

Brainbox Research



# User testing and evaluation of the new waymarked path grading system

Final report



**Forestry Commission** Scotland  
Coimisean na Coilltearachd Alba



FOR A HAPPIER,  
HEALTHIER SCOTLAND



**Scottish Natural Heritage**  
**Dualchas Nàdair na h-Alba**

All of nature for all of Scotland  
Nàdar air fad airson Alba air fad

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Insight **and understanding**



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# Key insights

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This report presents research to evaluate a standardised information and grading system for waymarked paths that has been developed by Forestry Commission Scotland, Scottish Natural Heritage and Paths for All. Waymarked paths are typically provided to encourage less experienced countryside users to explore and enjoy the countryside by providing them with a clearly marked route to follow. The standardised system comprises six different elements: the path name; a description of the path (the path promotion); a description of the terrain; a difficulty grading symbol; the distance; and an estimated time to complete the route. A map is often provided, although this does not form part of the system itself. The system helps people select the most appropriate path by providing simple, concise and consistent information.

To evaluate the system we piloted its use at three different locations: The Lodge at the Queen Elizabeth Forest Park, near Aberfoyle; Callendar Wood, Falkirk; and Glenmore Forest Park in the Cairngorms. Each site had an information panel installed to display the new system, and each had either three or four paths for people to choose from. We interviewed 438 groups of visitors across these three sites to find out how they understood the system, how they used it to choose a path, whether their experience of the path matched their expectations, and their suggestions for improving the system. We also interviewed 35 groups who had decided not to use one of the paths to find out what deterred them, and whether the information needed to be changed in order to make it more accessible. Finally, we conducted five focus groups with groups of people who traditionally make infrequent use of the countryside: people from areas of high deprivation; people with disabilities; older people, including those with mobility problems; and people from ethnic minorities.

The results provide the following key insights and in the report we present a series of recommendations that address how the system could be further enhanced and adopted more widely.

- People find the standardised waymarked path system easy to understand and use and they believe it provides the right sort of information at the right level of detail. They value the concise nature of the system, which enables them to quickly and easily assimilate the information it contains. They also value that the information about the path difficulty and the terrain they will encounter is consistent between sites.
- The research provides evidence that the new system is appropriate, useful and helps people, including first-time and occasional path users and those with varied needs, to confidently select a suitable route and enjoy outdoor activity. As such it is suitable to be adopted and rolled out across other sites.
- We identified four different types of path user and these groups interact with the information panel in different ways. *Incidental Walkers* are those who are visiting the site for a reason other than to walk and so they often have time constraints. They are most interested in which walks can be done quickly. *Strollers* have visited the site with the intention of going for a walk, although they may also be there for other reasons such as going out for lunch and visiting a local attraction. They tend to be occasional walkers and so look for a short easy walk on suitable terrain that takes them through points of interest or activities for children. *Hikers* are more experienced and are visiting the site expressly to do a walk. They are most interested in distance, time and difficulty and tend to interact more with the information, looking at the full range of information provided.

*Mountain goats* are confident and experienced walkers who are happy planning their own routes and usually select more challenging walks. They rely primarily on the map and are more interested in time and distance than the difficulty rating. The new system is targeted primarily at the *Incidental Walkers* and the *Strollers*, and to a lesser extent the *Hikers*. It is not targeted at the *Mountain Goats*.

- Visitors enjoyed their experiences of the paths and the points of interest and activities along the route. They believed that the information presented in the standardised system accurately reflected the walk that they did and they felt motivated to try further walks.
- While some people are unnecessarily deterred from a path that is graded as strenuous, successfully completing a moderate path gives them confidence to tackle more strenuous routes in the future.
- Careful design of the information panel, with a simple map that supplements, rather than distracts from the system helps people select an appropriate path. People often find the map difficult to understand, and we have made several recommendations on how to display maps effectively for the target audience, including using parallel lines rather than alternating dots to show routes that coincide, and using colours that provide high contrast. Getting to the start of the waymarked path should be signed clearly on the map and on the ground.
- Visitors to the sites who chose not to use a path – path refusers – were not deterred from walking because of the information system or the range of walks on offer. They assumed that some or all of their party would not want to go for a walk, they would not be fit enough to walk, or their situation meant it was not convenient for them to walk on that day. Simply having a discussion about the range of paths available led to many subsequently going for a walk.
- People who had not visited a site previously found the information and grading system easy to understand and they were all able to use it to select a path they would like to use. Off-site focus groups faced several barriers to visiting outdoor sites, including a lack of awareness that such sites exist, lack of motivation and confidence to walk, perceptions of it being difficult to travel to a site, and fears about personal safety. They would be interested in trips to the sites, especially if there were supported activities for them such as Ranger-led walks.

# 1. Background and methods

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Forestry Commission Scotland, Scottish Natural Heritage (SNH) and Paths for All have developed a system that can be used to grade and describe waymarked paths in Scotland. The system was developed from earlier research on path attribute information, which provided comprehensive information about paths but was complex to interpret. The earlier project concluded that the level of complexity inherent in the original system may deter rather than encourage novice path users. Forestry Commission Scotland and key partners: SNH and Paths for All, further developed the attribute approach to produce a new system that provides a simple, consistent way of describing waymarked paths. Waymarked paths are routes that are provided by site managers to encourage less experienced countryside users to explore, exercise and enjoy the countryside, with the security that they will be able to easily find their way around the route and back to the start point. They showcase some of the best aspects of the site and help all visitors to enjoy the paths. However, waymarked routes aren't targeted at more experienced users who prefer to plan their own routes, go on longer walks or mountainous routes, or who like to explore by themselves. The system is applicable to all waymarked paths used by a range of non-motorised access, including by foot, bicycle, wheelchair, mobility scooter and horse. However, as most users walk the paths some elements of the system such as the Terrain Description and the Time Estimates are focused on walking. While the path grading system was based on the initial attribute research, it had not been user tested. The current research aims to evaluate the system and make recommendations for any changes necessary to make it is suitable for being adopted more widely.

The new standardised waymarked path grading system comprises six standard elements, as described below and shown in Figure 1. The strength of the system is considered to be the complete package of information rather than any single one of the elements and that it provides everything potential users need to know in a simple and concise format. The elements that make up the system are as follows.

- Path name.
- Path promotion, which briefly summarises the route and some of its highlights.
- Difficulty rating – there are three different grades: easy; moderate; and strenuous. It comprises a symbol with the grade written below. There are technical criteria for each of the ratings, such as gradient over specific distances, and version 1.1 of this management facing information is reproduced in Appendix 1. Where an “easy” path meets Countryside for All access standards grading is indicated by a wheelchair symbol incorporated into the “easy” grade symbol.
- Terrain description, which provides information on the surface people will walk on and any steep, muddy, loose sections or obstacles that people will encounter using a standard vocabulary, again relating to a series of management-facing technical specifications. (See Appendix 2.)
- Distance, in miles and km.
- Advised time based on walking. The time to complete a walk is based on both length and difficulty grading. While each path will be slightly different, the starting point for timing routes is to allow 30 minutes per mile for easy paths, 35 minutes per mile for moderate paths, and 40 minutes per mile for strenuous paths.

In most but not all applications, a map is provided to show the route the path takes. This often includes a smaller scale version that shows the complete paths, and a larger scale inset that shows the sections of the paths close to the start point.

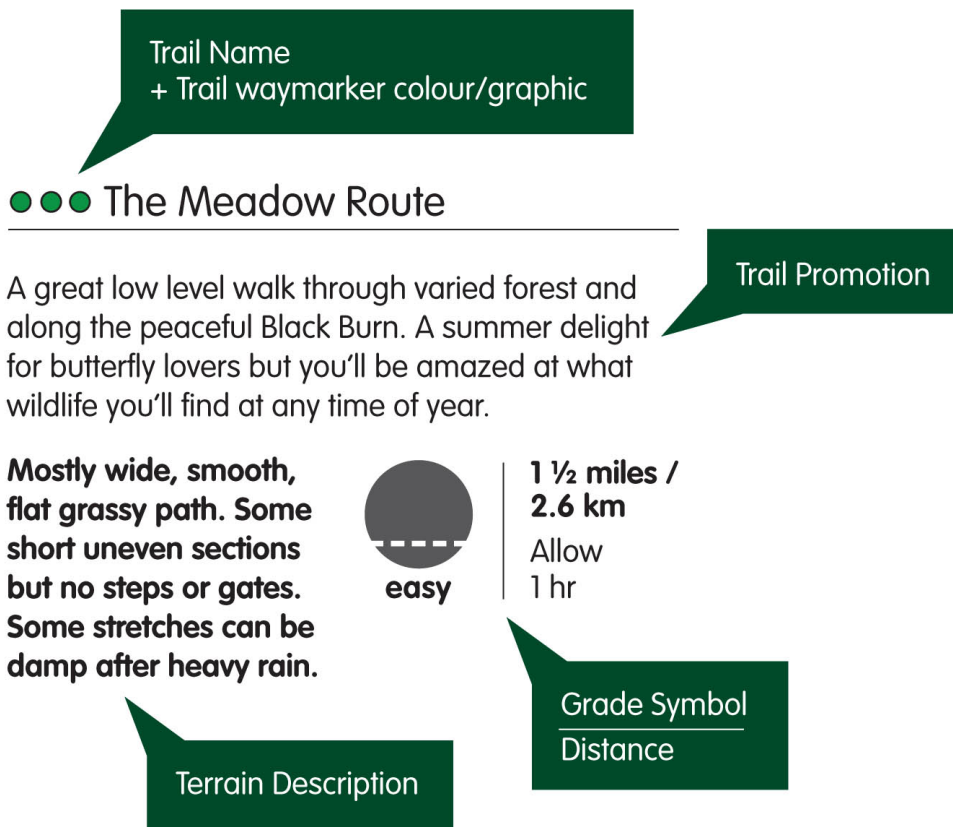


Figure 1: The standardised waymarked path system.

The new grading system incorporates the Countryside for All access standards but doesn't impact on or change any of the conventions already established in these access standards. If a path meets the appropriate standard it can be promoted using the wheelchair symbol. The Fieldfare Trust ([http://www.fieldfare.org.uk/?page\\_id=48](http://www.fieldfare.org.uk/?page_id=48)) has defined standards for different rural and urban environments and because the standard is designed to be seen as appropriate within that setting there is no need to inform visitors which standard was used. The new system does not change that approach. As with the other background information, such as the Terrain Description and Standard Vocabulary, access takers are able to find out the specifications behind the symbols used on site in advance of their visit but to keep the information clear and simple, definitions are not presented on site.

We have undertaken a piece of mixed methods research with both users and non-users of Scotland's waymarked paths. The research aims to understand how the system is used and whether it encourages people to use one of the paths. We wish to gain insight into whether the system is understood by a wide range of path users and non-users and the ways in which the system influences and aids decision-making around path choice.

The research will ensure that the new system is appropriate, useful and promotes equality in helping people, including first-time and occasional path users and those with varied needs, to confidently select a suitable route and enjoy outdoor activity. As part of the research we have completed an equality impact assessment in

conjunction with the steering group that will ensure the system promotes accessibility and facilitates use for a number of key protected groups.

## Testing sites

Three Forestry Commission Scotland sites were selected to pilot the grading system using outdoor path information panels located near the start points. Whilst the system is intended for use in a range of off-site media too (leaflets, web etc), only the response to on-site panels was studied here – being located at actual path decision points. On-site visitor attention or dwell time also tends to be lower than for off-site media, suggesting that if the system works with on-site panels, it is also likely to work in other media settings too.

The test sites were chosen to give a range of different path use experiences, and were located in both urban and rural areas. They were:

- The Lodge at the Queen Elizabeth Forest Park, near Aberfoyle
- Glenmore Forest Park in the Cairngorms (which is also a National Nature Reserve)
- Callendar Wood, Falkirk.

More details are provided below and the information panels for each of the sites are shown in Appendix 3.

### The Lodge

This site was selected because it has a high footfall and it provides a choice of four paths, including one that is graded as meeting Countryside for All standards (Rural and Working Landscapes), and it attracts people who live in the region as well as visitors from elsewhere in the UK and overseas. We anticipated that this site would provide the majority of the research participants. All four paths leave from and return to the same point, so that path users could be easily approached at the start and end of their walks. The four paths were:

- Waterfall, which was the shortest path, running 1 mile to the Waterfall and back. It had picnic areas, artwork, sculptures and activities for children along the way. It was graded as easy, met the Countryside for All standards and the panel advised visitors to allow ½ hour.
- Oak Coppice ran for 2 miles past the waterfall through woodland. It was graded as moderate because of some short steep sections and some steps. Visitors were advised to allow 1 hour.
- Achray ran past the waterfall, through the forest and over moorland, before returning to the forest. Visitors were advised that they should allow 2½ hours for this 3½ mile path. Its grading placed it in the strenuous category, but a design and print error led to it being shown as moderate on the information panel. This error, however, allowed us to explore how a path grading influences people's perceived and actual ability to walk a path.
- The Highland Boundary Fault path ran past the waterfall up into the hills and provided views of the surrounding forests and mountains. It ran for 3½ miles and it was graded as strenuous. Visitors were advised to allow 3 hours.

The researchers visited this site between the 7<sup>th</sup> and the 14<sup>th</sup> August 2013.

## Glenmore Forest Park / National Nature Reserve

This site was selected because it has a greater proportion of visitors who are staying onsite or nearby rather than day trippers, there are a wide range of paths and mountain walks nearby, and it has a car park through which several of the paths run through, and therefore a base for the researchers to approach potential participants. There were three paths:

- The Beach ran through the pine trees alongside the loch and along the river. It was graded as easy and met Countryside for All standards (Rural and Working Landscapes). Running for 1 mile, visitors were advised to allow  $\frac{3}{4}$  hour.
- Loch Morlich was a moderate path that ran for  $3\frac{1}{2}$  miles around one side of the loch before returning along a forest path. Visitors were advised to allow 2 hours.
- Ryvoan was the longest path at this site, running for  $4\frac{1}{2}$  miles through the forest and up a series of hills to the Green Lochan. Visitors were advised to take 3 hours.

The researchers visited this site between 19<sup>th</sup> and 23<sup>rd</sup> August 2013.

## Callendar Wood

Being in the centre of Falkirk, this site provides feedback from users of an urban park. The site is based around Callendar House and Parkland. It attracts visitors to the House, local people walking through the site to get into town, dog walkers, families visiting the play areas, as well as people who are coming specifically to walk one of the paths. There are three paths:

- Yellow, which was graded as easy and met the Countryside for All standards (Urban Fringe and Managed) and ran for 2 miles through the park and woodland. Visitors were advised to allow  $1\frac{1}{2}$  hours.
- Red, which was the shortest path at  $1\frac{1}{4}$  miles, and ran parallel to the loch, It was graded as moderate because of one slightly steeper section along the path. Visitors were advised to allow  $\frac{3}{4}$  hour.
- Blue, which was the longest route at 3 miles, went further into the woods than the other paths. It was graded as moderate and visitors were advised to allow 2 hours.

The researchers visited the site between the 15<sup>th</sup> and 19<sup>th</sup> August 2013.

Our consultant visited the sites, graded the paths, produced the path descriptions and tested the practicality of the technical system specifications. We made several recommendations for minor changes to the specifications to facilitate its application. These changes have been incorporated into the Path Difficulty grades and standard vocabulary (shown in Appendix 1) and the Terrain Description (shown in Appendix 2).

1. The wording used to describe gradient should be changed in the Terrain Description standard vocabulary: "steep" should be replaced with "fairly steep" and "very steep" should be changed to "steep".
2. For an easy route, the total distance should not exceed 5 miles / 7km. (The original proposal set this threshold at 6 miles).
3. For a moderate route, the total distance should not exceed 7 miles / 11km. (The original proposal set this threshold at 9 miles).
4. The key break point for gradient between the grades should change from 1:10 to 1:8. For example the gradient for an easy route should not exceed 1:8 (or 12% or 7.1 degrees).



We also suggested that the key break point for clear path width between the grades may need to be adjusted to allow a moderate path to contain infrequent sections that narrow to less than 800mm. We recommended that user experiences of path width should be explored during the research. The amended, rather than the original specification was used for the test panels used for the research.

## **Interviews with path users**

Visitors were approached at or near the start of the path and asked if they could spare some time to talk about the walk (or ride) they were about to do. A few screening questions were asked to ensure that they were using the information panel to help plan their visit rather than being locals who were already very familiar with the route. The research was explained and informed consent obtained. A structured interview guide was developed (shown in Appendix 4) that explored how often participants use paths, their reason for visiting the site, their choice of path, how they used the path information board, and how easy to understand and useful they found each section of the information board. On their return, participants were interviewed about their experience of the path, the extent to which it met their expectations, and their suggestions for how the path information panel could be improved. Both open and closed questions were used during the interview, and responses were recorded on an interview sheet. The responses to closed questions were analysed using descriptive and inferential statistics. Responses to open questions were coded and content analysed. This method involves coding responses and grouping them together into categories which are then described and the proportion of responses in each category reported. This shows the range of beliefs that people have, and their relative frequency. Frequencies for each category are reported rather than for each individual point visitors made because participants were free to raise any and as many points as they wanted so some talked at length and in details and others made just a few brief suggestions. Therefore reporting percentages for each individual point in each category suggests a level of precision that isn't present. Say, for example, 2% of comments about how to improve the new system were about the colour of paths indicating their difficulty. This does not mean that, had they been asked, only 2% of participants would have reported that they think the path colour does/should indicate difficulty. All we would know is that of all the comments, 2% were about colour coding for difficulty. Had all participants answered a closed question on this topic (Do you think the colour of the path indicates how difficult it is?) it is likely the percentage would have been higher. This is the reason that we only give percentages for the category as a whole, not for the individual points that form it. This is standard practice in content analysis. Nevertheless, we have indicated where points were made by more than or around half of participants ("most" or "many") less than half ("some") or less than a quarter ("few"). Where points were only made by only one or two participants, this is stated specifically.

