

Exploring Opportunities for New Woodlands at the Landscape Level

Towards a formal method for South Scotland and beyond



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1. Introduction

1.1 – Context

From historically low levels of woodland cover at the turn of the 20th Century, Scotland has seen a range of initiatives to reforest the country, resulting in rapid expansion of non-native conifer plantations which increased woodland cover by more than 20,000 ha per year from 1950 to 1990 (Thomas et al., 2015), including the use of 'dedication schemes' and tax incentives (House et al., 2003) to encourage private landowners. However, harsh criticism of the environmental impact of 'blanket planting' of monocultures of Sitka spruce together with the increased public concern through the publicity about the Flow country (Woodland Expansion Advisory Group, 2012) led to a revision of incentives and the introduction of grants that have promoted social and environmental benefits, as well as woodland expansion on agricultural land (Quine et al., 2013).

The current Scottish Government aspiration is to increase woodland cover to 21% (from the current 18%) by 2032 (Scottish Government, 2019) but there remains a significant gap between the aspiration and current levels of woodland planting. Challenges remain through conflicting food and climate change policy goals, low acceptability of woodland planting among farmers, volatile stakeholder perceptions, and, in Scotland, grazing pressure from high deer populations (Duckett et al., 2016; Environment Climate Change and Land Reform Committee, 2016; Burton et al., 2018).

These challenges have implications for how to undertake consultations with the public and community groups about woodland creation proposals to ensure a fair, transparent and considered approach is taken. Context is important; a comparison of two case studies in Ireland demonstrated positive public values for amenity and recreation of woodland with a long history of forest cover, but negative perceptions associated with a landscape a) with more recent forest cover and b) largely dominated by Sitka spruce (Dhubháin et al., 2009). For some, associations may still persist between 'woodland expansion' and dense conifer plantations managed on a clearfell basis.

Public consultation is undertaken in relation to new planting proposals and also for the development of national strategies, including views on a draft of Scotland's Forestry Strategy 2019-2029: its vision, objectives and priorities. The draft strategy received 442 responses to the public consultation, of which 102 (23%) of these were from organisations and 340 (77%) from individuals (although 216 of the responses from individuals (49% of the total number of responses) were identical and generated as part of a campaign led by Woodland Trust Scotland). This demonstrates both that the public are engaged with forestry issues, but also that there are key stakeholders who are both interested and influential.

1.2 – Overview of Scope and Methods

Forest Research have been commissioned to advise on how best to elicit landscape preferences and attitudes towards woodland creation within four pilot areas in South Scotland. However, the methods proposed are designed to be suitable and replicable for other areas where information pertaining to landscape preferences and attitudes towards woodland creation is sought. Should this occur, subtleties in how the methods are conducted should strive to reflect local circumstances (population density, presence of key stakeholders/groups, and consideration of locally sensitive issues).

For the South Scotland region, it is advisable to seek input from those residing within the pilot areas as well as those on the peripheries. This approach allows for comparisons between the pilot areas' inhabitants and a wider sample of the regional population, whose preferences and attitudes may differ based on factors such as Nimbyism, and connectedness to the pilot areas' landscape (proximity, familiarity and use). The inclusion of both samples is advised since the different populations are likely to appreciate and accrue different benefits from the landscape, some of which are realised through direct and immediate interaction (e.g. scenic views and recreation) and others that are more indirect and continuous (e.g. flood prevention and carbon sequestration).

As well as being more inclusive and reflecting greater diversity, a larger sample lends itself to accurate statistical analysis, and thus provides more meaningful results. Surveys offer the most efficient means of determining the number and range of different attitudes within a target population. However, for a greater in-depth understanding about *why* particular attitudes exist it is useful to engage in dialogue with a sub-sample of a population. This may be facilitated through a semi-structured question framework and/or participatory methods in which behaviours, reactions, choices and/or statements are captured, i.e. exercises which allow participants to express and articulate their attitudes in ways that surveys seldom do. In addition, with land use studies it is often useful to consider the implications of a population's concerns and aspirations in the hope of realising scenarios which are acceptable and feasible. This process is most valuable when involving key stakeholders whose interest and influence in land use decision making will likely determine what options are possible, or what would need to change for them to become so.

Given the importance of collecting different types of data from different sources, a mixed method approach is recommended to explore and evaluate landscape preferences and attitudes towards woodland creation (Figure 1).

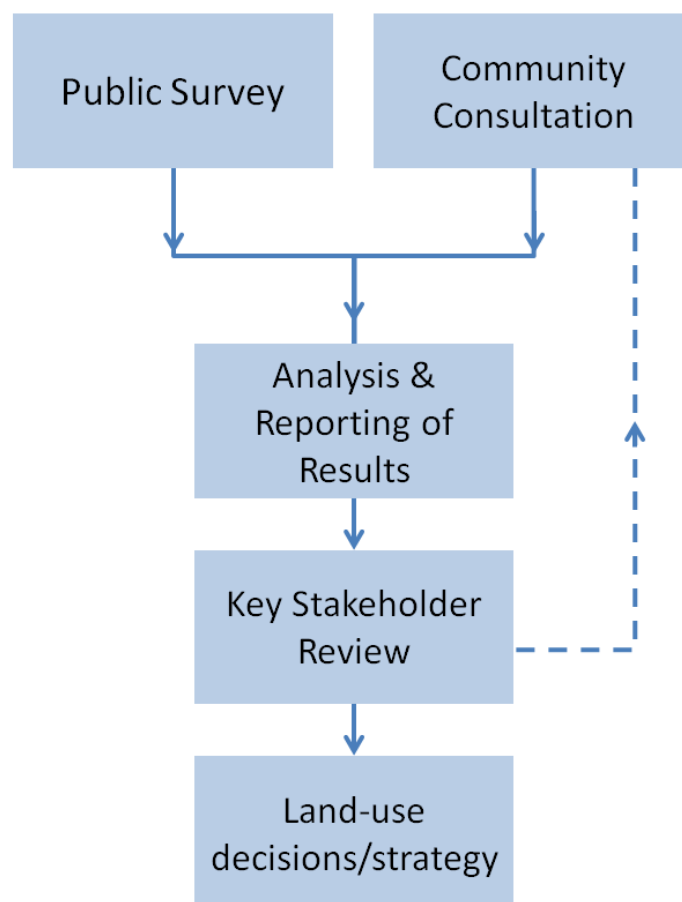


Figure 1. Summary of methods to explore and evaluate landscape preferences and attitudes towards woodland creation.

