Duesberg, S., O'Connor, D., & Dhuháin, Á. N. (2013). To plant or not to plant—Irish farmers' goals and values with regard to afforestation. *Land Use Policy*, 32, 155–164. <https://doi.org/10.1016/j.landusepol.2012.10.021>
- Fish, R., Seymour, S., & Watkins, C. (2003). Conserving English landscapes: Land managers and agri-environmental policy. *Environment and Planning A*, 35(1), 19–41. <https://doi.org/10.1068/a3531>
- Fleming, A., O'Grady, A. P., Mendham, D., England, J., Mitchell, P., Moroni, M., & Lyons, A. (2019). Understanding the values behind farmer perceptions of trees on farms to increase adoption of agroforestry in Australia. *Agronomy for Sustainable Development*, 39(1), 9. <https://doi.org/10.1007/s13593-019-0555-5>
- Ford, R. M., Williams, K. J. H., Smith, E. L., & Bishop, I. D. (2014). Beauty, belief, and trust. *Environment and Behavior*, 46(4), 476–506. <https://doi.org/10.1177/0013916512456023>
- Gasson, R. (1973). Goals and values of farmers. *Journal of Agricultural Economics*, 24(3), 521–542. <https://doi.org/10.1111/j.1477-9552.1973.tb00952.x>
- Graeber, D. (2001). *Toward an anthropological theory of value: The false coin of our own dreams*. Palgrave Macmillan. <https://doi.org/10.1057/9780312299064>
- Guest, G. (2014). Sampling and selecting participants in field research. In C. C. Gravlee & H. Russell Bernard (Eds.), *Handbook of methods in cultural anthropology* (2nd ed., pp. 215–250). Rowman & Littlefield.
- Hill, B., & Bradley, D. (2023). Goals and values of farmers revisited: Gasson fifty years on. *Journal of Agricultural Economics*, 75, 108–113. <https://doi.org/10.1111/1477-9552.12556>
- Hitlin, S., & Piliavin, J. A. (2004). Values: Reviving a dormant concept. *Annual Review of Sociology*, 30, 359–393. <https://doi.org/10.1146/ANNUREV.SOC.30.012703.110640>
- Holl, K. D., & Brancalion, P. H. S. (2020). Tree planting is not a simple solution. *Science*, 368(6491), 580–581. <https://doi.org/10.1126/science.aba8232>