A total of 378 groups of path users were interviewed, with groups ranging in size from 1 person to large groups of 12 people. Most were family groups with children (40%) or groups of adults (36%). Many of the groups contained an older adult, age 65+ (13%). Minority groups were well represented: 6% were from ethnic minorities and 9% had a disability. We noticed a difference in the times at which ethnic minority groups visited the sites: at both The Lodge and Glenmore these groups tended to arrive on site in the late afternoon or early evening as most other users were leaving. As the focus of the research was on walkers, relatively few of the participants (2%) were cycling along the paths and no horse riders were encountered. Cyclists told us that they tend to avoid paths with a lot of walkers, which explains why we encountered relatively few at the waymarked path sites. The majority of participants were recruited from The Lodge, although all three sites had good representation. Table 1 shows the sites and the paths that each participant group were using.

**Table 1. The number of participants using each path.**

<b>The Lodge</b>	<b>Waterfall 131</b>	<b>Oak Coppice 43</b>	<b>Achray 16</b>	<b>Highland Boundary Fault 33</b>	<b>All paths 223 (58%)</b>
<b>Glenmore</b>	<b>Beach 27</b>	<b>Loch Morlich 42</b>	<b>Ryvoan 20</b>		<b>All paths 89 (24%)</b>
<b>Callendar Woodlands</b>	<b>Yellow 22</b>	<b>Red 23</b>	<b>Blue 21</b>		<b>All paths 66 (18%)</b>

### **Interviews with path refusers**

Path refusers were approached as they left the information panel and it became clear that they were not intending to use the paths. The research was explained to them and informed consent obtained. A semi-structured interview guide was developed (shown in Appendix 5) that explored the purpose of their visit, their understanding of the path information panel, their decision not to walk a path, and their intentions around walking a path in the future. These interviews were analysed using thematic analysis, in which the data are coded and grouped into themes that answer the research question(s) asked. In addition, a content analysis was undertaken to indicate how common each of the barriers to walking a path were. Some participants preferred not to be audio recorded, and in these cases the researchers made field notes after the interview. A total of 35 interviews with groups of path refusers were conducted, 7 at The Lodge; 11 at Callendar Woods; and 17 at Glenmore.

### **Focus groups with non-users**

To explore the impact of the waymarked path grading system on people who are less likely to use the paths, we conducted focus groups with people from groups who are seldom seen at outdoor sites. During focus groups an experienced facilitator guides participant discussions around a set of questions on the topic of interest, in this case the path grading system and their use of waymarked paths. This is a form of qualitative data collection in which the data are the things that people say, for example their accounts of their experiences and the way in which they talk about things. The qualitative approach means that the data are analysed to provide insight into participants' experiences rather than quantifying the number who report a particular opinion. As such statistics are not used in this part of the report and instead we draw out how and why the new path grading system is likely to influence behaviour. However, as for the semi-structured interviews, we have indicated whether the points discussed were common using the terms "most" or "many" (more than or around half) "some" (less than half), and "few" (less than a quarter).

We developed a focus group topic guide that explored people's use of the countryside, their understanding of the grading information system, how they would use it to select an appropriate path, and their expectations of what a walk would be like. The topic guide is shown in Appendix 6. Each focus group began by giving an overview of the research and gaining informed consent from participants. Focus groups lasted around 90 minutes and were audio recorded and transcribed verbatim. They were analysed using theoretical thematic analysis, in which the data (the transcripts) are coded and grouped into themes around the topic of each of the research questions. The themes are described in this report and are illustrated by quotes from participants. Where appropriate, quotes have been anonymised to protect the identity of participants.

To recruit potential participants to the research we worked with contacts provided by the research funders, as well as other organisations in Glasgow identified by our team. These included disability groups and associations, charities, housing provider services and older adults' day care centres. To encourage participation and input from a range of people – not just those with very strong opinions – we provided a cash incentive of £30 to those who took part. Five focus groups took place in Glasgow in November 2013, each held with a different minority group.

1. People with low socio-economic status
2. People with disabilities
3. Older people
4. Older people with mobility difficulties
5. People from an ethnic minority

### **Group 1**

This group included local residents from Castlemilk – a highly deprived area of Glasgow situated close to a large woodland area. The eight participants were males and females ranging in age from 18–60 years. Most were currently unemployed or participating in local employability schemes. Two were retired and take part in a local walking group that runs hour-long walks in the local area. One had young children. Most had lived in Castlemilk all of their lives.

### **Group 2**

This group included ten male and female residents from across Glasgow with a range of disabilities, including physical disabilities, visual impairment and learning disabilities. Participants ranged in age from their early 20s to their late 60s. Participants' physical disabilities were varied and included cerebral palsy, muscle myopathy, and disabilities caused by health conditions such as arthritis and fibromyalgia. There were three wheelchair users in the group, including two individuals who use an electric wheelchair, and one had a visual impairment.

### **Group 3**

The first of our two older adults groups included five male and females in their 70s and 80s. Four attended an older adults day care centre in northwest Glasgow in the Knightswood area. One participant was a member of a local older adults community group in the Lambhill area.

### **Group 4**

The second older adults group included four males and females aged in their late 60s to their early 90s and one in their early 50s. Three had mobility problems and one walked using a walking frame. One participant was a health walk leader in the Maryhill area of Glasgow who takes small groups of local residents on hour-long walks in the local area.

### **Group 5**

This group included eight South Asian women who attend a local venue that provides health and wellbeing services for the BME community in Govanhill, Glasgow. The women were residents of the Govanhill area and were regular users of the centre which holds a coffee morning for local women to meet and socialise. Most of the women had children, some young and some young adults. Some were involved in a weekly local health walking session run by the centre which runs short social walks (under 1 hour) in the local area.

## 2. Results

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The results are described in six sections:

1. How did path users engage with the path information panel?
2. What other information sources did path users make use of?
3. What were people's experiences of using the paths?
4. Why did some visitors not use the paths?
5. How could the path information panel be improved?
6. How could non-visitors be encouraged to use waymarked paths in the countryside?

### 2.1 How did path users engage with the path information panel?

People using the waymarked paths were asked a series of questions about how easy or difficult it was for them to understand the information on the path information panel. They were asked to rate each information source as being very difficult, fairly difficult, fairly easy or very easy. Responses were coded from 1 to 4 with higher numbers indicating greater ease of understanding. Average (mean) responses are shown in Figure 2.

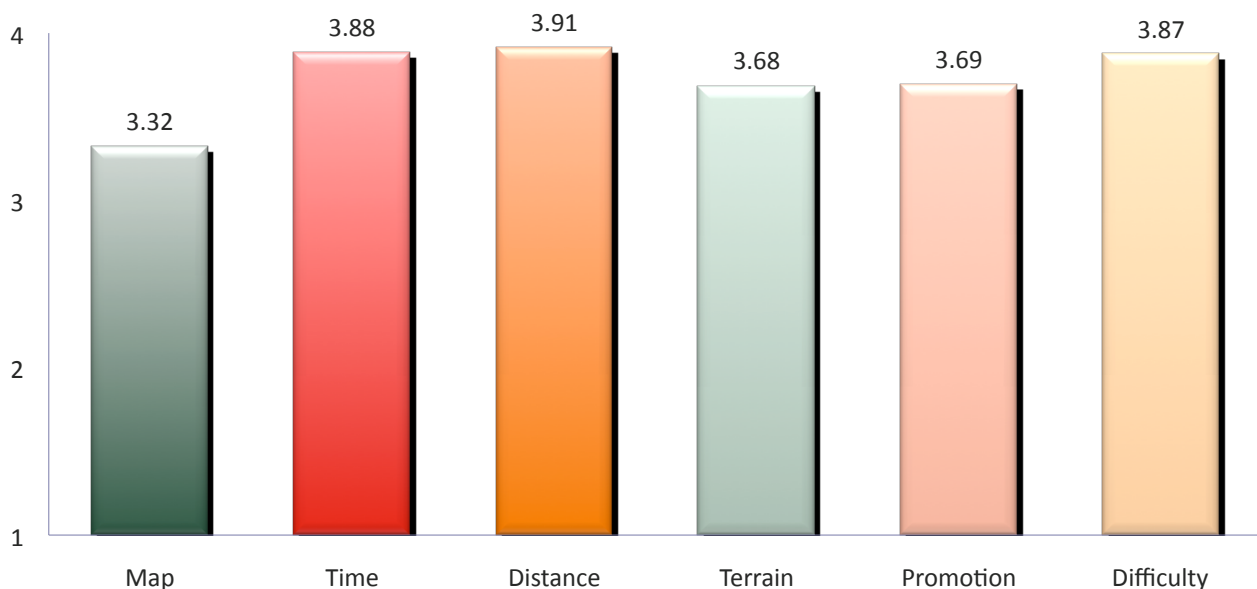


Figure 2: Participants' ratings of how easy it is to understand the information panel.

The results show that people find all aspects of the information panel easy or very easy to understand. The only exception is the map (which is not part of the path grading system being tested), which has a lower mean score,

indicating that there are some people who find this more difficult to understand. A repeated measures ANOVA<sup>1</sup> confirmed that the map is rated as significantly less understandable than other aspects of the information panel ( $F(2,35)=75.49, p<0.001$ ).

We also explored whether there were any statistically significant differences<sup>2</sup> between understanding of the information panel by participants at different locations. Several statistically significant differences were identified:

- Participants at The Lodge had a lower understanding of the path promotion text than those at Glenmore ( $F(2,337)=4.64, p=0.01$ ).
- Participants at The Lodge had a lower understanding of the terrain characteristics than those at Glenmore ( $F(2,338)=4.96, p=0.008$ ).
- Participants at Callendar Wood had a greater understanding of the map than those at either The Lodge or Glenmore ( $F(2,340)=15.81, p<0.001$ ).

Our qualitative results provide insight into these findings and highlight that as more participants at Glenmore were experienced walkers they would be more likely to immediately understand the terrain characteristics and its implications. Differences in ratings of the path promotion text could be explained in the same way, or could also be because a higher proportion of participants at The Lodge were from overseas and so had English as an additional language. Additionally, some of the terms used in the path promotion for The Lodge (such as “drovers’ road”, “fair haul”) might have been more difficult for non-native speakers to understand.

Participants were also asked a series of questions about how useful they found the information on the path panel. They were asked to rate each information source as being essential, very useful, fairly useful, or not at all useful. Responses were coded with higher numbers indicating greater usefulness. Mean responses are shown in Figure 3.

On average, all the information is useful, and participants understood how all the elements together provide a complete description of the path. Overall, time and distance are reported as most useful and the terrain information and path promotion as least useful.

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<sup>1</sup> The ANOVA tests whether or not the differences found in the research sample can be generalised to the wider population of path users. The numbers quoted after each test show the value for the F statistic and the probability, or p, value. Values of less than  $p = 0.05$  are conventionally accepted as indicating that the differences between the different groups or conditions are “genuine” and not because of the particular sample that took part in the research. Because data for this analysis are ordinal rather than continuous and we have undertaken several different analyses we have used ANOVA testing with a conservative p value.

<sup>2</sup> Statistically significant differences indicate that the results reported for this sample can be generalized to the wider population of visitors to the Forestry Commission sites.

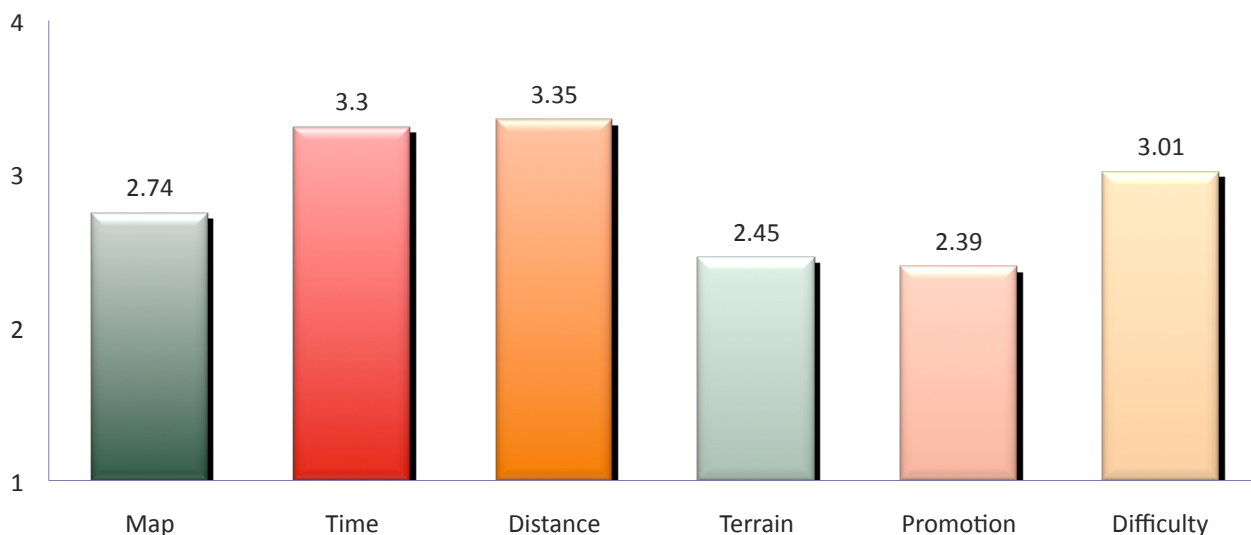


Figure 3: Participants' ratings of how useful the information is.

A repeated measures ANOVA shows that the distance, time and difficulty ratings are rated as significantly more useful than other aspects of the information panel ( $F(4,67)=64.8$ ,  $p<0.001$ ).

We also explored whether there were any differences between perceived value of the information panel by participants at different locations. Several statistically significant differences were identified:

- Participants at Callendar Wood valued the map more than those at the other two sites, and those at The Lodge valued it as lower than the other two groups ( $F(2,342)=26.95$ ,  $p<0.001$ ). Given that visitors at Callendar Wood found the map easier to understand, and that our qualitative research showed that those at The Lodge found the map inset difficult to interpret, this demonstrates that a more complex map is less useful for visitors. (The Callendar map was the simplest graphic of the three sites.)
- Participants at The Lodge valued the path distance more than those at Callendar Wood ( $F(2,347)=5.03$ ,  $p=0.007$ ).
- Participants at The Lodge valued the path promotion more than those at the other two sites, and those at Callendar Wood valued it as lower than the other two groups ( $F(2,346)=16.32$ ,  $p<0.001$ ). This is an interesting finding given that participants at the Lodge also found the promotion more difficult to understand. The results highlight the importance of the trail promotion to less experienced walkers, who are the target of the new system.

Participants were asked to talk us through what they looked at on the path information panel, anything that they found particularly interesting, useful, or easy or difficult to understand or any general comments they might have about the system.

Overall, participants found the system intuitive and easy to understand. They appreciated that the system was clearly laid out and provided a concise overview of what they needed to know in order to make a choice of which

path to follow. They liked that the descriptions managed to highlight the main attractions of the walk without being long or complicated.

We noted that the design of the panel very much influences how they used the information. Where the map is very large, such as Glenmore, participants were drawn first to the map and only later consulted the text. In contrast, at The Lodge, where the map was relatively small, participants first read the text, although they didn't typically notice the "Do a little" "Do a lot" section headings straight away. Many participants at both The Lodge and Glenmore found the map difficult to understand, and not all immediately recognised that the map inset was a larger scale version of a small map section despite this being labeled clearly. Participants struggled to make sense of the alternating coloured dots indicating where paths coincide. At Glenmore one of the paths was coloured brown, and participants did not always notice this path on the map as it did not stand out sufficiently. Because they had referred to the map first, they often skipped over the corresponding path information as they were not looking for its colour code on the text panel (see Appendix 2). Many participants at all three sites struggled to use the map to find the start of the path. Nearly all participants spotted the disability symbol and understood that this related to a range of different users, including pushchairs as well as people with mobility problems.

Participants generally assumed that the paths were listed in order of difficulty, with the easiest ones listed first. Some initially believed that the walks were colour coded, and expected the red route to be a difficult one. While they subsequently recognised this was not the case, they suggested that colour coding difficulty would be a sensible approach to take. Some participants who ride mountain bikes talked about the colour grading of mountain bike routes: green for easy; blue for moderate; red for difficult; and black for severe. They assumed a similar system would be in operation for waymarked paths. Most participants assumed that the shortest walk would be the easiest, and at Callendar where the shortest path was graded as moderate, this could cause initial confusion. Participants who wanted an easy walk were unsure which one they should choose: the short one or the easy one.

Some quotes are shown below that illustrate people's initial reaction to the information system. Most of what people discussed was very positive and about the system being easy to use, but rather than replicate many positive quotes we have selected those that show a range of responses and have focused on where people have had difficulties.