Herein we describe considerations for implementing the above methodology. Chapter 2 is focused on the collection and use of data from public surveys; Chapter 3 outlines considerations for consulting with local communities; and finally, Chapter 4 briefly outlines how and who to involve in a key stakeholder review.

2. Public Surveys

2.1 – Sampling Strategy

To be able to draw conclusions about a wider population from a sample, steps must be taken to ensure that a sufficient number of responses are collected. The required sample size is guided by two factors: confidence interval and confidence level.

The **confidence interval** (also called margin of error) is the plus-or-minus figure often reported with opinion poll results. For example, if using a confidence interval of 5% and 47% percent of a sample picks an answer you can be "sure" that if you had asked the question of the entire relevant population between 42% (47-5) and 52% (47+5) would have picked that answer.

The **confidence level** tells you how sure you can be. It is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval. The 95% confidence level means you can be 95% certain; the 99% confidence level means you can be 99% certain. Most researchers use the 95% confidence level.

Table 1 - Sample sizes required to reflect wider populations.

Area	Approximate Population	Required sample size* (# of respondents & response rate)	
Village X	100	80	80%
Ward X	500	218	44%
Sub-regional, e.g. Scottish Borders	115,000	383	0.33%
Regional e.g. South Scotland	800,000	384	0.05%
National e.g. Scotland	5.4m	384	0.01%

*based on 95% confidence level and 5% margin of error

Table 1 demonstrates the general rule that the required sample size increases when dealing with larger populations. However, once the wider population reaches a certain size, increasing the size of the sample will generally not alter the conclusions that result. The Table also details the response rate, or percentage of the wider population that must be sampled to achieve the desired sample size. This figure reflects the 'intensity of effort' required to achieve the necessary sample size. Thus, while an attempt to capture the attitudes of a

hamlet's population will require only a small number of responses, the intensity of effort required to obtain these responses will be very high since a large percentage of the population must be reached.

Figure 2 illustrates an example of a pilot area from South Scotland, within which there are few settlements or indeed residences. As such, a sample drawn entirely from this area would require a high response rate, which would be difficult (time consuming and costly) to achieve.

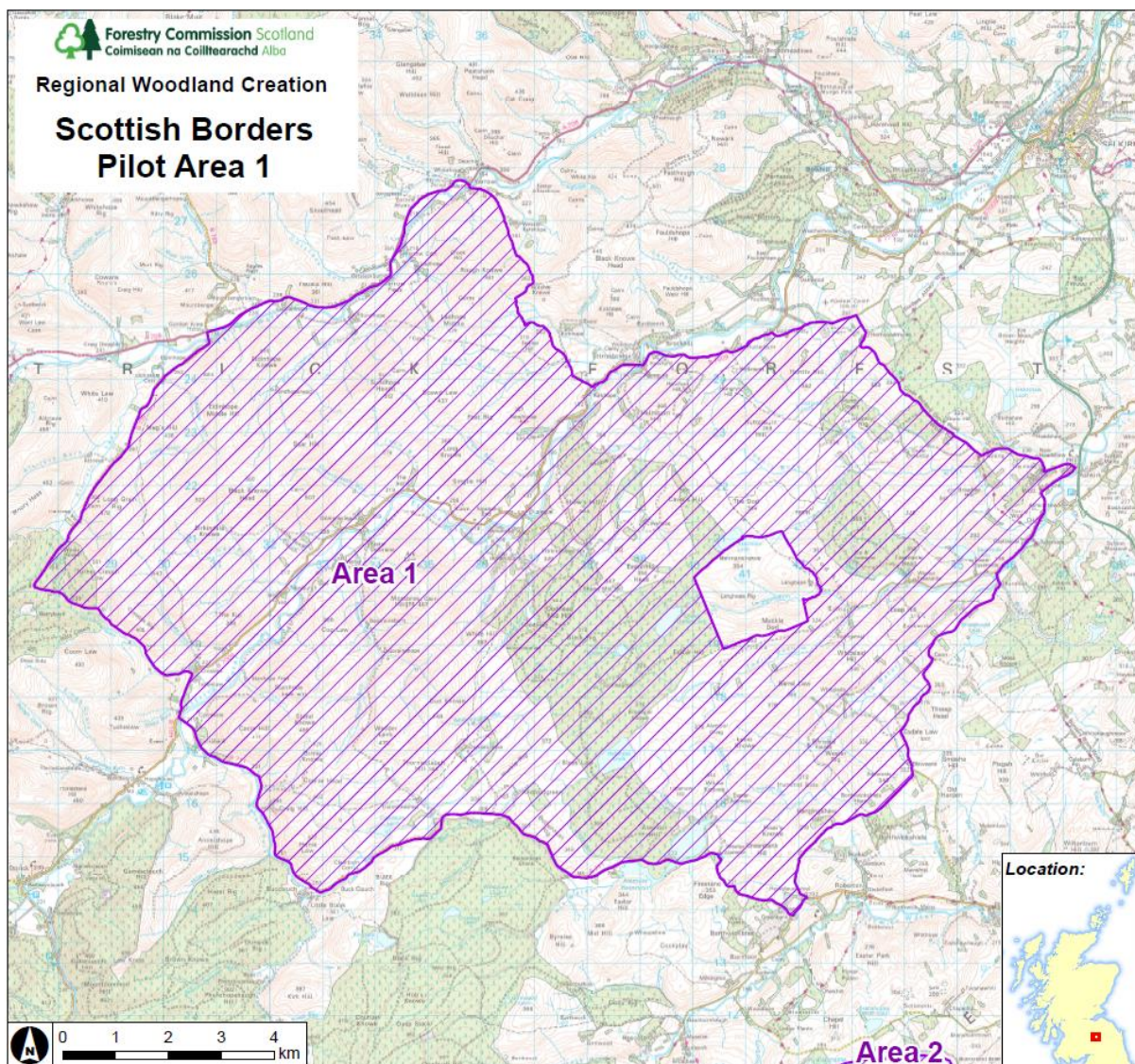


Figure 2. An example of a pilot area from South Scotland (FCS)

Extending the sampling zone beyond a pilot area's boundary to include larger settlements will increase the chance of obtaining an adequate sample size. Expansion of the study area may be done on the basis of (radius) distance from

a known point, or through the inclusion of predefined jurisdictions or boundaries such as those illustrated in Figure 3.