- Ilbery, B. W. (1978). Agricultural decision-making: A behavioural perspective. *Progress in Human Geography*, 2(3), 448–466. <https://doi.org/10.1177/030913257800200303>
- Ingram, J., Gaskell, P., Mills, J., & Short, C. (2013). Incorporating agri-environment schemes into farm development pathways: A temporal analysis of farmer motivations. *Land Use Policy*, 31, 267–279. <https://doi.org/10.1016/j.landusepol.2012.07.007>
- IPBES. (2022). *Methodological assessment report on the diverse values and valuation of nature of the intergovernmental science-policy platform on biodiversity and ecosystem services*. P. Balvanera, U. Pascual, M. Christie, B. Baptiste, & D. González-Jiménez (Eds.). IPBES Secretariat. <https://doi.org/10.5281/zenodo.6522522>
- IPCC. (2019). *Climate change and land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (SR2)*. P. R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, ... J. Malley (Eds.). Cambridge University Press. <https://doi.org/10.1017/9781009157988>
- Justus, J., Colyvan, M., Regan, H., & Maguire, L. (2009). Buying into conservation: Intrinsic versus instrumental value. *Trends in Ecology & Evolution*, 24(4), 187–191. <https://doi.org/10.1016/j.tree.2008.11.011>
- Kaine, G., Edwards, P., Polyakov, M., & Stahlmann-Brown, P. (2023). Who knew afforestation was such a challenge? Motivations and impediments to afforestation policy in New Zealand. *Forest Policy and Economics*, 154, 103031. <https://doi.org/10.1016/j.forpol.2023.103031>
- Keen, S., Lomeli-Rodriguez, M., & Joffe, H. (2022). From challenge to opportunity: Virtual qualitative research during COVID-19 and beyond. *International Journal of Qualitative Methods*, 21, 16094069221105075. <https://doi.org/10.1177/16094069221105075>
- Klain, S. C., Olmsted, P., Chan, K. M. A., & Satterfield, T. (2017). Relational values resonate broadly and differently than intrinsic or instrumental values, or the New Ecological Paradigm. *PLoS One*, 12(8), e0183962. <https://doi.org/10.1371/journal.pone.0183962>
- Klebl, F., Parisi, A., Häfner, K., Adler, A., Barreiro, S., Bodea, F. V., Brönnimann, V., de Vries, J. P. R., Dos Santos, A., Hood, A. S. C., Melts, I., Popa, R., Vajna, F., Velado-Alonso, E., & Kernecker, M. L. (2024). How values and perceptions shape farmers' biodiversity management: Insights from ten European countries. *Biological Conservation*, 291, 110496. <https://doi.org/10.1016/J.BIOCON.2024.110496>
- Kluckhohn, C. (1951). Values and value-orientations in the theory of action: An exploration in definition and classification. In T. Parsons & E. A. Shils (Eds.), *Toward a general theory of action* (pp. 388–433). Harvard University Press. <https://doi.org/10.4159/HARVARD.9780674863507>
- Kluckhohn, F. R., & Strodtbeck, F. L. (1961). *Variations in value orientations*. Row, Peterson.
- Kuyah, S., Öborn, I., Jonsson, M., Dahlin, A. S., Barrios, E., Muthuri, C., Malmer, A., Nyaga, J., Magaju, C., Namirembe, S., Nyberg, Y., & Sinclair, F. L. (2016). Trees in agricultural landscapes enhance provision of ecosystem services in sub-Saharan Africa. *International Journal of Biodiversity Science, Ecosystem Services & Management*, 12(4), 255–273. <https://doi.org/10.1080/21513732.2016.1214178>
- Lobe, B., Morgan, D. L., & Hoffman, K. (2022). A systematic comparison of in-person and video-based online interviewing. *International Journal of Qualitative Methods*, 21. <https://doi.org/10.1177/16094069221127068>
- Morris, C., & Potter, C. (1995). Recruiting the new conservationists: Farmers' adoption of agri-environmental schemes in the UK. *Journal of Rural Studies*, 11(1), 51–63. [https://doi.org/10.1016/0743-0167\(94\)00037-A](https://doi.org/10.1016/0743-0167(94)00037-A)
- Mould, S. A., Fryirs, K. A., & Howitt, R. (2020). The importance of relational values in river management: Understanding enablers and barriers for effective participation. *Ecology and Society*, 25(2), 1–16. <https://doi.org/10.5751/ES-11505-250217>
- Nyelele, C., Kroll, C. N., & Nowak, D. J. (2019). Present and future ecosystem services of trees in the Bronx, NY. *Urban Forestry & Urban Greening*, 42(June 2018), 10–20. <https://doi.org/10.1016/j.ufug.2019.04.018>
- Odoro, K. A., Arts, B., Kyereh, B., & Mohren, G. (2018). Farmers' motivations to plant and manage on-farm trees in Ghana. *Small-Scale Forestry*, 17(3), 393–410. <https://doi.org/10.1007/S11842-018-9394-5>
- O'Neill, J. (1992). The varieties of intrinsic value. *The Monist*, 75(2), 119–137.
- Potschin, M., Haines-Young, R., Fish, R., & Turner, R. K. (2016). *Routledge handbook of ecosystem services*. Routledge. <https://doi.org/10.4324/9781315775302>
- Potter, C. (1998). *Against the grain: Agri-environmental reform in the United States and the European Union*. CAB International.
- Reid, R. (2017). Developing farmer and community capacity in agroforestry: Is the Australian master TreeGrower program transferable to other countries? *Agroforestry Systems*, 91(5), 847–865. <https://doi.org/10.1007/S10457-016-0039-4>
- Riechers, M., Balázs, Á., Engler, J. O., Shumi, G., & Fischer, J. (2021). Understanding relational values in cultural landscapes in Romania and Germany. *People and Nature*, 3(5), 1036–1046. <https://doi.org/10.1002/pan3.10246>
- Riley, M. (2016). How does longer term participation in agri-environment schemes [re]shape farmers' environmental dispositions and identities? *Land Use Policy*, 52, 62–75. <https://doi.org/10.1016/j.landusepol.2015.12.010>
- Rival, L. (1998). Trees, from symbols of life and regeneration to political artefacts. In L. Rival (Ed.), *The social life of trees: Anthropological perspectives on tree symbolism* (pp. 1–36). Berg. <https://doi.org/10.4324/9781003136040>
- Staddon, P., Urquhart, J., Mills, J., Goodenough, A., Powell, J., Vigani, M., Simmonds, P., & Rowe, E. (2021). *Encouraging woodland creation, regeneration and tree planting on agricultural land: A literature review*. NEERO20. Countryside and Community Research Institute Report to Natural England. <https://publications.naturalengland.org.uk/publication/4561957727502336>
- Sutherland, L.-A., & Darnhofer, I. (2012). Of organic farmers and “good farmers”: Changing habitus in rural England. *Journal of Rural Studies*, 28(3), 232–240. <https://doi.org/10.1016/j.jrurstud.2012.03.003>
- Swart, R., Levers, C., Davis, J. T. M., & Verburg, P. H. (2023). Meta-analyses reveal the importance of socio-psychological factors for farmers' adoption of sustainable agricultural practices. *One Earth*, 6(12), 1771–1783. <https://doi.org/10.1016/j.oneear.2023.10.028>
- Tan, X., Hirabayashi, S., & Shibata, S. (2021). Estimation of ecosystem services provided by street trees in Kyoto, Japan. *Forests*, 12(3), 1–21. <https://doi.org/10.3390/f12030311>
- Teixeira, F. Z., Bachi, L., Blanco, J., Zimmermann, I., Welle, I., & Carvalho-Ribeiro, S. M. (2019). Perceived ecosystem services (ES) and ecosystem disservices (EDS) from trees: Insights from three case studies in Brazil and France. *Landscape Ecology*, 34(7), 1583–1600. <https://doi.org/10.1007/s10980-019-00778-y>
- Torabi, N., Mata, L., Gordon, A., Garrard, G., Wescott, W., Dettmann, P., & Bekessy, S. A. (2016). The money or the trees: What drives landholders' participation in biodiverse carbon plantings? *Global Ecology and Conservation*, 7, 1–11. <https://doi.org/10.1016/j.gecco.2016.03.008>
- UK Government. (2018). *A green future: our 25 year plan to improve the environment*. <https://www.gov.uk/government/publications/25-year-environment-plan>
- Valatin, G., Moseley, D., & Dandy, N. (2016). Insights from behavioural economics for forest economics and environmental policy: Potential