<p><i>Even as a non-native speaker of English it's straightforward and easy to understand. The map is more complex and you need to spend more time looking at it in more detail but it's easy enough if you spend the time. (The Lodge)</i></p>	<p><i>The green path appears to be a circular walk on the big map but not on the more detailed one. I couldn't understand where it actually goes. I couldn't find the start. (The Lodge)</i></p>
<p><i>The wheelchair symbol gives you confidence that the path is suitable for a buggy. (The Lodge)</i></p>	<p><i>Sounds like we will enjoy it if the information panel is right. (The Lodge)</i></p>
<p><i>I had to look at it for a while before I understood the symbols were about how difficult the walk is; I thought they were colour coded at first. But once I understood that it was very straightforward. (The Lodge)</i></p>	<p><i>Not sure of the relevance of a circle versus square versus triangle. I thought the colour coding is a difficulty coding with red the most difficult. Green, yellow, blue, red in order of difficulty. (The Lodge)</i></p>
<p><i>We liked the old system but it did tend to be inconsistent between hikes. (The Lodge)</i></p>	<p><i>I found the map confusing but I get that the wheelchair symbol means pushchair friendly. (The Lodge)</i></p>

<i>Triangle means mountainous, which is good for dogs. (The Lodge)</i>	<i>We weren't concerned about not being able to do the walk. The Forestry Commission sites are always safe and well signed. (The Lodge)</i>
<i>The split screen map isn't immediately obvious. The layout's not great - it's not clear where to start from. I'm not keen on strenuous, but maybe later in our holiday. It's too wordy, we wouldn't read everything, but we're dog walkers rather than proper walkers. (The Lodge)</i>	<i>We're used to the old system but this new one is very clear. The terrain information is really important for someone with bad knees - it's really good information. (The Lodge)</i>
<i>I looked briefly at distance and saw it was short and easy. I might read the rest more closely if going further afield. (Glenmore)</i>	<i>It's easier to follow than the older system, the terrain information is useful and you can work out footwear from this. (The Lodge)</i>
<i>I'm totally confused by it, I'm not sure where to look or what to read. I went to map first and the first thing that jumped out was to Loch Morlich path, then I looked at time, decided on Loch Morlich. (Glenmore)</i>	<i>I'm actually very sensible and tend to read through everything on these boards before I go and get a full picture of what I might expect - Only time and terrain information that I would ignore here. (Glenmore)</i>
<i>I looked at map and I assumed the first walk is the easiest, that it runs top to bottom from easy to more strenuous. I didn't notice difficulty rating. (Callendar)</i>	<i>I didn't notice any of the difficulty symbols straight away, although they're really useful. (The Lodge)</i>

We combined what the participants told us during interviews with field notes on observations on how they used the panel and the discussions that went on within their party to identify different types of user. These types differed in terms of their reason for walking a path, the type of path they selected, and how they used the information panel. They are described below and quotes provided to illustrate the four different groups we found evidence for.

### **Incidental walkers**

Walking is incidental to their visit, for example they might have been passing by and stopped off, or they were with their family visiting Go Ape at The Lodge, or had come to see Callendar House. They were most interested in which walks could be done quickly and often had constraints that limited the time they could spend and therefore the distance they could walk, for example because they had only paid for an hour in the car park hour or they had arranged to meet the rest of their party at a particular time. Typical reasons for walking are:

- To stretch the legs;
- To see the scenery;
- To enjoy nice weather;
- To see the family on Go Ape;
- To visit a local attraction, e.g. to see the Lodge, to see the beach, to visit Callendar House.

The path promotion is important for this group as it can sway their decision about whether or not they go for a walk at all. They would often be attracted by a point of interest along the route: what they might see on the walk. Most were influenced by the time and ease of the walk. At the Lodge they usually chose the Waterfall path. At Glenmore they usually opted for Loch Morlich. While this wasn't the shortest path, they chose this because the colour of the Beach path made it difficult to see on the map and so they often didn't notice it. Those who thought Loch Morlich was too long would often choose to take a look at the beach, and sometimes they would pick up the waymarks for the Beach path and follow this instead. At Callendar Wood they looked for a walk around the Loch. We saw



relatively few of this type of path user in Glenmore. Those who fitted into this group typically had come for a drive through the area but saw a nice place to stop, or went into the Visitor Centre cafe and thought they would go for a walk. Some examples of how this group used the information panel are shown below.

<p><i>We only have an hour before we do Go Ape so I looked at the time and read to see if it an interesting walk to go on. (The Lodge)</i></p>	<p><i>We only had half an hour as we're heading up to Loch Katrine so we based it purely on the time predicted but we would use the difficulty rating if we had longer as it seems really clear. (The Lodge)</i></p>
<p><i>We want the easiest one as I've not done any walking before. It's strange that the Red one isn't the easiest: you'd think the easiest one would be shortest and it would take less time. We'll do Yellow as we don't want any steep bits – we're only wearing sandals today. (Callendar)</i></p>	<p><i>We were looking for some way of getting to the beach with a wheelchair, but we saw the walk was suitable and close to the beach so we decided to try to follow that. But we only went for a walk as we saw you talking to people about the walks, otherwise we wouldn't have noticed or had confidence to interpret the panel. (Glenmore)</i></p>
<p><i>My mother-in-law is in a wheelchair so we wondered if the Waterfall path is suitable. Not sure about surface, though although it says it's for wheelchairs. We may not get all the way round. (The Lodge)</i></p>	<p><i>I have a bad leg and I'm wearing sandals so the most important is the time and the distance, and the second is the terrain, that there's no gravel. I chose the shortest route even though it's moderate and I checked the terrain to make sure it's do-able. (Callendar)</i></p>
<p><i>We looked at what the terrain is like with a pram. The pram has big wheels and can handle most things but the pushchair less so. (Callendar)</i></p>	<p><i>It enabled us to see how long the shortest route took and how the Beach path could go to the loch side. (Glenmore)</i></p>

## **Strollers**

This group visited the site with the intention of going for a walk, although they may also be there for other reasons, such as going for a picnic, visiting a local attraction, going out for lunch, or meeting with friends and family. They can therefore be under time constraints. They want to walk and to enjoy the countryside. They don't consider themselves as "proper" walkers and so they typically look for a short easy walk to do or a path that takes them through points of interest or activities for children. The path promotion is therefore very important. While they have already decided to do a walk, they choose one that sounds interesting, will give them something to see or will give the children something to look out for. Some have health or mobility problems which limits what they can do. Others have young children in pushchairs, which again limits their activities both in terms of the distance and gradient the children can walk and also their attention span. Some examples of their reasons for using the paths are:

- To take advantage of good weather;
- To entertain the children;
- To spend family time outdoors;
- To show visitors the waterfall or other local attractions;
- To enjoy some exercise.

The terrain tends to be more important to this group than others. They also use time, distance, and to a lesser extent, difficulty. They like to speak to the Ranger to get personal advice about which walk would be best for them. Their choice of path tends to be similar to the Incidental walkers: at the Lodge they usually went for the Waterfall

path; at Glenmore they usually chose Loch Morlich (because they don't see the Beach path) and at Callendar Wood they tended to choose the Red or Yellow paths. Some examples of how this group used the information panel are shown below.

<p><i>My daughter doesn't like steep descents so we try and avoid them, so it helps us see which path is best for all of us. Time is very important, we will start at 10 and finish at 12ish for lunch. My son has seizures so we don't want anything that means we're too isolated or too far from the car. Although distance is fine – he can walk a long way – just not too much up and down. (Glenmore)</i></p>	<p><i>We take into account how much time you have, what you see on the walk. We look for a mixture of terrain to keep it interesting. It's crucial that the way is clearly marked. It was a joint decision about the walk. We decided on the Oak Coppice because it's about an hour, although we recognise that we'll do it in less time. (The Lodge)</i></p>
<p><i>Time is very important, surface is very important as we use sticks to walk and don't want to get halfway round and find it too steep. (Callendar)</i></p>	<p><i>We wanted a walk we could do in a set time so it helped identify which walk would be enjoyable and suitable in terms of time and distance. (The Lodge)</i></p>
<p><i>We look at the map and the distance and time. The terrain is useful, the kids sometimes have scooters sometimes bikes. The youngest isn't good on the bike yet so it needs to be smooth. (Callendar)</i></p>	<p><i>We look at the length of walk - want a long one but two hours might be too long. We look at the overview - things you'll see. What the slopes will be like, whether the path would be muddy, whether our shoes are suitable. (Callendar)</i></p>
<p><i>We'd already decided to do the Waterfall walk but the information confirmed this is a good route and we have suitable clothing. (The Lodge)</i></p>	<p><i>It's particularly important to get information on the surface - whether it's suitable for a toddler, and whether we could take the pushchair. (The Lodge)</i></p>
<p><i>We were most interested in the time it would take. We haven't got a lot of time so it told us which walks we could do. We liked the idea of a waterfall. (The Lodge)</i></p>	<p><i>We look at the distance mainly as we can work out how long the family will take - usually a lot longer than expected. That and the difficulty, and that there is a waterfall to look at. (The Lodge)</i></p>
<p><i>We look at the distance and how hard it is primarily. We read the text only for some more information but wouldn't make a decision on it. The map isn't clear but I'm not very good with maps. (The Lodge)</i></p>	<p><i>The time of the walk very useful. With the rain we don't want a five-mile walk with the kids. We have limited time. The waterfall path gives us something to aim for. The titles are important. "Do a little, do a lot" is important as we're with kids. (The Lodge)</i></p>
<p><i>It really works – it's very useful. I read it all then made an informed decision, based most on the distance and time with a child. (The Lodge)</i></p>	<p><i>I couldn't understand the map at all. I looked at the overview to find out what I'd see then the time the walk would take is very important too. (The Lodge)</i></p>
<p><i>We look for something of interest so read the text for views or something else of interest. Today, and often, time is an important factor. (The Lodge)</i></p>	<p><i>I only looked at distance and time today as the kids won't go far. But if I were on my own I would look more at the other details and difficulty rating. I'll possibly come here again on a bike. (The Lodge)</i></p>
<p><i>We're with the grandchildren so there's a limit to what they can do. A short walk is very important. An Easy grading gives us confidence that the youngest girl (age 2.5) can do it. (The Lodge)</i></p>	<p><i>We looked for a walk that goes round the loch, is not too steep or too long. We want a walk with views of the loch, and maybe two hours is ok or maybe shorter would be better. Not too steep or high as I'm pregnant. I felt too sick this morning when we walked up a mountain path - we had to give up. (Glenmore)</i></p>

## Hikers

This group visited the site expressly to do a walk, and any other activities are secondary to their visit. They are more likely than the Strollers to have explored their walking options before leaving home, and so advice from the Ranger is less important, although they will often seek advice to reassure themselves about both the path and the local conditions. Some examples of their reasons for using the paths are:

- To explore new places;
- To enjoy being in the outdoors;
- To challenge themselves;
- To keep fit and active;
- Because they are on a walking holiday;
- To seek out a particular view, wildlife or geological feature.

Distance, time and difficulty are important, although they tend to interact more with the information, looking at the full range of information provided. They usually look for a longer walk than the Strollers and will sometimes choose paths they believe will be less popular because they want to get away from the crowds. While they will have considered footwear and clothing before leaving home, they often want to check to make sure that they are suitably attired for the walk they plan to do. They are also more likely to check the gradient to make sure they can manage the path. The Hikers tend to be more experienced walkers, although sometimes they are in a mixed party where some people have not done much walking previously. Nevertheless, some are deterred by a path that is graded as strenuous and assume it would be too difficult for them. Some, however, take less note of the grading as they consider themselves experienced walkers who can handle any of the paths. Many of the Hikers will have a guidebook that describes the path and they don't like it when the information is contradictory. They may also have brought along their own maps. Some examples of how this group used the information panel are shown below.

<i>We seek out strenuous routes as they're quieter and more challenging, so difficulty is useful along with the summary information. The main thing I looked for was a decent time walk, though. (Glenmore)</i>	<i>We'd decided in advance to do this walk so we didn't use the panel to decide which one to do but I suppose we used it to decide whether the walk was suitable, e.g. duration, how difficult it is. (The Lodge)</i>
<i>It helped identify the best walk, taking into account that some of us don't go on walks. I do, I go with my husband and we walk more strenuous paths but my sister in law doesn't walk at all. With the children you don't want to be in the position where you're halfway into a walk and realise it's too difficult. (The Lodge)</i>	<i>We used it to distinguish between the red and blue routes. We chose red because it was modest but a good length, whereas the strenuous looked too hard for the last day of the holiday. The younger child is fed up of so many hills after going up Ben Nevis earlier on in the holiday. (The Lodge)</i>
<i>We only really used it to look at the time and distance. We did another walk earlier in our holiday that was too difficult so we want to get a walk that is easier. The summary and terrain information would be useful for longer routes but not so important for shorter ones. (The Lodge)</i>	<i>We mainly looked at the distance as we want a decent length walk. We chose this one as it looked like better views from the map than the red one, which stayed lower down. The map isn't clear on where the walk starts from. (The Lodge)</i>
<i>The difficulty rating is the most important. We wouldn't do strenuous- we're not fit enough yet. Moderate is ideal. Then we look at time and distance. If I had children with me, though, I'd read everything including the terrain information. (The Lodge)</i>	<i>The terrain and the difficulty rating are most important. Needs to be strenuous enough for the dog - it can cover a lot of distance in a little time - so slopes are best, but not steps. Time is useful - I saw a walk of six hours yesterday but that is too long. (The Lodge)</i>
<i>We wanted a decent walk that was three miles or so but we were put off the strenuous one as we have young</i>	<i>Time is the most important, the terrain, depending on who is in the group. The person with the least mobility</i>

<p><i>children. We looked closely at the terrain description and, combined with moderate difficulty, seemed ideal for the family. (The Lodge)</i></p>	<p><i>governs which route to take. A lack of information has put people off longer walks in the past as we didn't know how long it would take. We'd probably go for a moderate and not a strenuous walk. (The Lodge)</i></p>
<p><i>We generally use distance to work out the time, so we look at distance and difficulty mainly, though we also looked closely at the terrain information as it's very important – we don't necessarily enjoy it too rough at our age, so would think twice about the blue route. (Glenmore)</i></p>	<p><i>It's very useful as we would be put off by the strenuous category and definitely by the terrain description of the Ryvoan Path. We would mainly look at distance and difficulty to work out if it's suitable as we're not serious cyclists, we're on hybrids. It may help if it said if it is suitable for bikes. (Party of cyclists, Glenmore)</i></p>

**Mountain goats**

This group is more experienced and they are typically happy planning their own routes rather than relying on waymarked paths. As such they are not really the target audience for this grading system. Their walks tend to be more challenging, either in terms of distance or gradient or the type of terrain they tackle. They are familiar with Ordnance Survey maps and with using maps to identify the length and gradients of their walks and making a judgment about how long a walk will take them. They are more confident in their walking ability and they are not usually deterred by a strenuous grading unless they are deliberately choosing an easier walk. Some examples of their reasons for walking a waymarked path are:

- They don't have much time and so a waymarked path gives them confidence they can complete a walk quickly and easily;
- They've not had the opportunity to plan their own route, either because they have limited time or they are just passing through an area;
- They have done a "proper" walk earlier in the day;
- They are having an easy day after a long walk;
- They are in a mixed group with some members who are less confident in their ability.

The paths are relatively easy and straightforward for them and they don't interact very much with the information. They often simply look at the time or distance and the map. Often they go straight to the map and work out everything they want from that. They like detail on the maps and so they find maps like the one at Glenmore easier to understand and to extract useful information from than more stylised maps like the one at Callendar Park Woodland. They don't think the information presented on time and difficulty is applicable to them but they can use information on time to estimate how long it will take them. However, if there is a reason why they want an easier walk, for example because of an injury or time constraints, they will take difficulty into consideration. They acknowledge the information could be more useful in bad weather. Some examples of how this group used the information panel are shown below.

<p><i>The map is the most useful. If I were with somebody else then I'd consider the terrain but I walk on all terrains. I don't use the time because I have all day, but if I were with somebody else it might be different. Again, difficulty, if I were with somebody else I would check it out. (The Lodge)</i></p>	<p><i>We're experienced walkers and climbers and I'm teaching my son map reading at the moment and so we looked at the map to see where the paths go and where it is steepest and so more difficult. It's important to get good information, particularly for long walks. Some walks we go on last all day and we need to know if you need boots or if trainers are ok. (Glenmore)</i></p>
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<i>We only really used the map to work out where we'd like to go as it has a scale, contours and everything we would need to be able to work out our level. (Glenmore)</i>	<i>We looked at the time allowed as it's often a key factor and we know it will always take us less time. Also can work out a lot from the map. The difficulty rating is only really relevant in winter conditions. (Glenmore)</i>
<i>We used the map to work out the routes we wanted to go on. The other information is not so useful for us, though distance/time may be a good guide. Otherwise we find these gradings a bit gentle - nothing is too hard here. (Glenmore)</i>	<i>We just look at the time. We're experienced walkers so we know we could do any of the walks here. We do hill walking so would normally take an OS map but on walks like this you just need to follow the waymarkers. (The Lodge)</i>
<i>We look at the distance primarily as we have already walked today; we're not too interested in the difficulty rating. (The Lodge)</i>	<i>Difficulty, distance and time only thing really used apart from the map - the combination of these gives a good outline of the walks. (Glenmore)</i>
<i>We only looked at time and which colour to follow. (The Lodge)</i>	<i>Only distance matters. We can handle any terrain and difficulty for a short walk. (The Lodge)</i>
<i>Today I don't want a hard walk because I have an injured ankle – my achilles tendon, so I could do a moderate walk but not a strenuous one. Around the loch will be fine. (Glenmore)</i>	<i>The difficulty rating is very clear, so we used that with the distance and time information. We'd normally go for longer walks but we're on a "taking it easy" holiday. (The Lodge)</i>

Of these four user groups, the new system is targeted primarily at the incidental walkers and the strollers, and to a lesser extent the hikers. It aims to encourage them to use one of the waymarked paths when without this information they may not use the paths, or make an inappropriate choice. It is not targeted at the mountain goats.

## 2.2 What information sources did participants make use of?

Path users were asked about the sources of information they used to help them plan their day and the walk they were going to do. They could answer in any way and the researchers coded their responses into one of six categories, plus any "other" source. The following types of information were identified, in the order they were mentioned most frequently.

### Looking for an information board

This was the most common response that people gave, although as the researchers were located nearby the path information board, this will have biased the results. Participants wanted to look at the range of paths, choose the most suitable one for their group, and to find out where the paths start. For this reason it is important that the board is very clear about which direction to go in to start the walk.