Figure 3. An example of predefined geographical boundaries in South Scotland

To help ensure that only those within the target population are sampled, potential respondents may self-report their eligibility based on a visual cue (map), or on the basis of their postcode. By segmenting data, these approaches can still allow responses from particular localities (e.g. within the pilot area) to be considered separately, or compared with the wider sample. However, where sample sizes are low, caution should be taken when attempting to draw conclusions from these sub-samples. A more in-depth understanding of the preferences and attitudes from sparsely populated areas may be attainable through other methods, as outlined in Chapter 3.

In addition to spatial considerations, a sampling strategy may also seek to reflect the demographic diversity of the target population in terms of factors such as age, gender and ethnicity. Data pertaining to these factors may be obtainable through census records. However, it should be noted that local data may not mirror that at the national level due to localised social and economic factors (retirement communities, youth migration, male dominated industries etc.)

2.2 – Question Framework

A question framework designed to elicit landscape preferences and attitudes towards woodland creation may incorporate a variety of question types. Given the proposal to collect more in-depth qualitative data through community consultations, we have opted to focus on questions which generate quantitative responses. Such responses can be presented as descriptive statistics that quantitatively describe or summarise features of a collection of information, or inferential statistics which are required to infer findings to a wider population. The use of quantitative data also allows us to explore whether relationships and associations are statistically significant by measuring the probability that findings occurred by chance. Expertise will be required to select the correct statistical tests, conduct the analyses, visualise the results and describe the implications. A selection of potential outputs from a quantitative survey is detailed in the following section.

A sample questionnaire illustrating a range of questions suitable for eliciting landscape preferences and attitudes towards woodland creation has been included in Appendix A. This combines traditional questions with more novel features including LANDPREF - an interactive landscape visualisation tool that allows respondents to adjust a virtual landscape using rich images (Schmidt et al., 2017). Specifically, the respondent can choose 6 possible quantity levels (0 – 5) for six potential land uses (wind turbines, recreation, sheep farming, commercial forestry, native woodland and habitat for wildlife). A carbon sequestration indicator represents the carbon storage potential for the chosen quantities of forest and woodland. The available combinations are constrained through a rule-based algorithm to represent the trade-offs and synergies among the different land uses.

Note that both LANDPREF and the sample questionnaire as a whole are framed in such a way that they do not focus solely on the topic of woodland creation but rather pose questions about a range of land uses and ecosystem services. This approach helps to ensure that the study is made relevant and appealing to a greater range of individuals, and will therefore assist in generating a larger number of responses. A more holistic land use survey is also less likely to be perceived as antagonistic to those with concerns that the study belies a hidden agenda. If this were the case, respondents with a particular view of the topic may be more or less likely to participate or to adopt an extreme stance when providing their responses. The approach therefore helps to minimise response bias. Finally, the more holistic land use survey allows attitudes towards woodland creation to be compared in respect of other land use scenarios, including a 'business as usual' scenario i.e. no change.

In addition to the question framing, the example provided in Appendix A reflects considerations about flow (from broad to narrow focus), terminology and length. In spite of these considerations it is always preferable to pilot a survey so as to identify any potential misinterpretation or difficulties experienced by respondents.

2.2 – Survey Data

Quantitative data from a suitably large sample offers countless opportunities for analysis. Here we provide several examples of how data may be used and presented.

Histograms can be used to show the overall distribution of scores that survey respondents gave to a particular response option, such as land use type. Figure 4 shows the results of a previous survey conducted in Lochaber. These responses are positively skewed for native forest and wildlife and negatively skewed for commercial forestry, sheep farming and wind turbines.

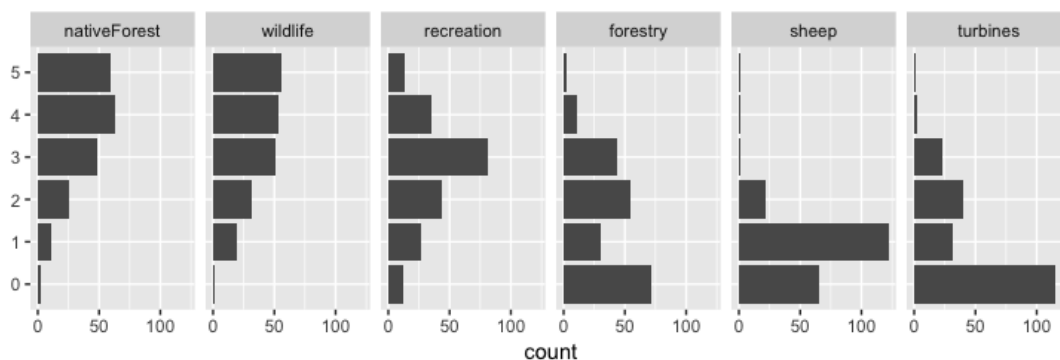


Figure 4. Distribution of values for each land use

Radar plots may be employed to visualize several variables. For example, Figure 5 demonstrates how radar plots can be used to compare how different types of respondent value a selection of landscape characteristics based on how they chose to allocate a finite number of 'points' across the different options (weighting). Responses to multiple choice, Likert scale and weighting questions can also be considered in respect of other responses to illustrate relationships and associations. As with radar plots, these analyses allow us to consider whether a particular type of respondent has a tendency to favour, for example, a particular landscape characteristic.

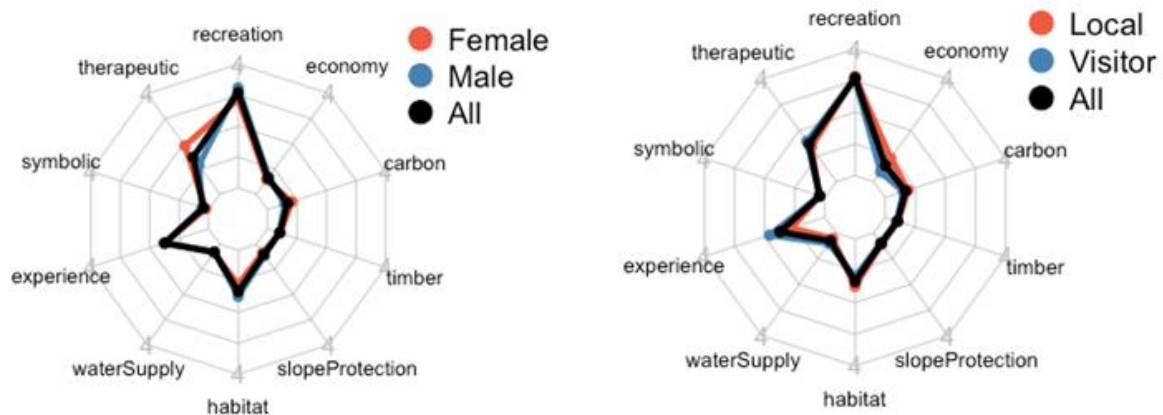


Figure 5. Radar plots used to visualise valuation of landscape characteristics by different types of respondent.