- nudges to encourage woodland creation for climate change mitigation and adaptation? *Forest Policy and Economics*, 72, 27–36. <https://doi.org/10.1016/j.forpol.2016.06.012>
- Ward, N. (1993). The agricultural treadmill and the rural environment in the post-productivist era. *Sociologia Ruralis*, 33(3–4), 348–364. <https://doi.org/10.1111/j.1467-9523.1993.tb00969.x>
- Westaway, S., Grange, I., Smith, J., & Smith, L. G. (2023). Meeting tree planting targets on the UK's path to net-zero: A review of lessons learnt from 100 years of land use policies. *Land Use Policy*, 125(November 2021), 106502. <https://doi.org/10.1016/j.landusepol.2022.106502>
- Wheeler, R., Lobley, M., Winter, M., & Morris, C. (2018). "The good guys are doing it anyway": The accommodation of environmental concern among English and Welsh farmers. *Environment and Planning E: Nature and Space*, 1(4), 664–687. <https://doi.org/10.1177/2514848618817487>
- Wilson, G. A., & Hart, K. (2001). Farmer participation in agri-environmental schemes: Towards conservation-oriented thinking? *Sociologia Ruralis*, 41(2), 254–274. <https://doi.org/10.1111/1467-9523.00181>
- Zubair, M., & Garforth, C. (2006). Farm level tree planting in Pakistan: The role of farmers' perceptions and attitudes. *Agroforestry Systems*, 66(3), 217–229. <https://doi.org/10.1007/s10457-005-8846-z>

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

Data S1. Interview guide.

Data S2. Interview guide—Cereal farmers.

Data S3. Interview guide—Dairy farmers.

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