### Looking online

Participants talked about looking for different types of information online. This might be a website, and some had downloaded and printed off a pdf that listed the walks they could do. Some participants had looked at websites that listed different walks, some of which provided maps that they had printed. Others talked about searching online more generally about the area, what there is to do, and getting general maps and guides. Some, but not all,

participants who were on holiday had easy access to the internet so they varied in how easily they could access online material. Few, however, could print materials off away from home, so while they could read about the sites and things to do there they could not bring materials sourced from the internet with them.

### **Picking up a leaflet on site**

Many participants who did not already have a leaflet on the walks went to find one in the Visitor Centre when they arrived. They wanted the leaflets to contain details and a map of the walk, and information about the wildlife they might encounter along the way. Some parents suggested the leaflets could also contain activities for children, which they noted as being enjoyable for both adults and children.

### **Picking up a leaflet in advance of the visit**

Tourists staying nearby often described how their accommodation carried a stock of leaflets about things to do in the area and they had picked up a leaflet about the site they were visiting. Others had been given a leaflet when they visited a tourist information centre, and some tourist officers had recommended specific walks or points of interest they could see when walking the paths.

### **Asking advice from the Ranger**

The Ranger was a very popular source of advice. Participants usually went to the Visitor Centre when they first arrived and would look to see what information they could collect. They liked to talk to a Ranger to ask about the walks, get recommendations about which paths would be most suitable for their party, the weather conditions, and to find out about any activities going on that day, or anything they should be looking out for along the path on that day. This was particularly important for the Strollers and the Hikers – they wanted reassurance that the path they were considering would be appropriate. The Rangers were also a very useful resource for directing people to the start of the paths, as well as providing information on the general history of the site and other things to see and do during their visit.

### **Recommendations from others**

Some participants, particularly families, described how a particular site or path had been recommended by other people, often other tourists or staff in their accommodation. This was particularly the case for the Waterfall Path at The Lodge.

### **Guide books**

Bringing along a guide book on the area was the least common means of accessing information, although participants from both the UK and overseas did so. Mostly these covered walks from a particular area of Scotland, and participants visited several different locations covered by the guide.

## **2.3 What were people's experiences of using the paths?**

Participants were asked why they had chosen that particular walk, and on their return, how much they enjoyed it and what they enjoyed about it. Overall most participants did enjoy their walk: most reported that it was really good (71%) or "excellent" (19%) with less than 10% that "it was ok". Only one person (less than 0.5%) said that they did

not enjoy their walk. This person had been cajoled into walking a path, and despite them walking a strenuous path, the rest of their party described it to them as being easy. This highlights the importance of clear and accurate expectations of how easy or difficult a walk is likely to be.

Participants were also asked whether the path information and grading matched their experiences of the path. They could choose between it matching not very or fairly well, that it was very close, or that it was exactly right. The results, averaged across all of the paths, is shown in Figure 4, with higher scores indicating a better match.

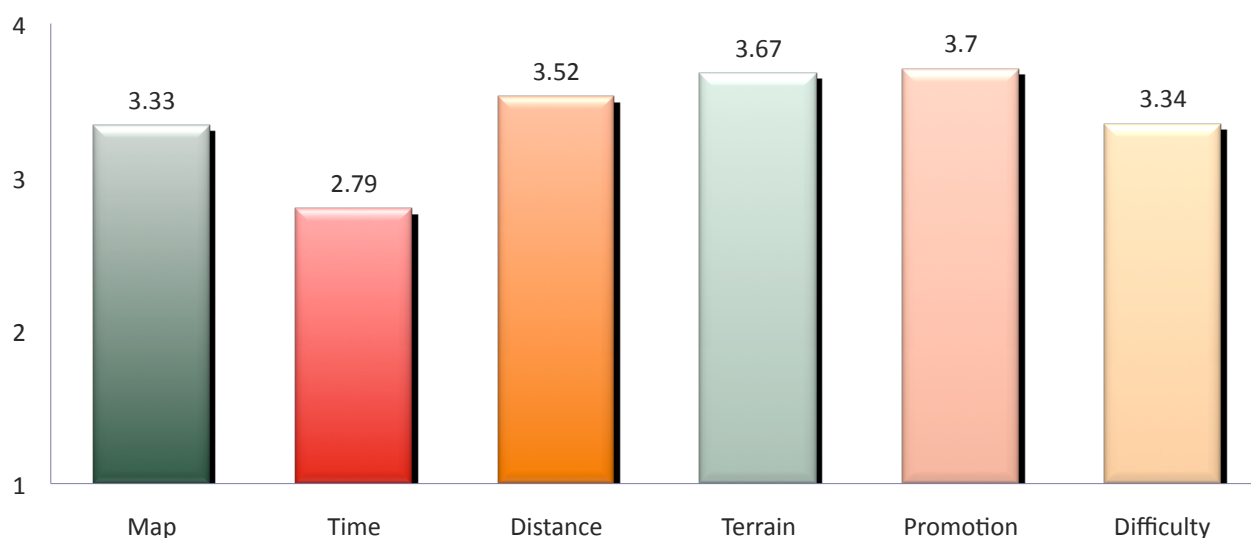


Figure 4: Participants' ratings of how accurate the information is.

There was little difference between the three locations, with the exception of the estimated time at Callendar Wood, which was rated as being significantly less accurate than the other two sites ( $F(2,244) = 5.69, p < 0.001$ ). The interviews suggested that paths were completed faster than was suggested, possibly because there were fewer activities, viewing places or interest points to linger over than at the other sites.

Participants were asked how long it had taken to complete their walk. Around a third of the groups were able to supply a time; the remainder found it difficult to estimate as they had stopped at the Visitor Centre or stopped for lunch or a picnic before returning to speak to the researchers. Information on how long it took to walk the paths was rarely obtained at Callendar because participants had usually stopped with their children at the playground on the route, had stopped at Callendar House or the cafe, or had not followed the route as they had chosen to walk to the loch instead of staying on the path. However, information on over 100 completion times was obtained and this shows that the majority of groups – around 70% – completed their walk in less time than suggested on the information panel. The only exceptions were the Waterfall path at The Lodge and the Beach trail at Glenmore. These took longer because there was lots to see and do on these paths, especially for children, and visitors took their time to explore and enjoy what these paths had to offer their group. The time to complete each of the walks at The Lodge and Glenmore is shown below. As before, “most” or “many” indicates more than or around half, “some” indicates less than half and “few” indicates less than a quarter.

**The Lodge:***Waterfall Trail (allow 30 minutes)*

Most of the groups who used this path said that it took them more than 30 minutes to walk because there was so much to see and do, particularly for children. Some stopped for a picnic. Participants told us that they were on this trail for between 20 minutes and 3.5 hours. Only a few said that they had walked the path in under 30 minutes. These users said that they found the walk easy and were surprised how quickly they had completed it.

Minimum walk time: 20 minutes / Maximum walk time: 3.5 hours

*Oak Coppice Trail (allow 1 hour)*

Most of the path user groups said that their walk was shorter than one hour (range: 40—50 minutes). On average, the walk took these groups 45 minutes, which is 15 minutes less than the suggested time. A couple of groups said that the walk took longer than the suggested time, with the maximum time being 1.5 hours. One of the users groups who took longer than one hour mentioned that they made stops to look at things along the path.

Minimum walk time: 40 minutes / Maximum walk time: 1.5 hours

*Achray Trail (allow 2.5 hours)*

Some groups found that the walk took them 15—30 minutes less than suggested and one that the walk took them 50 minutes less. A couple of user groups described taking their time to walk this route, finding some stretches of the path steep. They said that walking the path took them between 15—30 minutes longer than suggested.

Minimum walk time: 1 hour 40 minutes / Maximum walk time: 3 hours

*Highland Boundary Fault Trail (allow 3 hours)*

The majority of people who had walked this path said that it took less than the suggested time to allow. There was quite a bit of variation, ranging from 1 hour 40 minutes—2 hours 50 minutes. On average, it took people using the path 35 minutes less than the stated time to walk it. A small number of people who found this trail a challenge for their physical ability or had young children with them took on average around 30 minutes longer than the suggested 3 hours.

Minimum walk time: 1 hour 40 minutes / Maximum walk time: 4 hours

**Glenmore:***Beach Trail (allow ¾ hour)*

Most people said that their walk took 1 hour—1 hour 15 minutes. Their comments indicated that they opted to walk slowly and take their time on the path as they were with their family, and some stopped for lunch. People who completed the walk quicker than the time stated generally took 5—15 minutes less than suggested.

Minimum walk time: 30 minutes / Maximum walk time: 1 hour 20 minutes

*Loch Morlich Trail (allow 2 hours)*

Most of the user groups told us that their walk had taken around 20 minutes less than the information panel suggested. A few said that this walk had taken them the full two hours that it suggested on the panel, although most of these mentioned having a rest stop during their walk.

Minimum walk time: 1 hour 15 minutes / Maximum walk time: 2 hours

*Ryvoan Trail (allow 3 hours)*

Most groups told us that they walked this path in under the three hours: their walks ranged from 2 hours—2 hours 30 minutes. Two user groups walked the path in the 3 hours—3 hours 10 minutes.

Minimum walk time: 2 hours / Maximum walk time: 3 hours 10 minutes



Participants were asked how easy or difficult it was to follow the route, choosing between it being very difficult, fairly difficult, fairly easy or very easy. Most reported that it was very easy (60%) or fairly easy (31%). Only 8% reported that it was fairly difficult and 1% very difficult. The difficulties they described were usually around missing one of the waymarker posts, and most quickly discovered they had gone wrong and managed to find the correct way. A one-way ANOVA showed that the only significant difference between the paths was that the Loch Morlich and the Ryvoan paths were more difficult to follow ( $F(9) = 4.4, p < 0.001$ ). For the Loch Morlich path, the difficulties were when the route goes through the campsite. For the Ryvoan path some participants reported that they went the wrong way a few times at junctions and that they found themselves on the Orange route at one point.

When asked why they enjoyed their walk, participants talked about the path being really beautiful with views, fresh air, trees, plants, wildlife and it being really peaceful. Some talked about how they found it challenging in places but always manageable. More information on people's experience of each of the paths is provided below.

### Paths at The Lodge

All the paths at The Lodge were rated on average between 3 and 4, indicating between people finding them "really good" and "excellent". Mean scores for all four walks are shown in Figure 5.

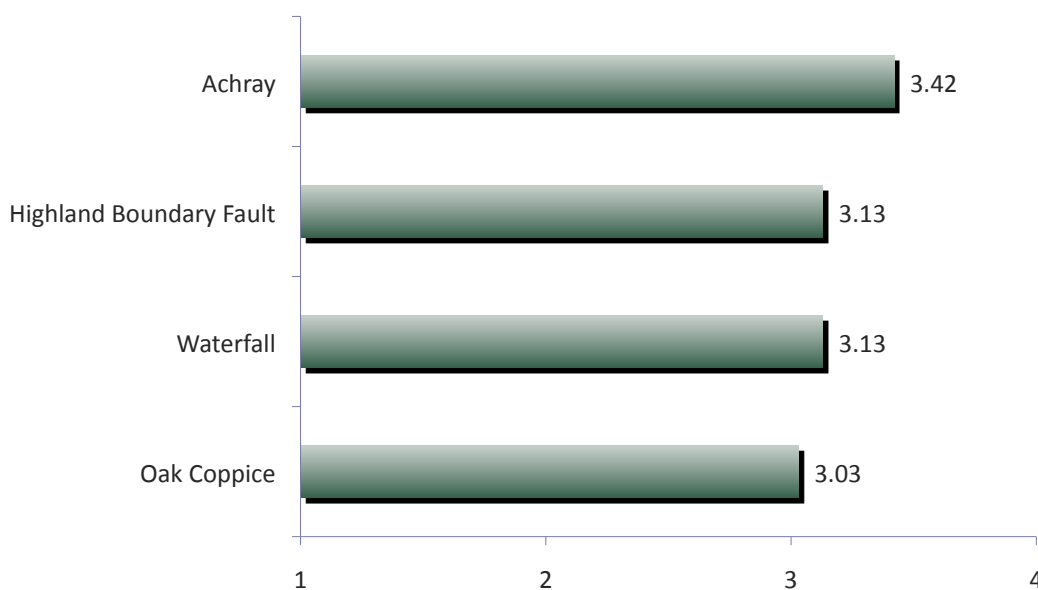


Figure 5: How enjoyable were the paths from The Lodge?

Because Achray was described in error as moderate on the information panel we explored whether there was any difference in participants' perceptions of how accurate the difficulty grading was for paths at The Lodge. If participants struggled with Achray because it was more strenuous than expected they would have rated the difficulty grading as being less accurate. Accuracy ratings ranged from 3.26 (Oak Coppice) to 3.65 (Waterfall) and there were no statistically significant differences between the four paths ( $F(3,164) = 2.47, p = 0.064$ ). Given that some participants were deterred by a strenuous grading, and yet managed the Achray trail without difficulty, the suggestion to adjust the boundaries between the difficulty ratings was supported. The Achray trail was graded as

strenuous because of the width of the path: a moderate grade, as it currently stands, cannot narrow to less than 800mm. Our findings therefore, provides evidence that users would accept stretches of a moderate path narrowing. The path specification could change to state that there can be infrequent sections less than 800mm, and these should be described in the Terrain description.

### Paths at Callendar Wood

The mean scores for the paths at Callendar were slightly lower than those from The Lodge, although the weather during the fieldwork was generally colder and wetter, which may have impacted on scores. The red path was rated lower than the other two walks. Interviews with participants show that this is because participants expected the red path to walk alongside the lake, whereas when they followed the waymarker posts it took them away from the loch and into the woodlands. Mean scores for all three walks are shown in Figure 6.

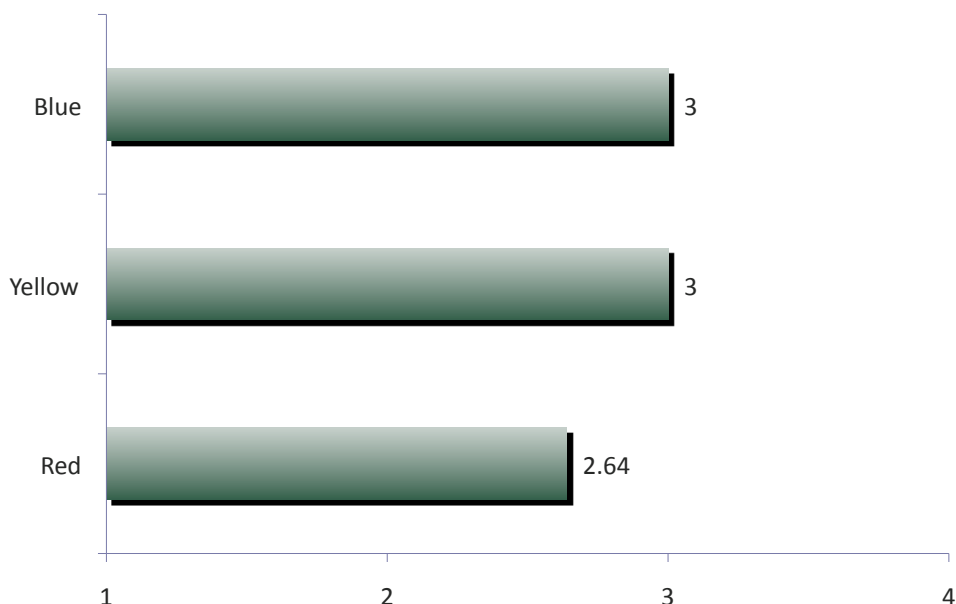


Figure 6: How enjoyable were the paths from Callendar Wood?

### Paths at Glenmore

The mean scores for the paths from Glenmore are shown in Figure 7. Participants who followed the Ryvoan path reported they enjoyed their walk more than those who followed the Beach path ( $F(2,62) = 3.48, p=0.37$ ). Interviews revealed that some who chose the Beach path expected that their walk would take them along the loch shore, whereas relatively little of this path was along the beach. While this could have been identified from the map, participants described how they found it difficult to see the Beach path on the map.

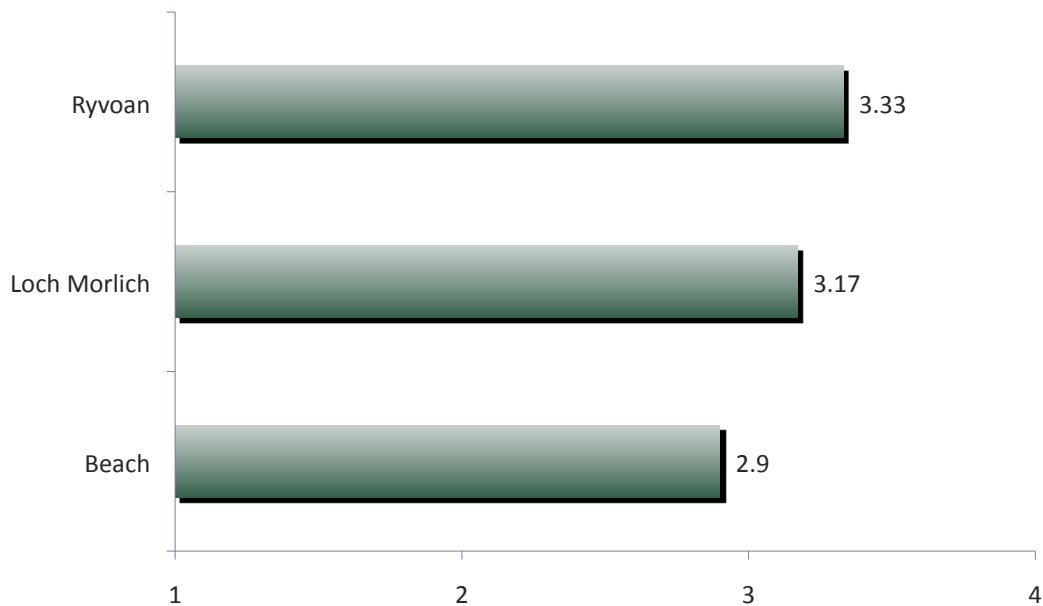


Figure 7: How enjoyable were the paths from Glenmore?