Agglomerative Hierarchical Cluster Analysis (HCA) can be used to identify groups of respondents with similar land use preferences. In this example, each of the LANDPREF respondent's landscapes is initially treated as a single cluster, and through a series of iterations similar clusters merge with others until one cluster or K clusters are formed. Figure 6 presents the results for the data collected in Lochaber. Representative landscapes can then be generated using the median value of each land use for each of the returned clusters (Figure 7). It is then possible to analyse the demographic characteristics and test whether there are statistically significant differences between the clusters.

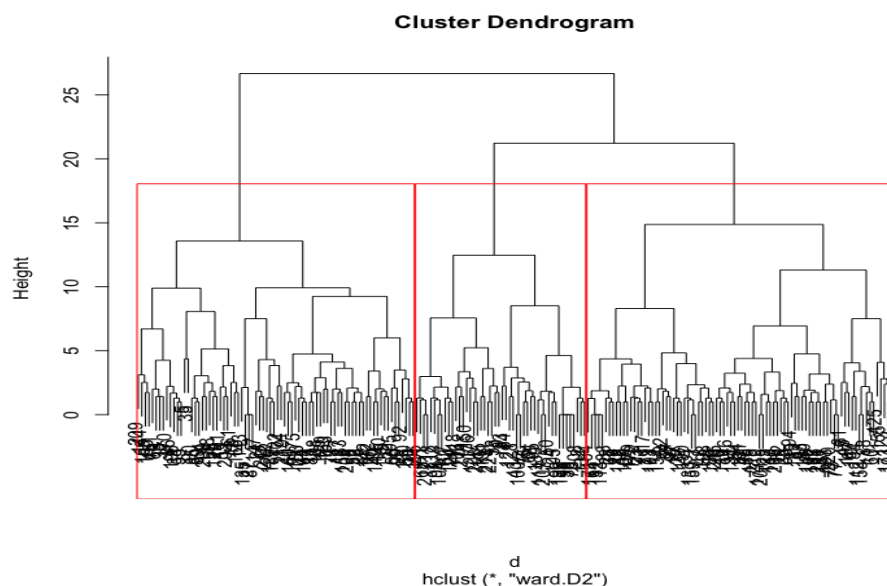


Figure 6. Hierarchical Clustering Analysis dendrogram of results showing 3 clusters in red.

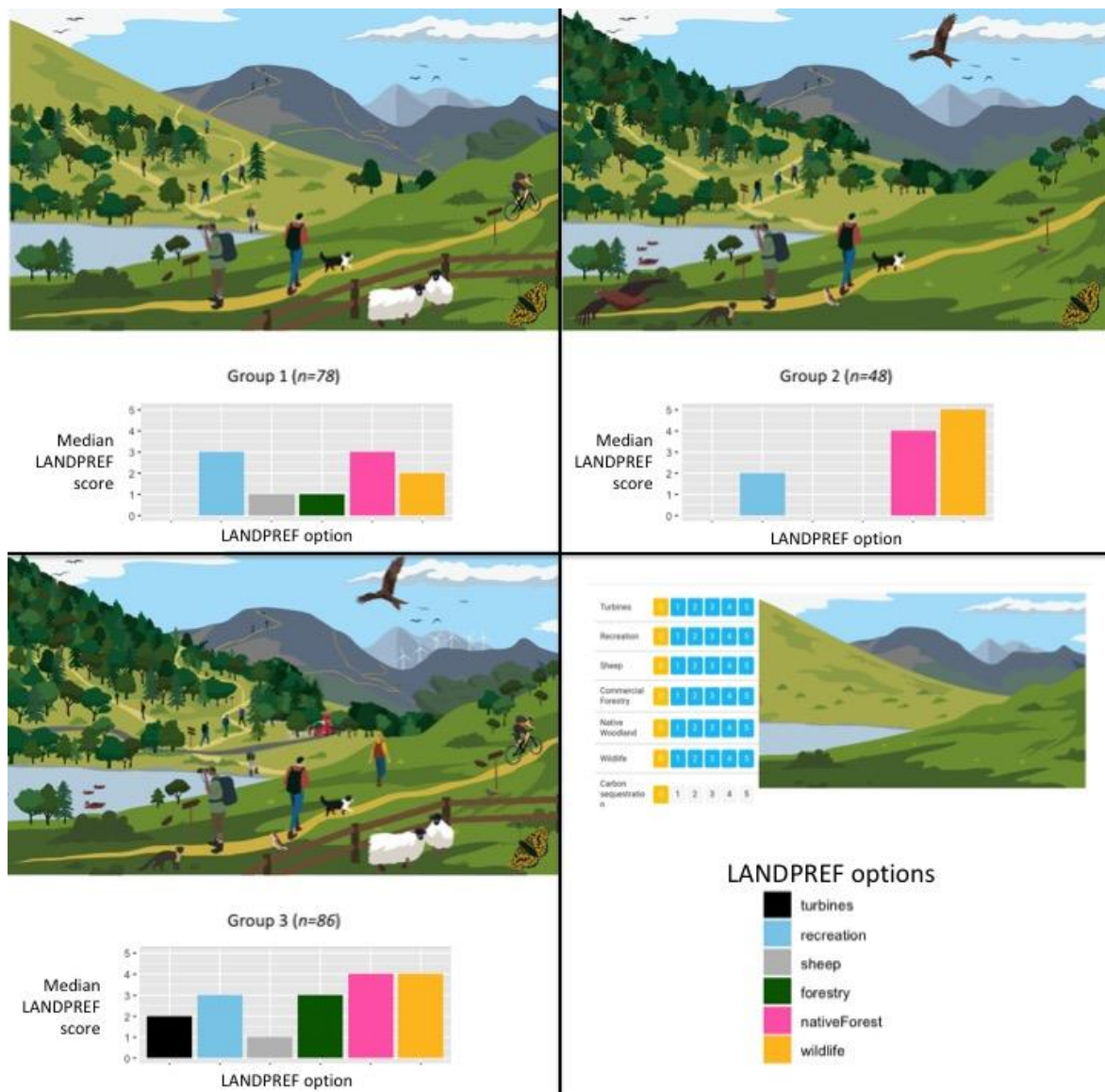


Figure 7. (a – c) Landscape visualisations from the LANDPREF tool, showing visualisations using the median values for each of the preference clusters identified using Hierarchical Clustering Analysis; (d) shows the LANDPREF tool interface and initial landscape.

3. Community Consultation

3.1 – Interactive workshops

Interactive workshops offer a customisable approach to consulting with a defined population, such as a community. The workshops can be designed to exchange information; to discuss the strengths, weaknesses, opportunities and threats of an idea or project; to obtain ideas and innovative thinking for a way forward for a project; or they can be specifically geared towards prioritisation and the production of an action plan. Workshops also offer an opportunity to progress towards consensus by encouraging 'group ownership' (Avery, 1981). Through this process all participants are involved in developing ideas and decisions where consensus has to do with shared insight or awareness. This may be combined with elements of reflection and discussion, whereby alternative ideas can be proposed, compared and critiqued collectively. Given this range of possibilities, workshops are an extremely favourable approach to determining and recording the reasons underlying a community's attitudes towards land use options such as woodland creation.

Workshop attendance may be encouraged through private or open invitation. As a minimum, this should include an outline of the workshop's aims and purpose. For community consultations, events such as 'pie and a pint' are increasingly used to incentivise attendance. Not only does this approach offer participants a 'thank you' for their contribution, it also helps to portray a relaxed and informal atmosphere conducive to open discussion. It is recommended that the organisers request that participants' places be booked in advance. This will help to ensure that the venue does not become overcrowded, and allows the dynamics of the day to be somewhat foreseen and planned for. Recorded bookings can also serve to warn the organisers if numbers are likely to be too low, in which case they may wish to consider increasing efforts to promote the event, or failing that, rescheduling/cancelling.

For community workshops, a local venue is recommended so as to make attendance convenient for participants. Considerations about how to set-up the venue and the resources required (including technology) will vary depending on the activities planned. Figure 8 includes a number of potential resources which could be incorporated.

3.2 – Workshop Structure

A minimum of 2–3 hours is needed to run an interactive workshop, although it is not unusual for a full day to be used. Participants are likely to be more energetic and engaged if the event is scheduled in the morning or late afternoon, so as to avoid what is for many people the slowest, most unproductive time of day (1400h–1500h). Where events do run for more than 2 hours, breaks should be

incorporated so that participants may temporarily disengage from the process, or pursue discussions with fellow attendees and organisers. Before launching into activities or discussion, it is important for the chair/moderator to begin by defining the workshop's goals. This will help participants to understand their role, and to ensure that discussions remain on topic throughout the course of the event.

In order to stimulate and maintain engagement, the agenda should balance different types of activities, such as individual and collective tasks. Hands-on activities are recommended, while electronic-based presentations should be kept to a minimum. Enough time should be scheduled to allow for outcomes from the activities to be presented back and discussed with the participants. This demonstrates to participants that their input is being considered whilst also providing an opportunity for clarification of the views they have been invited to express.

Some individuals may be apprehensive about speaking in public or in an unfamiliar group. While introductions and ice-breakers may be used in an attempt to reduce this reticence, it is also recommended that the participants be divided into small groups, each with a trained facilitator (Figure 8). Facilitators need to be impartial coordinators, neither contributing ideas nor evaluating them, but rather encouraging input from participants in their group. Left to their own devices, only the most aggressive personalities tend to participate and often dominate the discussion (Creighton, 1994). Facilitators will also keep discussions on time, and remind participants to note down all their points, sometimes actually doing this for them whilst they are speaking. In addition, facilitators may note further ideas as they arise during the presenting-back phase and subsequent discussion with everyone in the room. It is helpful if facilitators have an understanding of the concepts being explored. For example, for activities designed to prioritise items it helps if facilitators can clarify what the items are if participants have questions, or give specific examples if needed.

In order to better stimulate discussion, it is often preferable to aim for the groups to be diverse so that each contains a greater spectrum of interests and values. On the day of the workshop, the facilitators (or moderator) will monitor the groups and may consider reshuffling them during the breaks, as this can boost creativity.