## 2.4 Why did some visitors not use the paths?

We conducted 35 interviews with visitors who approached the path information panel but who decided not to go for a walk. We have termed these individuals path refusers. These were from all three sites and with a variety of ages and party sizes. At The Lodge they would typically drive to the site, go to the visitor centre for a look around, and depending on the weather, either sit in the café, or sit on a bench outside. Some would bring a picnic. They would take a little walk around the area directly outside the visitor centre or benches, and this often included taking a look at the path information panels before wandering away again. This is the point at which they were normally approached and interviewed. At Callendar the information panel was positioned between one of the car parks and Callendar House. People who stopped to read the board would be asked whether they were walking one of the paths. If they were visiting the park (rather than passing through) and not walking they were interviewed. At Glenmore, interviews took place at two different locations: at the path information board in the Beach car park and also outside the Visitor Centre.

During the interviews we explored how people used the path grading system and what they understood from it. We found that path refusers understood the panel and were able to rapidly identify the range of walks and their level of difficulty. They appreciated that there was a good choice of waymarked paths with a range of durations and difficulties that catered for people with different requirements. There was a great deal of variability in how participants interacted with the panel, as some walk regularly and others have never walked a waymarked path before. Some read the panel with the intention of picking a walk to do on a different day, and others read the panel because they were looking around the site and interested in all the information on display. They therefore read the information in varying levels of detail and with varying levels of interest. On the whole, path refusers interpreted the information panel easily. Hence it wasn't the path information system that deterred path refusers from walking a

path. The main difficulty they faced was locating where the walks start from. As a consequence of reading the information panel and being interviewed, several of our groups subsequently walked one of the waymarked paths. The information provided about the path gave them confidence that their party would be able to enjoy their selected path.

We conducted a thematic analysis of the path refuser interview data using the question: “Why did path refusers not walk one of the paths?” We found two themes that describe why participants were not walking. The first – shared assumptions – describes how groups assume that they are not the sort of people that would go for a walk, but instead have come to visit the café or just admire the scenery while driving through. In some cases individual group members thought that they personally would like to go for a walk but assumed the other people they were with wouldn’t want to, wouldn’t enjoy it, or wouldn’t be fit enough. It also describes how people think they are not fit enough to walk one of the paths. The second theme addresses the barriers that people perceive to using the paths. They are grouped into two subthemes that describe the particular situation, such as time pressures, and the concerns that people have about walking, such as it not being safe. The themes are shown in Figure 8 and are described in more detail below. To provide an indication of how common each of the different reasons for not walking as we conducted a content analysis and the relative frequency that each subtheme occurred is shown in Figure 9.

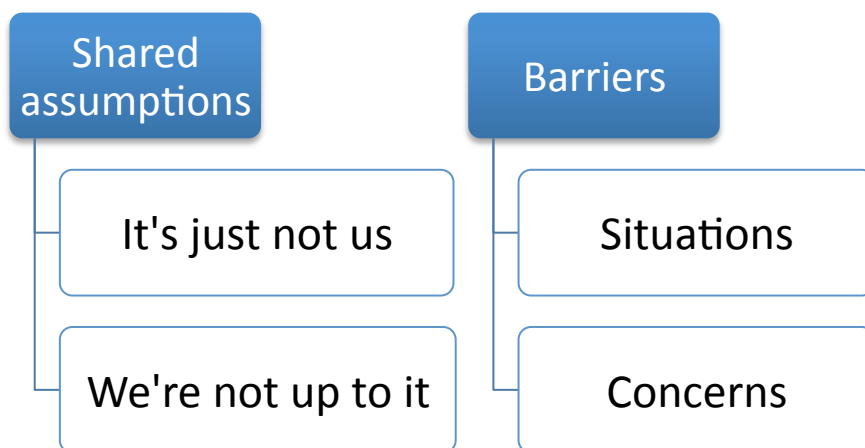


Figure 8: Thematic map of why people on site don’t use one of the paths.

### Shared assumptions

This theme describes how shared assumptions, misperceptions and low confidence mean that visitors do not walk. It comprises two sub-themes, as described below.

#### It’s just not us

Many of the non-path-users interviewed simply assumed that their party would neither want to nor enjoy going for a walk. They described how they had agreed to visit the countryside but the subject of going for a walk had not been raised. Everybody assumed that they would enjoy other benefits of the site, such as beautiful scenery, fresh air, refreshments, and enjoying somewhere different, but going for a walk had not featured in their thoughts for the day. They did not view themselves as people who go for a walk. Some groups had come for a picnic and might have a short wander around the picnic area but had not considered going further afield. During the interview they were

asked about different things that might deter them from walking a waymarked path, such as the distance involved, their ability, mobility problems, the time it would take, bad weather, or being worried about getting lost. None of these deterred them particularly, but rather they had simply not considered walking as an option. Often they had not discussed a walk with their party and while some would be very open to the idea of walking, they had assumed that nobody else would be interested.

*“My lady here hasn’t done a hike before. She’s never done a hike, so something like this with the distance clearly marked and you can see where you’re going, the illustration here is sensible and seems easy enough to understand.”* (Glenmore)

*“My husband’s not a walker; he’s not fit enough. When we’re on holiday it’s not a thing that he has in his head to do. We’re in the caravan park so I suppose I could leave him there and go out by myself but it’s not something that we’d do together.”* (Glenmore)

In some cases this is because the party included young children or older adults, and everybody assumed that a walk would be beyond their capabilities, although during the interviews it emerged that this wasn’t always the case.

*“I would be able to walk one of these but my Mum might have difficulties.”*

*“I could do that one, the Waterfall one. I could do that.”*

(The Lodge)

### **We’re not up to it**

This describes how non-users can believe that they are not capable of walking the paths. For some participants this was because they felt that their age and reduced mobility means that they couldn’t follow any of the paths. For others they feel that they have an illness or condition that means that they shouldn’t exercise.

*“I had a heart attack 20 years ago so I take it steady. When you’re 84 you’d have to be a bit daft to take on something like this.”* (The Lodge)

*“I used to like walking but I’m not fit enough for it now. I could do a bit of it but I couldn’t go all the way round.”*

(Glenmore)

*“We’re not walking because of our age. We’re not as fit as we used to do and there comes a time when you just have to change your lifestyle.”* (Glenmore)

Before reading the information panel, they sometimes assumed that they wouldn’t be able to walk any of the paths and so hadn’t looked in much detail. They assumed the paths would all be too long or too challenging for them. One of the groups interviewed were visiting the site specifically to give one of their party confidence that they would be capable of walking a path, and the standardised system encouraged them to select a path that they would return to walk on a later day in their holiday. Participants who were with babies and small children sometimes assumed there wouldn’t be a walk they could complete in the time available, which might be limited because of the need to breastfeed, or due to how far small children could walk or be kept entertained. When encouraged to look at

the information panel more closely, they noticed the wheelchair sign and recognised that this might make the path manageable for them, and that some of the paths are quite short.

*“I thought they’d all be too long, but that one, a mile, that’s nothing that, I walk that before breakfast.” (The Lodge)*

*“I have a bad hip and a bad leg, I have a trapped nerve at the top, so I can’t do too much and I can’t walk on uneven ground. That information on tree roots is really useful.” (Glenmore)*

*“It’s all really clear, having a rough time is helpful: for us we can’t go far because she’s breastfeeding. We have a pram so what might put us off is terrain, if it wasn’t a well marked trail or undulating but we’ve also brought also a papoose. What would put us off is terrain and if there were a lack of toilet facilities.” (Glenmore)*

Some, however, highlighted that it’s not just the terrain and the gradient that matters: they would need to sit down at regular intervals and there may not be enough seats along the way. Some participants at The Lodge and Glenmore talked about how they had been very keen walkers when they were younger and they were sad at no longer being able to walk the paths they had enjoyed so much in earlier years. Two of the participants were not able to accept that they were restricted to following paths with a wheelchair symbol – they were not ready to identify with a symbol of disability. A few of the participants talked about how they had brought their dogs who have mobility problems and so this limits their ability to follow the paths.

*“We have walked the Loch Morlich path in the past, but our dog is elderly now and so can only do a couple of miles.” (Glenmore)*

A few of the participants had an injury (e.g. twisted knees) and so this limited what they felt capable of. They described how the difficulty rating and information on the terrain would be very useful as they recovered and could start considering which walks they may be capable of.

## **Barriers**

This theme describes the barriers that people perceive to walking the paths. They are grouped into barriers around the specific situation people are in, and the concerns that they have about walking.

### **Situations**

These barriers are around the specific situation that participants were in. Competing time pressures was a very common barrier. Participants described how they might have liked to go for a walk but that they did not have enough time on that particular day, or that other members of their party wanted to do alternative activities, such as visiting other local attractions. Examples include the Reindeer Park at Glenmore, Loch Katrine near The Lodge, or the Falkirk Wheel from Callendar Wood.

*“We want to use the beach and visit the reindeer park to keep our eight-year-old happy. We’ve got a pram with big wheels and so I see from the board that there are walks that we could do. But today we’re going to see the reindeers.” (Glenmore)*

Sometimes participants wanted to engage in a range of activities during their holidays and as they had already done a walk in the previous few days they simply wanted to do something different.

*“We went for a walk yesterday, we walked up Ben Am? Near Loch Katrine? So today we’re going to go on a bike ride and have some lunch out.” (The Lodge)*

The time of day was a barrier to some groups, particularly approaching lunch time when participants expected they would soon feel hungry. Even when there was a short walk they could do, the path refusers did not typically consider looking to see if there was a walk they could do in the time they had available. Another barrier was the weather. While many of the visitors to The Lodge and Glenmore had come specifically to walk and they had clothing suitable for wet weather, some visitors preferred to organise their time in the park so they didn’t walk in wet, or conversely, hot weather.

*“I’m just going to sit here and look at the views. With the weather, it feels a bit close, I feel a bit exhausted. So I’ll just sit here.” (The Lodge)*

*“Today we went on the railway and to the beach. We do enjoy walking but that’s not the purpose of today. If it had not looked like it was about to rain we would have done the half an hour one. But it looks like it’s about to bucket down.” (Glenmore)*

People who live relatively near to the sites or who visit often described how they tend to avoid going on walks at busy times of the year. They are still happy to come to the sites but prefer to walk the waymarked paths at times of year when there are fewer tourists.

*“The paths tend to get very busy in the summer so we tend to walk them more when we come up in May. This time of year tend to go walking in quieter places.” (Glenmore)*

A final barrier is around feeling unprepared to do a walk. Some participants at Callendar described how they had not realised that there were paths they could walk, and while they had the time they did not feel they had suitable clothing (such as sturdy shoes) or equipment (such as water bottles). Some discussed how they don’t think about walking “from their own doorstep” and that walking is something that you go and do elsewhere. While everybody visiting Glenmore and The Lodge had realised there were walks from the sites, some nevertheless had not planned in advance to do a walk and therefore did not feel prepared. They might have planned other things and therefore while they might enjoy a walk it did not feature in their plans.

*“ We hadn’t planned to come up here, but we decided on the spur of the moment just to come up and feed the ducks and go to the café for a cup of tea, but the café is closed. We could go for a walk but it’s not something that we’d thought about doing.” (Glenmore)*

## Concerns

Some participants had concerns about walking a waymarked path. Most of these were fears about what might happen to them on a walk. These tended to be inexperienced walkers. Getting lost was a common concern. Some

participants were unsure about how the path might be marked, as they had not used a waymarked path before. Once the waymarkers themselves were pointed out, they understood they should follow the colour marked on the post, but not everybody was already aware of this. Looking at the map they were concerned that when there are several different overlapping paths they might take the wrong one and get lost.

*“When you’re up there, is it really clear, really really clear, which way to go. You wouldn’t want to get up there [in the woods] and not be able to find your way. You would eventually find your way, but it wouldn’t be the right way. If you were limited in time or energy and you wanted to take a specific path, like the yellow one, you wouldn’t want to take the blue one by mistake.” (Callendar)*

They were concerned that they might fall and hurt themselves. This might be because the path could be rocky or slippery, particularly in bad weather. At Callendar these participants were concerned that while they might be able to get a mobile phone signal to call for help, they might not be able to explain accurately where on the path they were.

*“What if you got hurt and needed first aid, if you stumbled, particularly on a long walk. Ok, you have a mobile and could probably get a signal, but how would you let people know where you were if you didn’t know the route?” (Callendar)*

Another fear a few participants had was that they might be attacked while walking. A few at Glenmore and The Lodge talked about how this is less of a concern than when they are walking at home, but it is something they are nevertheless aware of.

*“This day and age you’re a wee bit wary. Maybe not so bad here where everybody is in the same boat, you’re not going to get some baddies jumping out on you.” (Glenmore)*

It was more of a concern, however, at Callendar. Some people were concerned about the idea of walking into the forest. There were two types of fears that people had. One was around being attacked, and this was exacerbated by the graffiti along some parts of the path, and the damage from people lighting fires. The other concern was that there are dogs off their leads, and some of them are very large dogs. Participants were concerned that the dogs might not be safe.

Participants were asked specifically about whether the range of paths put them off walking. Nearly everybody was able to choose a walk they would like to do. Only one participant could not see themselves walking any of the paths because they were concerned that they would not find the paths challenging enough. They thought that the paths were all shorter than they would normally choose. However, they were experienced walkers – Mountain Goats – and the system is not aimed at them. Several participants at Callendar Woods highlighted that they might adapt the waymarked path slightly so that they go to the loch itself, rather than skirt around it. They described how the loch forms a focal point and they would like to go there, and their children would like to see the birds on the loch.



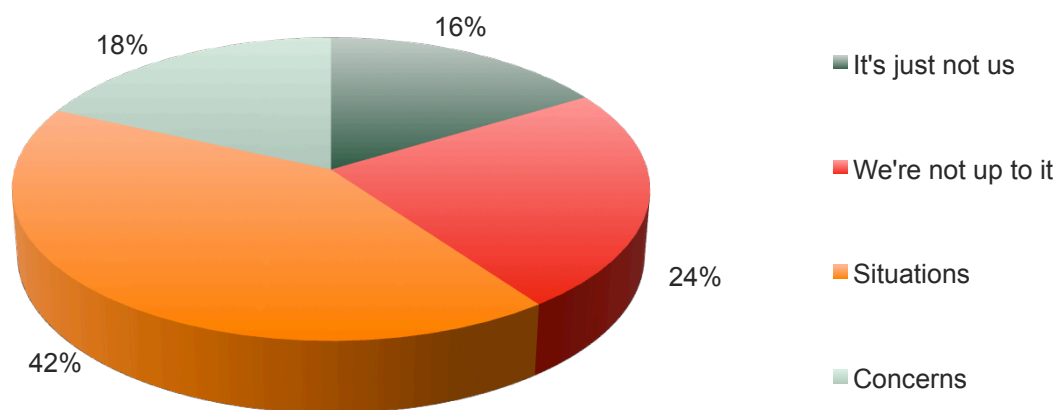


Figure 9: Reasons for not using a path.

## 2.5 How could the path information panel be improved?

During the interviews with path users we explored people's general perceptions of the information included on the board and we asked how the information panel could be improved. Responses were content analysed and the different categories of responses people gave are described below, and their relative frequency is shown in Figure 10.

### Improve the map (40%)

While the map is not part of the system itself, all the information panels contained a map and site visitors used the map alongside the system, so their suggestions for improving the map are included here. Improving the map was the most frequent suggestion made. Nearly half (40%) of the suggestions made about how to improve the system involved participants finding the map difficult to understand and use. The most frequent suggestion was how to indicate the paths where the routes coincide. Participants found the alternate coloured dots difficult to follow and suggested that parallel coloured lines be used instead. Another common difficulty was finding the start of the paths: participants had difficulty using the map to locate the start and they suggested the map should be much clearer about this. Participants commented that the map had made them think that the path would be difficult to follow and that they were pleasantly surprised to find it easier than anticipated. They suggested making the scale of the map clearer and increasing the scale of the inset so that it is easier to make sense of the start of the path. They also suggested rotating the map: while most preferred the map orientation to correspond to the direction they are facing, a few found this confusing and preferred North to be at the top; these tended to be the more experienced walkers (the Mountain Goats). A few participants suggested that the routes should have arrows so they know which direction to go round the path and making it clearer where the steep sections are and that this could help inform their decision about which way round to walk. They also expected that the colour of the path indicates its difficulty,

and thought that this should be the case, although some recognised that this would preclude having more than one path graded at the same difficulty level. Participants noted that the colours for the paths need to be very different as otherwise it is easy to confuse them, for example red and brown are too similar, and red and green should be avoided in case people who are colour blind might confuse them. Participants at Glenmore noted that it was confusing to see paths marked on the map that weren't described on the panel.

### **Include additional information (23%)**

Participants suggested additional information they would like on the information panel. The most common ones were the total height gained on the path, marking places to sit along the route, play areas and activities, toilets, and providing information on some of the plants, flowers and wildlife they might see along the way. Participants who used the Waterfall path at the Lodge described how the information panel hadn't given them any indication of just how much there was to do, so more information about what there is to see and do along the route would be welcome. Some participants suggested that adding the type of footwear suitable for the path would be useful, but others noted that this would change depending on the weather, and that the terrain information provided everything they needed to know. Participants suggested adding points of interest on the map, for example at The Lodge they suggested showing the hide and a few suggested noting whether paths are child-friendly and dog-friendly (i.e. possible to let dogs off their leads). A small number of participants suggested including instructions to follow the coloured waymarkers as they had not initially realised that the paths were colour coded. A few participants suggested having a phone number to call should they get into difficulty. One participant suggested that information on where the route is shaded could be useful on very hot days. However, the majority of participants also commented that a positive feature of the system is that it is concise – it doesn't contain a lot of information and it is quick to read and assimilate. So while there are always additional features that people would like, the best place for them is not on the system itself but on supplementary information that could be provided in the Visitor Centre or on accompanying leaflets.