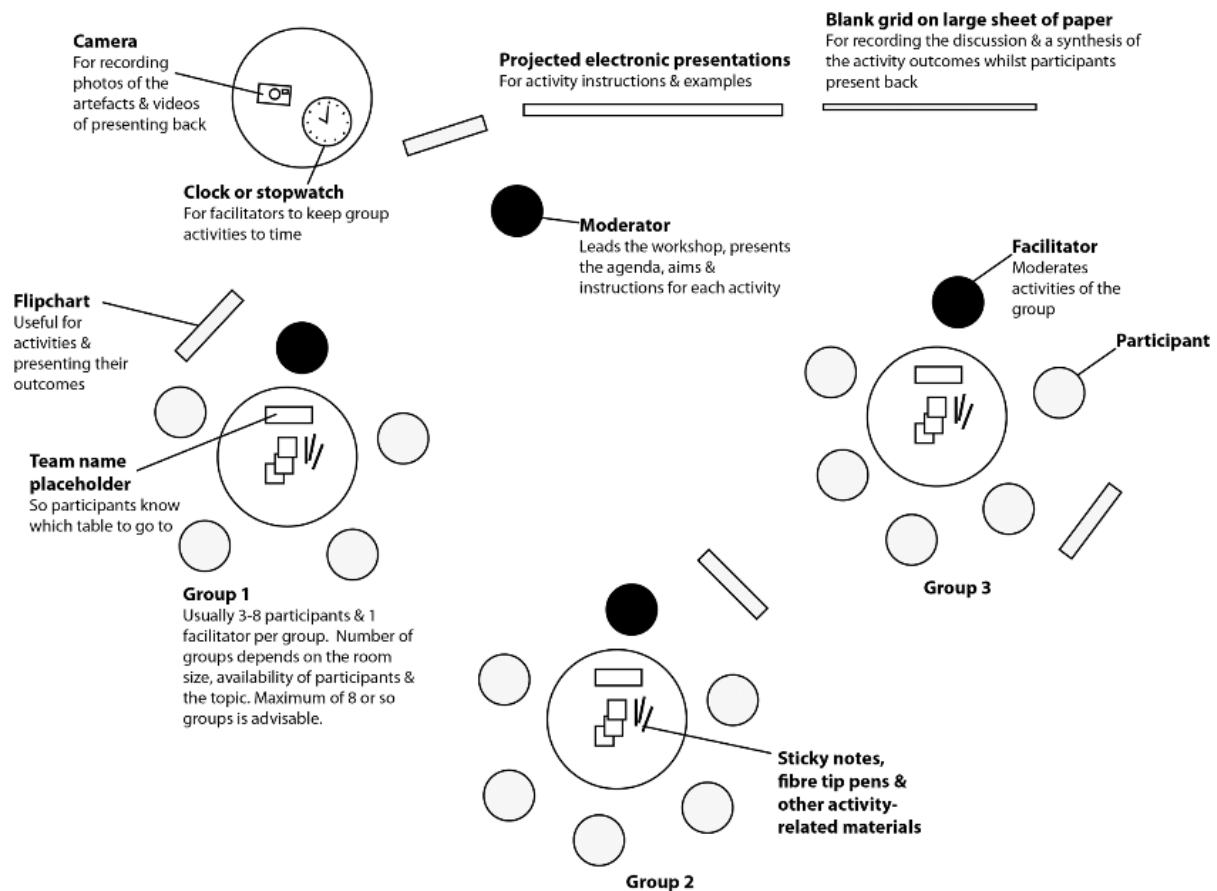


Figure 8. Example of room layout for an interactive workshop (Pavelin et al., 2014)

3.3 – Workshop Activities

In the case of landscape preferences and woodland creation, the use of planning and visioning tools is highly regarded for their potential to encourage people to visualise options for the future and develop shared plans or visions. Such tools have attracted a good deal of attention over the last decade, particularly among the planning community who value a strong focus on visual techniques involving models (real and computer-based), maps and graphics. These visual techniques may involve using Geographical Information Systems (GIS) and specialised computer software for map-making, design and modelling. Visioning tools include scenario building in which the implications of various options are explored and detailed alternative future scenarios built up. Such techniques have proved extremely useful in engaging people's interest and encouraging them to provide input. Participative methods, such as those centred on planning and visioning tools have also been praised for reducing the reliance on documentary (i.e. written) consultation where literacy standards may act as a barrier to participation (Royal Town Planning Institute, 2005).

The aforementioned LANDPREF tool, which allows users to create a preferred landscape based on a series of trade-offs, is one example of a visioning tool suitable for incorporation into a workshop setting. For example, participants may be asked to create and describe the decision making process behind their own personal landscape vision. Alternatively, groups can be tasked with collectively creating a landscape. This will necessitate discussion about the trade-offs being made based on what is important or preferable for a wider variety of interests. Participants may also be presented with predefined landscape scenarios and invited to voice their opinions about them, such as their likes and dislikes, and the perceived winners and losers. In all of these cases it is important for the facilitator to accurately record how choices are being made (i.e. on the basis of historical/cultural context, personal/societal gains, compromise or sacrifice, fear, uncertainty etc.).

Annotated maps may be used to explore in more depth the extent and suitability of different land uses for a given area (Figure 9). If the community's own locality is depicted it is particularly important to be clear about how their input will be used in future land use decisions, if at all. This task may be presented so that participants are given complete freedom over their choices or so that they must work within a framework or set of stipulations (i.e. to reflect a particular set of values, to maximise a particular benefit, or to balance multiple policy goals).

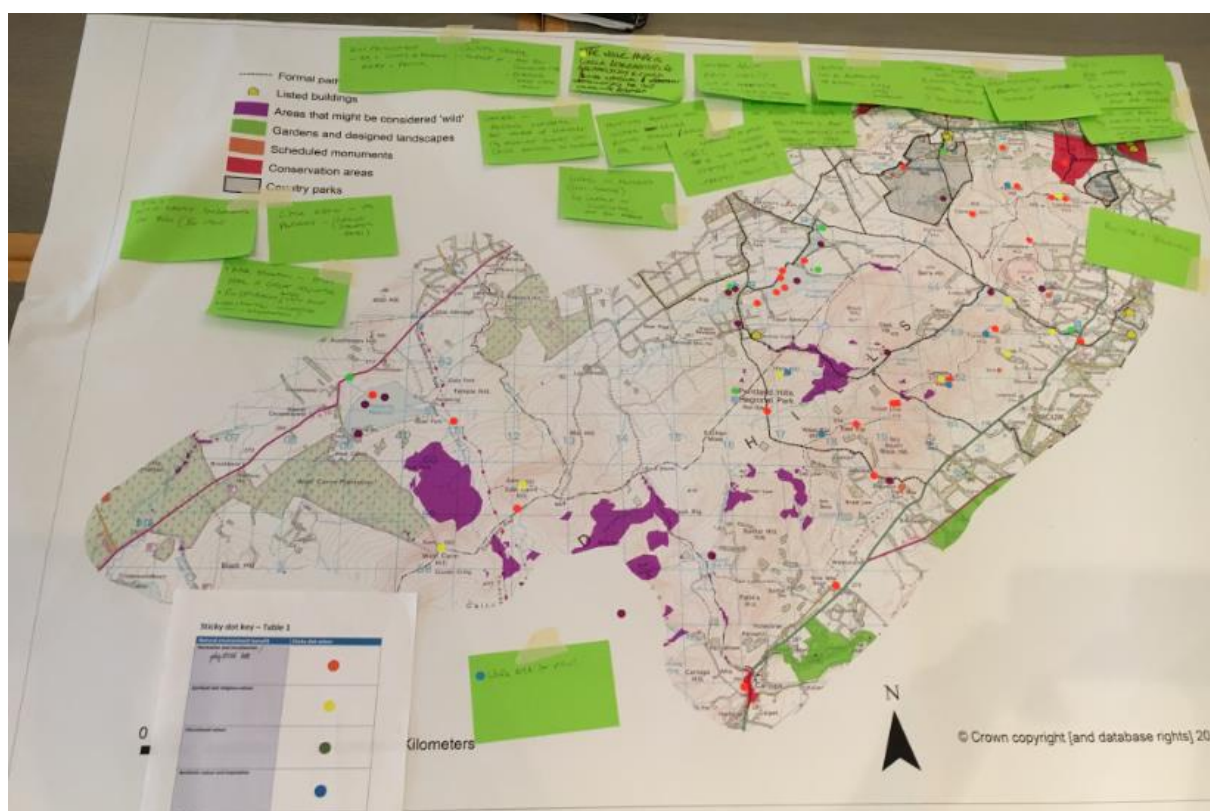


Figure 9. The use of maps and annotations to express preferred landscape options.

Participants may also be asked to record choices, for example by voting on a preferred landscape or allocating a finite number of 'points' to a series of choices (such as landscape characteristics, ecosystem services or conversely concerns and disbenefits). It is recommended that participants have the opportunity to carry out such voting in isolation so that they are not influenced or persuaded by the opinions of others in the room. When these results are tallied the moderator has the option of using them to facilitate new discussion or pose new tasks to the participants. For example, if participants' responses collectively reveal a concern about a particular land use, they may be asked why the concern exists, what could be done to minimise it or even to design a landscape which would prevent the concern manifesting. This iterative approach demonstrates that the participants' responses are being considered, and that they are able to guide the direction of the workshop to some degree.

3.4 – Workshop Data

While some workshop activities (voting, weighting and rating of landscape characteristics within a tool such as LANDPREF) are capable of generating quantitative data, these should be used to generate discussion rather than serving as the main outputs from the event. Instead workshop outputs will typically include a number of visuals in the form of whiteboards, flip-chart sheets, drawings or in the case of the LANDPREF tool, landscapes represented electronically. Ideally these should be labelled accordingly and photographed (or captured electronically) so that the data is retained even if materials become damaged or lost. While the raw photographs may be used as standalone results, the generation of several visual outputs will typically require these data to be distilled by researchers either descriptively or through the production of models portraying the range of processes and sentiments. Depending on the amount and distinctiveness of the data collected, this may be done for the participants as a whole, or for different categories of participant.

The recording of discussions and responses will often form a large proportion of the dataset arising from an interactive workshop, particularly if there is a desire to establish a sound understanding of the drivers in participants' attitudes and decision making processes. The use of a recording device is the most assured way to capture this data in the tone and context it was voiced. Transcriptions of these recordings can be coded using qualitative analysis software so that all responses relating to a particular subject or research question can be considered in unison (Figure 10). This allows for reporting which reflects the quantity and range of statements expressed at the event. Note that consent from participants must be obtained for video/audio recordings, as well as any photographs featuring the participants.

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Nodes

Name	Sources	References	Created On	Created By	Modified On
WeatherClimate	7	82	10/2/2014 11:58 AM	TH	11/24/2014 10:52 AM
Biology Ecology	6	31	10/2/2014 11:59 AM	TH	11/24/2014 10:01 AM
Environment Soil Water	6	53	10/2/2014 11:59 AM	TH	11/24/2014 1:46 PM
Conservation Measures	6	54	10/2/2014 11:59 AM	TH	11/24/2014 1:49 PM
Precision targeted conservation	6	17	10/2/2014 11:59 AM	TH	11/24/2014 1:35 PM
Financial	6	70	10/2/2014 12:00 PM	TH	11/24/2014 1:58 PM
Farm Operations	7	48	10/2/2014 12:00 PM	TH	11/24/2014 1:49 PM
Advisor Profile	7	62	10/2/2014 12:00 PM	TH	11/24/2014 1:19 PM
Advice and Advocacy	7	76	10/2/2014 12:00 PM	TH	11/24/2014 1:52 PM
Trust and Relationships	7	75	10/2/2014 12:00 PM	TH	11/24/2014 2:00 PM
Risk Management	7	64	10/2/2014 12:00 PM	TH	11/24/2014 1:27 PM
Farm Bill	7	14	10/2/2014 12:00 PM	TH	11/24/2014 1:50 PM

IN SWCD 1

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N: Doing a bit of restoration?

I: Yeah, but and, and we're regenerating a forest land but nothing big like row crops or that kind of thing, so.

N: Who benefits mostly from your work? Is it farmer, producers, or – you already mentioned that three quarters are corn and soybean (sure sure sure) producers, so are those the main? Do you also work with the city? Urban?

I: Yes, we do. We have a big walnut watershed group that is part of, it's focused on the big walnut watershed from its inception in Boone County and Hendrix County and on through Putnam. And we focus mainly with the urban people through them. And we work with DePauw University in the city and with their storm water whatever it's called. MS Force (I think). And so we do that mainly through them, but we do have some projects – backyard conservation, we're trying to get rain gardens and things like that in the city to help with the water quality. So it's mainly through the water quality issues that we work with the urban folks and we sell rain barrels and that kind of thing. Uh, as far as conservation for their yards and things, we haven't really tapped into that seriously, we've kind of kicked it around, but we haven't gone anywhere with it, so.

N: Um, what do you consider your primary goal or goals when you're working with producers, corn and soybean producers?

I: Education, mainly. Because if they don't know – it's not that they don't want to do what's right, a lot of times they just don't know, or they don't know how to accomplish it on the budget that they have.

Thematic coding bars on the right side of the transcript window:

- WeatherClimate
- Biology Ecology
- Environment Soil Water
- Conservation Measures
- Precision targeted conservation
- Risk Management
- Advisor Profile
- Trust and Relationships
- Advice and Advocacy
- Farm Operations
- Farm Bill

Figure 10. Thematic coding of a transcript using NVivo software

In lieu of recordings, a facilitator can attempt to capture discussions using detailed written notes. The accuracy of these notes is paramount for summarising the workshop findings – researchers should not attempt to rely on their recollections of the discussions and conclusions since these may be skewed by their own perceptions and flawed memories. If the purpose of the workshop is to collect data on a number of specific topics or to answer a number of specific questions, a framework composing headings/prompts and spaces for the facilitator to write or type notes may be adopted. This will aid in collating and comparing the responses of the facilitators working with the other groups. Given that a facilitator may be engaged in stimulating discussion and clarifying responses, a dedicated scribe may be used to assist the data recording process.

4. Stakeholder Review

4.1 – Purpose

Identification of who to consult for woodland creation plans is an important step towards ensuring organisations and individuals have their opinions taken into account. This first requires the results from public surveys and community engagement exercises to be presented to key stakeholders i.e. those with a particular interest and influence over land use planning and management. Where it is possible to assemble these stakeholders together the attitudes data can be communicated via a presentation and accompanying handouts. This scenario can allow for the stakeholders to engage in their own (guided) discussions about the feasibility and implications of the findings, for example, why a particular vision is unachievable or what could be altered to support the vision(s) presented. If it is not possible to assemble the necessary stakeholders, the circulation of a findings report and invitation to comment could serve as an alternative approach.

4.2 – Key stakeholders

For the strategic plans and land management plans (LMPs) produced by the Forest Regions (previously Forest Districts) consultation is undertaken with local authorities and other organisations with statutory powers over land use and land use change (e.g. SEPA, SNH) and organisations with non-statutory powers (e.g. RSPB, SWT, timber trade). Further consultation, particularly for LMPs, aims to engage the wider public and communities such as neighbours, businesses, residents, Council members, and Community Councils.