### **Provide information along the route (15%)**

Participants suggested placing path information boards at key locations along the path with "you are here" signs. They suggested that they could use these if they decided to extend their walk. They also thought it would be useful to remind them of the route, if they did not have a paper copy of the map. They suggested having distance information on the waymarkers on longer paths, and similarly or that some of the waymarkers could be numbered or named and shown on the map so that people knew where they were. Participants suggested arrows on the waymarkers to help identify which direction to go in, especially where the paths crossed or where the route could be confused. Some suggested including information plaques along the way to tell path users about areas of special interest, or about the trees or the views. A few suggested having compass arrows along the way to help people orient themselves. Participants also suggested having an information panel in the car park so they knew about the paths before paying for parking and deciding what footwear and supplies to take with them.

### **Improve the appearance (9%)**

A small number of suggestions (9%) were about the appearance of the path information panel. Participants noted that it is not very eye-catching and some suggested removing the wood from the sides. Participants suggested adding photos of some of the attractions along the way. A few commented about the layout, with the path summaries not being very obvious, although others noted that if all the text were in bold it would be difficult to read. A few suggested the time and distance information should be enlarged so they stand out more. Some noted that

the panels are positioned very low down and it would be easier to read if they were higher up. Several participants at Glenmore highlighted that the map on the panel should only cover the area of the paths, and that it would be better to show a smaller area but with a larger scale. One participant suggested having an icon for the terrain information, as they found the icon for difficulty so intuitive. Several noted that the map legend is very small and should be enlarged.

**Provide different formats (8%)**

This category included making the information panel available online so that visitors could view it before they set off, and they could download it and take it with them. It also included having paper copies available for visitors to take with them, perhaps with a large-print version available. Participants suggested a leaflet based on the path information panel could contain additional information on the plants, trees and leaves (particularly for woodland walks). Participants suggested having different leaflets for each walk so that the map would be clearer and that more information could be provided on the nature they might encounter along the path. Two participants suggested that the Forestry Commission could have an app to download information or a QR code on the panel that could provide additional and dynamic information, such as the weather.

**Include information for cyclists (3%)**

A few suggestions (3%) were that the information panels were aimed solely at walkers but should also contain information for cyclists. Participants suggested difficulty ratings for the paths using a system similar to how ski runs are graded. Others suggested showing which type of bike (e.g. road, hybrid, mountain) is suitable for the path. However, several of these participants acknowledged that the information panels were used primarily by walkers, and so it might not be feasible to have information for cyclists.

**Ensure the information is consistent (2%)**

Participants noted that if leaflets were to be provided, the information should be consistent with that on the information panel. They noted that the information at the Visitor Centre was not consistent with the research test information on the panel and this confused them. Those with guide books about the paths were perplexed when the information did not match.

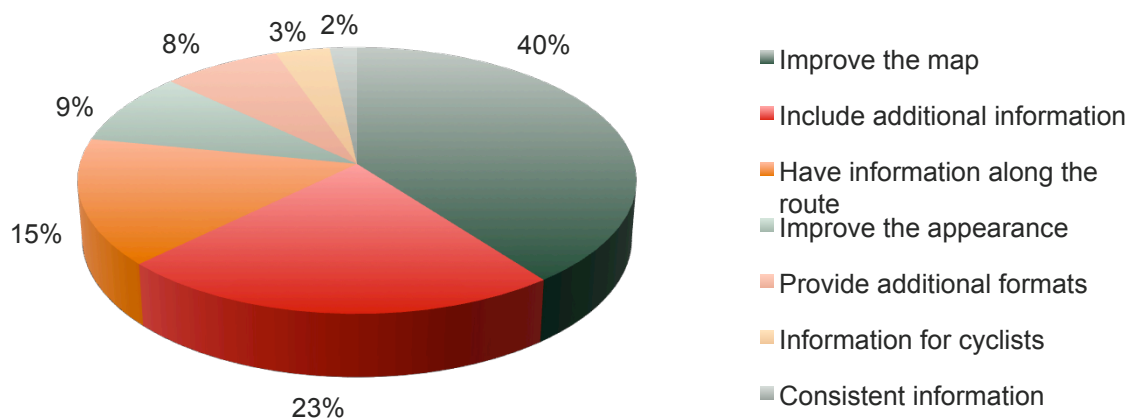


Figure 10: How often the suggestions for improvement were made.

## 2.6 How could non-visitors be encouraged to use waymarked paths in the countryside?

In this section we explore how people who don't walk waymarked paths interacted with the new system, the barriers that non-visitors perceive to visiting Forestry Commission and other outdoor sites and what could be done to encourage people to visit. These results are from the focus groups with people who do not use waymarked paths.

### How did non-visitors interact with the system?

Participants across the focus groups perceived that path information boards were useful, the information was easy to understand and could help them to make a choice about which path they would access depending on their perceived personal ability. Participants understood the purpose of each of the descriptors such as the time, path difficulty, and terrain and path promotion. Like the *Stroller* group of path users, many were particularly influenced by the path promotion, and having things to see along the path was very attractive.

*Interviewer: "So, tell me, why would you like to do the waterfall path?"*

*"There are plenty of places to play around, especially with the kids, it's a lovely path, and lovely pieces of artwork to enjoy while you're walking."* [Group 5]

They were able to use the information to decide which path was most appropriate for them and that they would enjoy most. They understood how they could use the distance and suggested time as a guide for their walk, rather than it being an absolute figure. They recognised the wheelchair symbol and how it might apply to other users.

*"That is just a gauge the time it takes. It is down to you how fast you want to walk. I mean if you're tired you are going to sit down and have a rest...but I mean that lets you know."*

*"I would go for the distance, not the time because it doesn't bother me how long it is going to take, just how far it is."* [Group 1]

*"If you've got arthritis and various other things you might need to stop for fatigue, you might need to stop for pain, you know and rest."* [Group 2]

*"The surface must be good if it's okay for a wheelchair."*

*"If it's easy for a wheelchair, it's easy for the people that are going with you as well."* [Group 3]

Participants with disabilities said that it would be useful to know more about how the paths had been graded as accessible for wheelchair users. They would be more reassured if they knew that the assessment had been carried out by people who are wheelchair users themselves.

*"If it said, you know, like this has been graded by, for instance, the Glasgow Access Panel, and then you know that it's got the stamp of approval."* [Group 2]

Participants with disabilities, particularly wheelchair users, also suggested that it is made clear where on a path there are any steps that might hinder their access to paths. They said having this information would help them to decide if they could travel on part of a path before turning back. These users were also interested in how the paths are maintained across the seasons and wanted reassurance that the description of the terrain was as accurate as possible throughout the changing seasons.

*“The other thing is just, you know, obviously how well are these all maintained, the paths, throughout the whole year, because obviously if there are storms and things you’ve got debris in the path and all that, so are these parks... do they maintain them to a very high standard to what they’re telling you, the description?” [Group 2]*

Like the site visitors, many participants found the maps confusing, especially where the paths overlapped. They suggested that using separate lines to show the routes of each path would be easier to understand. One participant had particular problems understanding what the difficulty rating of a section of the path would be when the paths overlapped; they were concerned that this section of an easy path might become strenuous where it coincided with a section of a strenuous path.

*“But where all the dots are intermingled here, there’s red and there’s yellow and there’s blue, does that mean that a wheelchair user could still use that path on that side or what does that mean? This is moderately difficult and then I’ll come to a blue bit and it’s confusing. It makes it look as if I’m walking through a rough bit and you don’t want to attempt that because that’s what that implies.” [Group 2]*

For some participants, having places to sit and rest was also important. They suggested that rest places should be marked clearly on the maps. Participants across all the groups wanted to have information about where toilet facilities are and if they are available along the path route. This was particularly important in the disability and older adults groups.

*“They should show a picnic table sign, so you can have a wee break. I don’t see it in the information.” [Group 3]*

*“If you’re doing a mile or two-mile walk there’s no way I could do that. I’d spend the whole time worrying where is the next toilet and not knowing where it is, even if it didn’t need to go to the toilet I just would want to know where it would be.”*

*“What do you do if you need the toilet? If you’re on your own you can maybe just go behind a bush and take a chance, but if you were with other people it’s a bit more embarrassing.”*

[Group 2]

However, participants discussed how they prefer the information presented on the panel to be simple and clear, and that adding all the additional information points to the map could make it more difficult to interpret. They discussed that they would be happy to seek this information from the Visitor Centre, or online in advance of their visit.

## What barriers do non-visitors face to visiting the countryside?

### Transport

Many of the focus group participants had heard of at least one of the three Forestry Commission sites discussed during the focus groups. However, many talked about how they had never really thought about visiting any of them. Some participants thought that if they wanted to go for a walk, they would visit one of their local parks which are much closer than Forestry Commission sites. For some, destinations within one hour's drive of their home were considered to be far away. Participants talked about how they might not think to travel far if they wanted to go on a walk.

*"I think I've seen some leaflets [for Forestry Commission sites] but I've never really picked them up because I've never thought of going." [Group 5]*

*"Well in the same way we have a big park beside us I could go there walk round the pond go through various places without travelling out of Glasgow to see these things." [Group 1]*

*"See that's the thing. If someone said to me, "Let's go to Aberfoyle", I'd say, why go that far just for a walk?" [Group 6]*

In addition, travelling was perceived to be very difficult. Many of the participants don't have access to their own car so driving to a site is not an option for them. Despite not really knowing the costs involved, many believed public transport costs would be high and the journey would take too long and might therefore mean they would need an overnight stay. Particularly in the focus group held in an area of high deprivation, the cost of a visit to the countryside on public transport was a large barrier to making a visit.

*"I think money is a problem. If you have got to travel, transport is a problem I think. I stay near home to save money." [Group 1]*

*"Transport again isn't it, transport is a big thing to get to these places." [Group 4]*

*"To me, four hours there and four hours back is too much." [Group 1]*

In the older adults and disability focus groups, participants commonly talked about how without access to their own transport they would have to rely on somebody else to take them to outdoor sites in the countryside. Some of the older participants said that they have children with transport but that they can be reluctant to take them to places. Some said that they do not feel comfortable being dependent on others to help them travel to or visit places.

*"That is one of the problems now of our age group it is the getting around we can't get around anymore on our own, we have got to depend on someone helping us." [Group 4]*

*“Well I have no chance going on my own and my daughter she is the only one who has a car. I am not fit or able to walk very far now myself so I don’t get out much other than to the [day care] centre that I go to. So my walking days are over.” [Group 4]*

Wheelchair users in particular talked about how they sometimes face difficulties travelling on public transport that might put them off visiting the countryside. They described how planning travel by bus can be challenging because in their experience services don’t always make appropriate provision for wheelchair users. Even though space on the bus is reserved for wheelchairs, this is sometimes taken up by a pram and bus drivers don’t always ask pram users to vacate the reserved space. Wheelchair users described how this can make using public transport complicated and time-consuming for them.

*“Most of the time it’s [the difficulty] actually prams on the bus and they can’t fold down and they put it where the wheelchair normally goes.” [Group 2]*

One participant talked about the local walking group that she runs with older adults and while she believes they are motivated to visit the countryside and use the paths, transport remains a barrier.

*“They want to walk because they want to keep their mobility. Most of them are at least 65 plus...they feel that if they keep coming out to the walking group it is getting them out. But they want to go further afield, they want to be taken somewhere but we don’t have the facilities. We are just walk leaders in the community so we don’t have a minibus or anything like that to actually take them further afield.” [Group 4]*

## **Motivation**

Before the focus groups none of the participants had given much thought to visiting a Forestry Commission site or other countryside sites with waymarked paths; the idea had not really occurred to them. They varied in their interest in and enthusiasm for a visit. Some thought they would very much enjoy a visit. Most (other than the much older adults) were open to the idea but because it lay so far outside of their own experiences, they weren’t sure what a visit would involve. We therefore explored their perceptions and expectations around what they thought a visit experience would be like. Their discussions highlighted that they have little insight into the scale of the forests and parks and the incredible scenery and wildlife on offer. Most participants didn’t differentiate Forestry Commission sites from small local woodland areas that they were familiar with.

*Interviewer: “What do you think the forest parks would be like?”*

*“Quiet”*

*“Tree-lined as usual”*

*“Clean”*

*“Yeah, well kept”*

*“You might see more wildlife I think” [Group 1]*

The path promotions discussed during the groups helped participants to visualise the beautiful scenery at the

Forestry Commission sites. The descriptive information about what can be seen on the paths enhanced their enthusiasm for making a visit to the sites – something that they hadn't really thought about before.

*"I'd like to see the waterfall and the hills and mountains: it's not every day that you see a waterfall."*

*"I think after all this information I'm quite excited. Like before I was saying I would never go on one of these walks because I think it's dangerous, but with all the information you've given us...it sounds good."*

[Group 5]

In contrast, most of the much older adults had little desire or ability to travel far from their home or to use the waymarked paths. The older adults discussed how the day centre they attend arranges day trips to local places where they can enjoy being outdoors. They depend on others to take them to the trip destination and home again, and to help them if they have difficulty walking. They believed that the carers at the day centre have only a limited amount of time available to co-ordinate trips and make sure that everyone is dropped off at home afterwards.

*"If we get to a centre three times a week that is a good thing for us although there is no walking attached. We get our transport there and transport home. And we get our meals and we have various things to do, entertainment. They do take us on trips but it's not too far away...time is also short so we have got to depend on them taking us by bus and bringing us back by bus."* [Group 4]

### **Confidence and mobility**

Some participants didn't feel confident they would be able to complete a walk at the Forestry Commission sites or other countryside sites with waymarked paths. In the older adults focus groups, participants often perceived that their age, current health and poor mobility would make this very difficult or impossible. Some can only walk a very short distance (i.e. a few hundred yards) before having to stop for a rest.

*"I cannot walk far at all. When I go to the shops it is a taxi there, and taxis all the time when I go out to my clubs. I couldn't walk it [in the countryside]. In my younger days I could."* [Group 4]

*"I have arthritis right through my body and I've got asthma as well, and I've got colic trouble. So I have to have a break fairly quickly."* [Group 3]

Some participants with mobility problems thought that they might be able to use countryside paths if they had somebody to push them in a wheelchair or if they were with a group with others that walk at their pace. However, these participants didn't want to be dependent on others to facilitate their visit. They worry about slowing down the rest of the group and being a burden on others. They perceive that walking is an active and fast-paced activity for people who are more able than they are. Some worry that they might get left behind if they tried to go with a walking group.



*“Well that would be ideal but I would be dependent on somebody doing that for me, to take me in a wheelchair...When you get to our time of life you feel that you have done it and you don’t want to impose on a younger person having to look after you.” [Group 4]*

*“There are walking groups in Glasgow but that’s, to me, for more fit people that can actually go out and go at a good pace. I would be scared to join in case I was holding everybody back or I was left alone. I’m not even sure if there is anything out there for people with disabilities.” [Group 2]*

### **Personal safety**

Some talked about their worries about personal safety as a barrier to visiting the countryside. As participants are not regular visitors to the countryside they assumed the sites would be similar to their local area and talked about vandalism, poorly lit parks and groups of people hanging around. Some were concerned that there might be lots of dogs roaming around, which might be intimidating. Some were unsure about how safe Forestry Commission and other similar sites might be and expressed general worries about travelling the paths alone. As such, not having anyone to visit the countryside with would put many participants off visiting the countryside. This was in part due to not having someone to enjoy the visit with but also because of safety concerns.

*“You hear a lot of things in the news, attacks are happening and things like that put you off, I don’t know if it’s safe enough to go.” [Group 5]*

*“People that have dogs, that’s a problem. Some people don’t like animals and don’t like to be near them.” [Group 5]*

A few of the participants with disabilities were worried about being involved in an accident. They talked about how the Scottish weather made it likely that the paths could get muddy and make the surfaces slippery. Some worried that they wouldn’t know what to do if they did have an accident or who to contact or to ask for help. They also worried that they might not get mobile phone signal at the sites if they were remote and this would put them at risk if they did require help.

*“I think you feel much more vulnerable [with a disability]. I’m stuck out here, if something happens will someone find me.” [Group 2]*

Even people without a disability could be worried that they might hurt themselves while walking a path. This was particularly the case for the longer or more strenuous routes.

*“You might fall and hurt yourself, graze your leg. I think it’s one of those types of routes.”*

*“It sounds very difficult.”*

*“It’s for the serious walkers that one.” [Group 5]*

### **A lack of facilities**

Some participants expressed concerns about not knowing what facilities might be available when they arrive on site. Some talked about being put off visiting sites if they didn’t have basic information about practicalities, such as

toilets, seating and shelter. For some participants, not knowing whether a toilet was nearby even for a short walk would be a source of anxiety for them, making their walk less enjoyable.

*"It would be really nice to know that there was a cafe at the end and as I say toilets it is a must that there is toilets before we set off and then when we come back."* [Group 4]

*"If you're doing a mile or two mile walk there's no way I could do that. I'd spend the whole time worrying where is the next toilet and not knowing where it is, even if it didn't need to go to the toilet I just would want to know where it would be."* [Group 3]

BME individuals face other specific cultural barriers to visiting the countryside. For example, if Halal food is unavailable at the forest sites, individuals need to make alternative arrangements for taking their own food with them. Some individuals might also want to pray if they are out in the countryside for a day visit. If there is a lack of facilities on-site for prayer this could be a barrier for some people.

*"A lot of these places their food isn't Halal for us, so we can't eat anything, and they have chips and things and we have to think about what oil it's fried in. So we'd have to take our own food there."* [Group 5]

## How could visits be encouraged and facilitated?

### Raise awareness

Many participants were unaware or only vaguely aware of the sites, how to travel to them and the sort of paths they could access. As a result of discussing the sites and the path information boards, participants across all of the groups said that they were very interested in what the countryside has to offer. They believe that general awareness-raising of the Forestry Commission sites and other areas where they can walk the paths will be important in encouraging people to visit. They suggested leaflets be left in local libraries, council services, community centres, doctors surgeries, schools and local parks. Participants also believe that information should be targeted to their communities to raise awareness that the Forestry Commission and other countryside sites with waymarked paths are for people like them. The knowledge that safe and well maintained paths are available would give confidence to people who might be concerned about the safety of walks in their local area.

*"Think it is publicity more than anything. [The sites are] not hugely advertised."* [Group 1]

*"I think the sort of little leaflets that they have should have Asian people in them as well, so that [people] know that Asians go on these walks as well."* [Group 5]

*"I think if my guys [in the walking group] read this information about the paths they would think it is terrific for them because this is what they are looking for. They want confidence that they are not going to be falling down the potholes that we do when we cross the canal."* [Group 4]

Participants discussed that would like to be made aware of areas with waymarked paths, including the paths themselves and the facilities that are on-site, before they arrive to help them decide to make a visit and then plan it. Some individuals were just interested in getting enough basic information to be made aware of what the sites have to offer in general, such as the paths and wildlife.

*“You just need basic information. Just find out when you get there it makes it interesting when you are finding something different you weren’t expecting.” [Group 1]*

Participants with disabilities described how they would need to see information about the Forestry Commission sites / other countryside sites with waymarked paths to be aware that they are accessible for disabled visitors. They talked about how many people with disabilities are members of disability groups or organisations where this information could be promoted and made available to them.

*“A disabled person wouldn’t just turn up. They would have to have a leaflet of have to have some information to get them to decide to go there. If it was signposted, I mean there are these organisations that people with disabilities are affiliated to, that would be helpful.” [Group 2]*

Information about the path grade, path terrain and surface material is particularly important to visitors with disabilities. They described how people with a variety of disabilities, not just wheelchair users, would use the international symbol of access (wheelchair) as an indicator that the path is appropriate for their use. Participants talked about how it would be particularly reassuring to them if they knew that a disability organisation and disabled users had tested and approved the paths for use by other people with disabilities. They would like to have this information displayed alongside the path information so that they can be reassured that the paths have been consistently graded by disabled people with access expertise. Similarly, some people with disabilities felt that they would benefit from online visual information about the path surfaces to help them to decide whether paths were suited to their ability. They described how being able to travel along the path virtually through a video of the path online would give them confidence to decide if they could use particular paths of varying difficulty. This is similar to the phototrail initiative.

*“I don’t think it would cost very much to video each of the paths and put it on their website.” [Group 2]*

Participants were aware that the condition of paths might change over the course of the year, or after rain or storms. They suggested that they could check at the Visitor Centre for up-to-date information.

### **Facilitate organised visits**

As transport was identified as a major barrier to visiting the countryside, participants described how the Forestry Commission could work alongside local community groups and walking groups to organise visits. Some said that coach trips leaving from different areas of Glasgow would be popular with residents, particularly in the summer months. They believe that many people would be keen to go on a day trip to the sites if transport costs could be kept low (e.g. £5). Some participants already had potential access to minibus transport from their community or day centre but would need their centre leaders to approve and organise the trip.

*“It would be an ideal situation if there was a central point somewhere and you had proper minibuses that will drive you to the start of the paths and maybe go back in two hours, three hours and pick you up.” [Group 3]*

Those with families in the BME focus group felt that they would need some notice to make arrangements for childcare (if the children weren't attending the day trip). People said that they would prefer to travel as a group so that they could meet before the trip, travel together and have arrangements for getting home organised. They talked about how travelling together, rather than separately, was less stressful as people wouldn't be getting lost on the journey.

*“I think it would be an all-day trip. So everybody would rather have the kids staying somewhere, someone picking them up so you don't have to worry about getting home. You'd need to leave a bit late from there [the park], so if you know the kids are safe it's okay.” [Group 5]*

### **Host special events**

Participants across the groups described how managers of countryside sites with waymarked paths could host events at the sites to encourage people to visit and try out the walking paths. Participants perceive that individuals would benefit from enjoying themselves being active, taking in the scenery, and building their confidence accessing and using the paths. The other groups talked about how they would find it useful and interesting to have a Ranger available when their group arrived at the site to give a talk including information about the paths, the wildlife and the history of the area. Some thought that the Ranger could take part in the walk with the group and provide information as the group travels along the paths.

*“I would quite like it because they [rangers] know things that we would never spot ourselves. Rangers are a good help.”*

*“I would like to know about the wildlife and anything unusual that is there that isn't in other parts of the area.”*

*“Archeology, previous people that have lived in the area that kind of stuff.”*

*“A bit of history.”*

[Group 1]

### **Provide guided or supported walks**

Older adults and participants with disabilities suggested that guided walks with a Ranger who is familiar with the routes would be useful in helping people develop confidence to use the paths. They talked about having a system where they could book a Ranger to go on the path with them. The Ranger could provide information, offer a tour to groups or help individuals with any difficulties they might have the first time they use a particular path.

*“I think if there was maybe set times during the day, particularly maybe for people with disabilities, and the route for the disabilities did have a ranger that you could just go round with. You know that would just give you confidence. Once you'd been round it with someone who knew the park, who knew the route, then you would maybe then think I could do that myself.” [Group 2]*

Participants with disabilities discussed how an on-site Ranger could provide them with reassurance that there was help available if they found themselves in difficulty whilst out in the countryside. They described the different ways that they felt the service could be provided that would encourage them to use the countryside more confidently. Some talked about how it would be useful to check-in with a Ranger when they arrived to use the paths on their own. This would allow them to be checked on if an agreed amount of time passed and they hadn't returned to the Ranger station. Others talked about having a GPS or walkie-talkie system that would allow their location to be monitored and let them communicate with a Ranger if they got into difficulties. Participants said that they would be willing to pay a small fee for the use of these services.

*"Maybe they could hire them out to the walkers and the monitor station could talk to them, ask where they are and if they're alright and you could answer them back, but you would need to pay a fee."*

*"Have a wee walkie-talkie things or wee tags [GPS location] so you know where you are. If there was maybe like a dozen of them but you pre-booked it."*

*"You pay your deposit and then you get your money back at the end of the walk."*

*[Group 2]*

## 3. Equality impact assessment

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During the focus groups we discussed how the standardised waymarked path grading system might impact on the protected groups that need to be considered during an equality impact assessment. We have completed a draft of the equality impact assessment form (Appendix 7), and will support the partners as required. Our analysis of the evidence is that the system will have a low positive impact on the protected groups.

## 4. Conclusions and recommendations

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### Conclusions

- People find it easy to understand the path grading system and believe that it provides the right sort of information at the right level of detail. They welcome consistency of path grading and descriptions between different sites.
- While there is a demand for additional information about the things that visitors will see along the route, and information such as the location of rest stops and toilets, participants believed a strength of the system was that it provides a concise, easy-to-understand overview of the paths and that more information would detract from the system. They are happy to seek additional information and advice from the Visitor Centre, where there is one, and indeed this contact with site staff adds value to their visit. They enjoy using additional

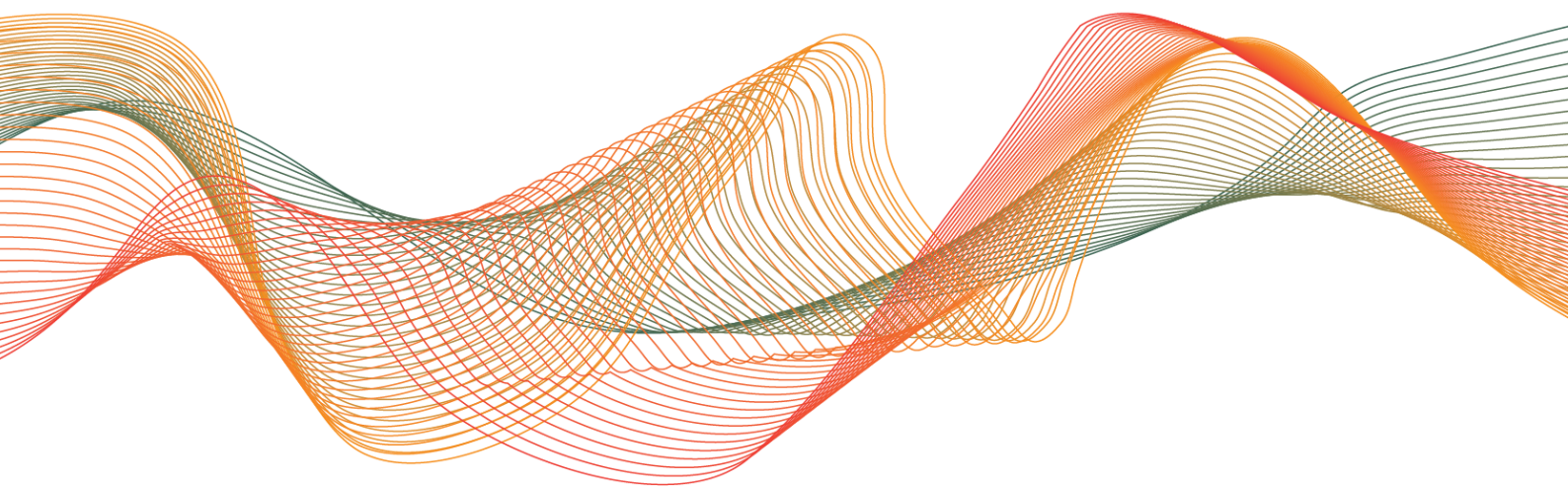
materials, and especially for children, activities to complete along the way but these materials should be viewed as supplementary.

- Overall, time and distance are viewed as the most useful information, although we identified four different types of path user and these groups interact with the information in different ways. Incidental Walkers are most interested in which walks can be done quickly. Strollers look for a short easy walk on suitable terrain that takes them through points of interest or activities for children. Hikers are more interested in distance, time and difficulty and tend to interact more with the information, looking at the full range of information provided. Mountain goats rely more on the map and are more interested in time and distance than the difficulty rating. The system is not targeted at the Mountain Goats.
- The design of the information panel also influences how the system is used. When the map takes up a relatively large proportion of the panel, as in Glenmore, people are drawn first to the map and only later notice the grading system, and they then may not read it all.
- People find the map more difficult to understand than the path grading system itself. It is not always apparent that one of the map panels is an inset, and people can be confused when the map scale and area do not match the paths described. The stylised map used at Callendar Woods was easiest to understand, and while more experienced walkers prefer more detail, the system is not targeted at them. People find it difficult to see paths that use alternating dots, and those that have a colour that does not contrast sufficiently with the map.
- A strenuous difficulty rating does deter some people from walking a path. However, completing a moderate path gives people confidence and many were then happy to tackle a strenuous one.
- People find the waymarked paths very enjoyable, and they enjoy points of interest and activities along the route. They welcome information about the plants and wildlife they can see on the paths and families enjoy nature quizzes to complete with their children along the way.
- Path refusers interviewed on site were not deterred from walking because of the information panel or the range of walks on offer. Many assumed that some or all of their party would not want to go for a walk, they would not be fit enough to walk, or their situation meant it was not convenient for them to walk on that day. Simply having a discussion about the range of paths available meant that many of them subsequently went for a walk.
- Path non-users face several barriers to visiting outdoor sites, including a lack of awareness, motivation and confidence to walk, and fears about personal safety. They would be interested in trips to the countryside, especially if there were supported activities for them.

## **Our research leads us to make the following recommendations.**





1. The standardised waymarked path system is understood and accepted well by the public and is suitable to be adopted and rolled out across other sites. Consistent grading underpins this system so it is essential that the criteria are applied in full.
2. Give careful consideration to the design of the panel, particularly the map. The trail descriptions should be prominent on the information panel and while the map should be large enough to be seen clearly it should not dominate the panel. Coinciding paths are better shown by parallel lines or similar design solution, rather than alternating dots. Symbols on the map should included in the key, and the size of the map key should be increased. Map insets should only be used where necessary, and should be clearly marked.
3. The start of the paths – both on the map and on the ground – needs to be very clear. People find it difficult to translate the map to actual start positions and so there should be several prominent signs to guide people from the Visitor Centre, car park, bus stop or information panel, to the start.
4. Where possible the shortest path should be graded as easy.
5. Walks should be listed on the panel in order of difficulty with the easy path(s) listed first.
6. Where colour is used to distinguish paths for waymarking, where possible, colours should reflect the difficulty of the path. Whilst colour is not and should not be incorporated into this grading system, some users may still believe that it is. Green, yellow, blue, red and black should therefore be used in order of difficulty at each site where possible, with green being the easiest and black the most difficult. Colours should, however, stand out clearly from the map, where one is included. People with colour blindness can find it difficult to distinguish black-red and green-red combinations so care should be taken to ensure that there is a large luminance (brightness) difference between these colours when they are used as foreground/background combinations.
7. The name of the walk is very important – Incidentals and Strollers in particular use it to decide which walk to go on. It needs to capture their imagination and give them something to aim for on the path.
8. The Trail Promotion text should be easy to understand and focus on the user experience, such as what they will encounter along the route. More details, for example of historical context, could be included in an accompanying leaflet or display in the Visitor Centre but the system itself should be presented in the same way in all the media in which it is used.
9. Keep the path grade “strenuous”, as while some people are deterred by this term, they gain confidence by successfully completing a moderate walk and then feel capable of tackling a strenuous walk.
10. The Clear Width technical specification for the system should change to allow a moderate path to contain infrequent sections that narrow to less than 800mm, and these sections should be described in the Terrain Description. This change has been made in the path difficulty criteria shown in Appendix 1.

11. Develop supporting materials for inexperienced path users, for example how to follow a waymarked path and what to do if they lose the waymarks. People with disabilities would be reassured by information on how the paths are checked and maintained, and what to do if they run into difficulties.
12. Provide more Ranger-led activities to help engage less confident visitors - which may simply be Ranger-led walks or could be talks, activities or workshops to learn new skills.
13. Work with community groups to facilitate visits by groups of traditional non-users. This could include helping people with transport, having a slow-paced walk with a volunteer or Ranger, and activities for families.
14. While visitors would like additional information, such as the location of rest and toilet stops, these are better shown on an accompanying leaflet that could be made available in the Visitor Centre. These leaflets could also include other types of information that visitors would appreciate, such as on the plants and wildlife they might see along the way. The system itself should be kept simple and the descriptions short.
15. At each site using this system, identify any decision points where visitors may decide they wish to extend their walk by following another path. Place additional information at these locations. For example, at The Lodge, additional information would be useful near the Waterfall.





# Appendix 1: Criteria for path difficulty grades

	Distance limits	Gradient and duration	Surface materials/ condition	Obstacles	Clear width
 <b>easy</b>	See Countryside for All Access Standards <a href="http://www.fieldfare.org.uk/?page_id=48">http://www.fieldfare.org.uk/?page_id=48</a>				
 <b>easy</b>	Total distance of the whole route must not exceed 5 miles / 7km (return route to start point)	The gradient is no steeper than 1:8 (or 12% or 7.1 degrees)	Generally a smooth, firm surface. Well drained and maintained with minimal loose material.	Minimal use of steps. Free of narrow gates or gaps and always itemised in the Terrain Description.	Generally 1200mm. short sections (<20m) down to 900mm.
 <b>moderate</b>	Total distance of the whole route must not exceed 7 miles / 11km (return route to start point)	May exceed 1:8 (or 12% or 7.1 degrees) for infrequent short sections (<200m) but generally no steeper than 1:8.	Earth or stone surface. Sections may be firm under foot. Generally well maintained but sections could be loose or uneven (<50mm height of roughness) of soft after rain.	Few obstacles. Sections of regular steps, gates and other minor obstacles mentioned in the Terrain Description.	Variable with sections down to 800mm.
 <b>strenuous</b>	Total distance may be greater than 7 miles / 11km. Distance does not influence grading although long routes may not be appropriate for waymarking.	May have arduous climbs and steep sections. May include long steep sections exceeding 1:8.	A distinct surface but could be without major change to the existing ground. Could be rough and rocky and may have large (>100mm) loose stones. May have muddy sections.	Natural and other obstacles are likely, including large or irregular steps, stiles or gates.	Frequently less than 800mm.

# Appendix 2: Terrain description standard vocabulary

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When describing paths, the terrain description should take the form of a few short sentences with a maximum of 30 words. The emphasis should be on providing useful and relevant information that gives an overall impression of the terrain rather than describing every condition of each section. Easy and moderate paths, which are more likely to be used by visitors with mobility difficulties, should be described in more detail. The most difficult sections or any particular barriers should be flagged to avoid any nasty surprises. The main topics to be covered are: gradient; surface (materials and condition); obstacles; and width. The vocabulary used in terrain descriptions is shown below, with definitions where appropriate.