A preliminary list of key stakeholders has been drawn up (Table 2) based upon previous work on woodland expansion. Discussions with the client are required to filter the list as appropriate and to identify individual representatives within the case study areas.

Table 2– Examples of key stakeholders in land use consultations

Timber sector	Land owners	Communities	Conservation	Public sector	Other
CONFOR	Large estates	Community Land Scotland	Woodland Trust	Local Authority for each case study area	NFUS
Tilhill	Local authorities (also included under 'Public Sector')	Community Councils for each case study area	RSPB	CSGN	Reforestation Scotland
	Scottish Land and Estates		SWT	Crown Estate	Key businesses (to be advised by client)
			SNH		Soil Association Scotland
			Local wildlife trusts		Heather Trust
			National Trust for Scotland		

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Appendix A – Draft Public Survey

Thank you for visiting our page to complete the Landscape Preferences Survey. This is an opportunity to express your preferences about your local landscape and the benefits it can provide.

All responses are anonymous, and any resulting data will be treated in accordance with the Data Protection Act (2018).

It takes 10 – 15 mins to complete the survey, so let's get started!

Section 1 – Connectedness to the landscape

Q1. How long have you lived in the South Scotland region?

1. 0 - 5 years
2. 6 - 10 years
3. 11 – 15 years
4. 16 – 20 Years
5. 20 – 25 years
6. 25+ years

Q2. How often do you spend time in the local landscape (the outdoor environment composed of fields, moor/heath, trees, water courses etc. lying beyond built-up areas)?

1. Never
2. Once or twice a year
3. Once every 2-3 months
4. Once or twice a month
5. Once a week
6. Several times a week
7. Every day
8. More than once per day

Q3. Do you use the local landscape for any of the following? (Select all that apply)

1. Social gatherings and events
2. As an educational venue
3. Income generation
4. Physical activities including walking, cycling, horse riding etc.
5. Relaxation
6. Wildlife watching/studying nature
7. Shooting, fishing or foraging
8. Conservation activities
9. Other (specify)

Section 2 –Landscape Features and Benefits

Q4. How important/unimportant do you feel the following features/factors should be in land use planning decisions and policies?

	Extremely important	Somewhat important	Neither important nor unimportant	Somewhat unimportant	Extremely Unimportant
Scenic quality					
Wildlife and Biodiversity					
Revenue generation					
Recreational opportunities					
Tranquillity					
Air quality					
Water quality					
Flood prevention					
Carbon sequestration (storage)					

Q5. How would you allocate 100 points to reflect the value you place on the landscape features/factors? The more you value a feature/factor the more points should be allocated. Note that you may allocate for as many or as few features/factors as you wish.


Feature/Factor	Points (must total 100)
Scenic quality	
Wildlife and Biodiversity	
Revenue generation	
Recreational opportunities	
Tranquillity	
Air quality	
Water quality	
Flood prevention	
Carbon sequestration (storage)	

Q6. Score the landscape components to create your preferred future landscape for your local area.

Use 0 for your lowest priority/priorities and 5 for your highest priority/priorities. Note that land uses and benefits can be conflicting so some compromises or trade-offs may be necessary!

Sheep farming	0	1	2	3	4	5
Native forest	0	1	2	3	4	5
Birds	0	1	2	3	4	5
Wind turbines	0	1	2	3	4	5
Carbon sequestration	0	1	2	3	4	5
Recreation	0	1	2	3	4	5
Inspiration	0	1	2	3	4	5

A



Q7. How would you feel about the following 'land-use futures' in your local area?

	Extremely Supportive	Supportive	Neither supportive nor unsupportive	Unsupportive	Extremely Unsupportive
No change (landscape remains as it currently exists)					
Increased residential developments					
Increased farming					
Increased energy production e.g. wind turbines & hydroelectricity					
Increased productive woodland (timber production)					
Increased wilderness and nature reserves					

Q8. What is your opinion of the landscape depicted? (Same question for each of the 12 images)

1. Highly acceptable
2. Acceptable
3. Neutral
4. Unacceptable
5. Highly unacceptable



Section 3 – Trees, Woodlands & Forests

Q9. How do you feel about the idea of increasing trees, woodlands and forests in Scotland as a whole?

1. Extremely supportive
2. Supportive
3. Neither supportive nor unsupportive
4. Unsupportive
5. Extremely unsupportive

Q10. How suitable to do you consider your local area to be for the establishment of new woodlands and forests?

1. Extremely suitable (potential for many/large areas of new woodland)
2. Suitable (potential for several/small areas of new woodland)
3. Largely unsuitable (potential for very few/very small areas of new woodland)
4. Extremely unsuitable (no or almost no potential for new woodland)

Q11. What impact do you feel a move towards more expansive productive woodland would have on your local area relative to the current landscape and use?

	Extremely Positive	Somewhat positive	Neutral	Somewhat negative	Extremely Negative
Scenic quality					
Wildlife and Biodiversity					
Revenue generation					
Recreational opportunities					
Tranquillity					
Air quality					
Water quality					
Flood prevention					
Carbon sequestration (storage)					

Section 4 - Demographic Questions

These questions will allow us to understand whether our sample reflects the make-up of the wider population. Responses will not be used to identify individuals or to send information and requests.

Q12. Which age bracket do you belong to?

1. Under 18
2. 18-24
3. 25-34
4. 35-44
5. 45-54
6. 55-64
7. 65+
8. Prefer not to say

Q13. What is your gender?

1. Male
2. Female
3. Other
4. Prefer not to say

Q14. Where are you located (postcode) _ _ _ _ _

Q15. How much land do you own in the South Scotland region?

1. 0 Ha (0 acres)
2. Up to 0.5 Ha (up to 1.25 acres)
3. 0.6 – 5 Ha (1.26 – 12.5 acres)
4. 6 – 10 Ha (12.6 – 24 acres)
5. 11 – 15 Ha (25 – 37 acres)
6. 16 – 20 Ha (38 – 50 acres)
7. 21 – 25 Ha (51 – 62 acres)
8. 26 – 30 Ha (63 – 75 acres)
9. 30+ Ha (75+ acres)
10. Prefer not to say

<Submit>

Thank you for taking the time to complete the survey. Your responses have now been submitted.

If you require more information on the study please contact Joe Bloggs at j.bloggs@forestry.gov.uk