## Gradient: Slope

**Flat:** path must actually be flat with no inclines greater than 2% (1:50).

**Gentle:** slopes between 2% (1:50) and 5% (1:20).

**Moderate:** slopes between 5% (1:20) and 12% (1:8).

**Fairly steep:** slopes between 12% (1:8) and 20% (1:5).

**Steep:** slopes greater than 20% (1:5).

## Gradient: Slope Duration

**Short:** gradient of less than 10m duration.

**Long:** gradient of more than 100m but less than 200m duration.

**A long slope for ...m:** where the slope is for longer than 200m, the distance must be stated.

## Surface Material

### Grassy

**Earthy (or sandy):** any unconstructed path surface.

**Gravel:** most aggregates even if the particle size is technically out of the range of gravel.

**Firm:** compacted built "metalled" surfaces that aren't bitmac.

### Tarmac

### Boardwalk

**Rocky:** this could include rock steps or pitching.

## Surface Condition

**Smooth:** compacted aggregate or bound surfaces with no protrusions or loose stones greater than 10mm.

**Loose gravel:** material not compacted or has no fines

**Uneven:** minor variability in the level of the surface (< 50mm of height roughness or rockiness).

**Rough:** >50mm roughness and may have loose stones.

## Obstacles

E.g. Steps (long flight / short flight); Gates (wide, narrow kissing...); Stiles; Bridges; Public road crossings.

## Width

**Narrow:** the managed width is less than 800mm wide (i.e. not wide enough for two people to walk comfortably side-by-side or pass easily).

**Broad or wide:** the managed width is greater than 1500mm.

# Appendix 3: Information panels used at the three pilot sites

Forestry Commission Scotland  
Coimisean na Coilltearachd Alba

## Great paths from The Lodge. Find a trail that's right for you...

**Do a little...**

Some great trails start from here. You can discover a dramatic waterfall, red squirrels and ancient oaks on one of our shorter trails.

**Waterfall Trail**  
An easy stroll through the trees to a dramatic waterfall that appears as if by magic. There are plenty of places to sit or to play along this lovely trail, as well as a number of pieces of reflective artwork.  
Wide, firm and smooth surface throughout, with short sections of wooden boardwalk. Long gentle slope for 400m down to waterfall.  
1 mile / 1.4 kms  
Allow 15 hour  
easy

**Oak Coppice Trail**  
A scenic stroll through mature oak woodland dotted in weedy green. There's a rare sign of the clean team or up here. See how the trees have been coppiced (cut back and re-grown) over many centuries.  
Largely firm surface, with a few uneven sections. Several short moderate slopes and one short flight of steps.  
2 miles / 3 kms  
Allow 1 hour  
moderate

**Do a lot!**

If you fancy trails that takes you to the heart of the forest, you've come to the right place! The Achray Trail and Highland Boundary Fault Trail have plenty to see and do along the way.

**Achray Trail**  
Follow in the footsteps of the Duke of Montrose, who once owned the estate here. Follow the old drovers' road through open native woodland and Achray Forest's stately spruce woods for some great views.  
Varied surface, with short steep section above the waterfall. Narrower earth path with tree roots and muddy sections above the road.  
3 1/4 miles / 5.5 kms  
Allow 2 1/2 hours  
moderate

**Highland Boundary Fault Trail**  
A varied trail with waterfalls, lofty trees and great views. It's a fall haul up the hill, but the panoramic views from Lime Craig over forest, mountains and the Corse of Stirling make it worthwhile.  
Long steep slope up to Lime Craig, but largely firm and smooth surface with occasional steps. Uneven along section up to the viewpoint itself that can be avoided.  
3 1/4 miles / 5.5 kms  
Allow 3 hours  
strenuous

# Callendar Park Woodlands

## Trails from here

### Yellow Trail ●●●

A charming tour of Callendar Park and the native oak woodland along the northern edge of Callendar Wood. Look out for dense clumps of yew and other specimen conifers, as well as the Forbes family Mausoleum enclosed within a vast circular wall above Callendar Loch.

Wide, firm and smooth surface throughout. Gentle slopes into and out of the wood with regular resting places, and a short moderate slope back up to the road.

2 miles / 3.4 km  
Allow 1½ hrs

### Red Trail ●●●

A short circuit of Callendar Loch and the attractive Arboretum behind Callendar House, and a good introduction to the delights of Callendar Wood.

Broad and largely smooth surface, with moderate slope and loose gravel path back down towards the house.

1¼ miles / 2.1 km  
Allow ½ hr

### Blue Trail ●●●

This, the longest route, follows many of the traditional cartways that were laid out through the wood in the nineteenth century. They are lined with specimen trees such as copper beech, western hemlock, red oak and strawberry trees and pass the Victorian kennels, Henry's Hill and the Barrel Well.

Largely broad and smooth surfaces, with moderate slope and loose gravel path back down towards the house. Short section of narrow earth path may be muddy.

3 miles / 4.7 km  
Allow 2 hrs

Some great routes start from here with something for everyone.

A great way to enjoy the woodlands of Callendar Park. The trails are waymarked with coloured banded posts.



# Glenmore paths

Some great routes start from here with something for everyone. A great way to enjoy the beauty of Glenmore. The trails are waymarked with coloured banded posts.

You can receive a mobility scooter free of charge at the visitor centre, ask the staff for details of this scheme, run by the Badenoch and Strathgairn Transport Group, contact: 01477 810 004

## Trails from here

### Beach Trail ●●●

The easiest waymarked route, this trail will take you through beautiful old pine trees by Loch Morlich and its golden beach, before winding its way back along the river bank.

Wide, firm and smooth surface. Largely flat, with a gently rolling section behind beach and a short slope back up to the road.

1 mile / 1.6 km  
Allow ¼ hour

### Loch Morlich Trail ●●●

This route around the water offers fine views, especially from the south shore looking to the hills. There's a good chance of seeing goldeneye, red-throated divers feeding, and even otters if you're up early.

Largely broad and firm surface, with some uneven stony sections. Gently rolling apart from a couple of short moderate slopes. One short section may be muddy.

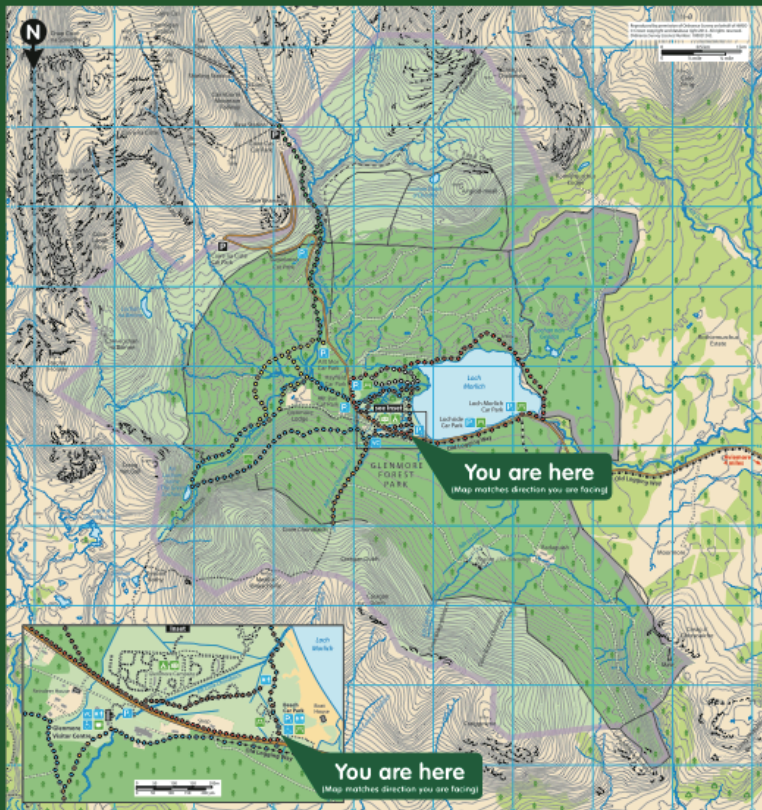
3 ½ miles / 5.6 km  
Allow 2 hours

### Ryvoan Trail ●●●

A trail that'll give you a real sense of how mountain and forest meet in Glenmore. It takes you up to An Lochan Uaine (The Green Lochan), watched over by a pointed hill called An Sidhean (The Fairies' Hill). The upper path is great fun, twisting and humping through the ancient pines.

Sections of narrow earth paths with a rough surface and tree roots. Long section of rough steps above the lochan, and other steep slopes.

4 ½ miles / 7.2 km  
Allow 3 hours



# Appendix 4: Interview sheet for path walkers

**1. How often do you visit this particular site to go for a walk or ride?** .....

First time      1-2/year      Every 2-3 months      1-2/month      1/week      More than 1/week  
 (if a regular visitor (every week or more) who would not use the path information panel then end the interview)

**2. Are you/does your party include** (circle all that apply)

Lone walker/rider M    F	Adult group	Family group	Young adult group (18-24)	Older adult group (60+)
Person from an ethnic minority	Person with a disability that limits ability to take part in outdoor recreation a little		Person with a disability that limits ability to take part in outdoor recreation a lot	

**3. How many people in each age group(s) does your party include?**

Under 18	18-24	25-40	41-55	56-70	71+	<b>Total</b>
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**4. Which of the following statements best describes your visit today?**

I live locally and I'm on a short visit	I'm on a day trip away from home	I'm on holiday away from home	I'm visiting friends and relatives in the area	I'm passing through the area on my way to or from my holiday destination	Other:
---	----------------------------------	-------------------------------	--	--	--------

**5a. How would you describe yourself?** (circle all that apply)

Regular walker/rider	Occasional walker/rider	Infrequent walker/rider	Mixed group	Prefer shorter or easier routes	Prefer longer or more strenuous routes
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**5b. How often per month do you usually go for a walk or ride?** .....

**6. Why did you decide to walk or ride today?** (circle all that apply)

To spend time with family/friends	To entertain a child	For health and exercise	To challenge myself / achieve something
To exercise a dog	For fresh air or to enjoy pleasant weather	To be somewhere I like	Other:

**7. Why did you decide to visit this site?** .....

.....

**8. When you're planning a trip that might include a walk or ride, when do you usually look at information about the paths?** (circle all that apply)

Online before my visit	Leaflet before the visit	Leaflet when I arrive	Path board when I arrive	Ranger/Visitor Centre
Guide book	Other:	Unmet information needs:		

**9. Which path are you planning to walk/ride today?**

The Lodge	Waterfall	Oak Coppice	Achray	Highland Boundary Fault
Callendar Wood	Yellow	Red	Blue	
Glenmore	Beach	Loch Morlich	Ryvoan	

**10. Why did you decide to walk that path?** .....

.....

**11. How many times have you walked this path before?** .....

**12. Talk me through what you looked at in the information panel. Which bits did you read?**

.....

.....

13. How did the path information help your decision? .....

.....

.....

**14. How easy or difficult is it to understand the information on the path panel?**

<b>Difficulty rating</b>	Very difficult	Fairly difficult	Fairly easy	Very easy
<b>Path overview</b>	Very difficult	Fairly difficult	Fairly easy	Very easy
<b>Path characteristics</b>	Very difficult	Fairly difficult	Fairly easy	Very easy
<b>Distance</b>	Very difficult	Fairly difficult	Fairly easy	Very easy
<b>Time</b>	Very difficult	Fairly difficult	Fairly easy	Very easy
<b>Map</b>	Very difficult	Fairly difficult	Fairly easy	Very easy

**15. How useful is the information on the path panel in terms of helping you choose a suitable walk?**

<b>Difficulty rating</b>	Not at all useful	Fairly useful	Very useful	Essential
<b>Path overview</b>	Not at all useful	Fairly useful	Very useful	Essential
<b>Path characteristics</b>	Not at all useful	Fairly useful	Very useful	Essential
<b>Distance</b>	Not at all useful	Fairly useful	Very useful	Essential
<b>Time</b>	Not at all useful	Fairly useful	Very useful	Essential
<b>Map</b>	Not at all useful	Fairly useful	Very useful	Essential

**16. Which word in each pair would you choose to describe the information board?**

Clear or Unclear    Appealing or Dull    Helpful or Not helpful  
 Interesting or Boring    Too detailed or Not enough information    Inspiring or Discouraging

### After Your Walk or Ride

**17. Did you enjoy your walk or ride?**

Not at all                                      It was ok                                      It was really good                                      It was excellent

Please tell me why .....

.....

**18. How well did the path description match your walk?**

<b>Difficulty rating</b>	Not very well	Fairly well	Very close	Exactly right
<b>Path overview</b>	Not very well	Fairly well	Very close	Exactly right
<b>Path characteristics</b>	Not very well	Fairly well	Very close	Exactly right
<b>Distance</b>	Not very well	Fairly well	Very close	Exactly right
<b>Time</b>	Not very well	Fairly well	Very close	Exactly right
<b>Map</b>	Not very well	Fairly well	Very close	Exactly right

**19. And how easy or difficult was it to follow the route?**

Very difficult                                      Fairly difficult                                      Fairly easy                                      Very easy

**20. Will you use any of the other paths in the future? (circle all that apply)**

I'll walk this one again	I'll walk one of the other paths here	I'll walk paths in other areas	No
Easier paths	Shorter paths	Longer paths	More strenuous paths

**21. How important is it to you to get good path information?**

Not at all important                                      Fairly important                                      Very important                                      Essential

**22. Are there any ways in which the path information could be improved? .....**

.....

.....

**Thank you for helping us with our research**

# Appendix 5: Interview guide for path refusers

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## Introduction, briefing, informed consent.

### 1 First of all, I'd like to find out more about you

How old are you? Which other people have you come with today? How many are you in total? Adults/ children? Which of these best describes you and your group? *Lone walker/rider, adult group, family group, young adult group (18-24), older adult group (60+), any ethnic minorities in the group, anyone with a disability?* Where are you from? Are you visiting the area for the day or longer? How often do you visit places like this? How often do you walk (or ride) waymarked paths?

### 2 Now I'd like to get your views on the path information

What do you think of the descriptions of the paths? How easy or difficult were they to understand? What about the information on the path surface? The gradient? How easy it would be to walk? (*easy, moderate, strenuous*) Did the grading symbols help, or not? Why? What, if anything, did the accessibility (wheelchair) marker tell you? What do you think about the distance of the path? The time it would take? The path names? How easy or difficult was it to understand the maps? Did the information encourage you to try a path or not? What information is most important to you? How easy or difficult do you think it would be to follow one of the paths? How could they have better described the paths?

### 3 Did you (and your group) consider walking a path today?

Which one(s)? How did you make your decision? Did you all agree? What, if anything, put you off walking a path? What was the main reason you didn't? *Prompts: distance, ability, mobility, time, weather, worried about getting lost.* How long did you discuss it for? What information, if any, would have made your decision easier?

### 4 Do you think you might walk paths in the future?

What, if anything, might make you decide to walk one of the paths in the future? *Prompts: more time, better weather, different types of information - what types? A wider range of paths?- what type? Being with someone who is more experienced?*

**Thank you – I hope you enjoy the rest of your day.  
Debrief – Brainbox Research contact details.**

# Appendix 6: Focus group topic guide

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## Introduction, briefing, informed consent.

### **First of all, I'd like to find out more about you**

Where do you live? How long have you lived there for? What do you normally spend your spare time doing? Why these activities? Where is there to go for a walk around here? Do you go walking often? Why/why not? Do you get out into the countryside much? Why/why not? Is there anything that would make it more difficult for you to do so? (Prompts: health, mobility, transport, cost, knowing where to go, knowing how to plan routes, read maps etc, other people).

### **Now I'd like to talk about some of the Forestry Commission sites**

Have you ever been to any of the Forestry Commission sites? The Lodge in the Trossachs? Callendar Park Woodland in Falkirk? The Queen Elizabeth Forest Park? Any others? What do you think of them/they would be like? Why? Is it somewhere you would like to go (again)? Why/why not? Did you go for a walk while you were there? Would you ever consider using one of the waymarked paths? Why/why not? (Prompts: health, fitness, accessibility, feeling welcome, feeling confident)

### **I'd now like us to look through some of the path boards that the Forestry Commission are using to tell people about the waymarked paths**

Bigger versions of these boards would be placed at the start of the walks.

**Mini-discussion in pairs with feedback to the whole group:** Which one of these paths would you choose? Why that one? Which parts of the information did you use? Why did that help you decide? What do you think the walk would be like? Might you have any difficulties? Why? What do you think you'd enjoy about it?

**Now thinking about the path board more generally:** What do you think of the descriptions of the paths? How easy or difficult are they to understand? What about the information on the path surface? The gradient? How easy it would be to walk? (*easy, moderate, strenuous*) Did the grading symbols help, or not? Why? What, if anything, did the accessibility (wheelchair) marker tell you? Do you think it would encourage people to include those with mobility problems, or not? What do you think about the distance of the path? The time it would take? The path names? How easy or difficult was it to understand the maps? Did the information encourage you to try a path or not? What information is most important to you? How easy or difficult do you think it would be to follow one of the paths? How could they have better described the paths?

### **Do you think that this sort of information would be useful to help make the paths more accessible to you?**

Which parts of it might encourage people like you? What, if anything, would put you off walking a path? What was the main reason you wouldn't? *Prompts: distance, ability, mobility, time, weather, worried about getting lost.* What information, if any, would make your decision easier? Is there anything that needs to change on this information board to help all different types of people to access the paths? Why would that help?

### **Do you think you might walk paths in the future?**

What, if anything, might make you decide to walk one of the paths in the future? *Prompts: more time, better weather, different types of information - what types? A wider range of paths?- what type? Being with someone who is more experienced?*

**Thank you**  
**Debrief – Brainbox Research contact details.**



# Appendix 7: Forestry Commission equality analysis form

<b>1. What is the name of your policy, function or service?</b>	
Standardised Waymarked Path Grading System	
<b>2. What are the main aims and objectives of the Policy function or service?</b>	
<p>The system aims to help as wide a possible range of users enjoy outdoor activity by:</p> <ul style="list-style-type: none"> <li>• Helping them to select a suitable waymarked path;</li> <li>• Promoting accessible waymarked paths.</li> </ul> <p>Agencies involved in path provision across Scotland identified a need for a new, effective path grading system for the full range of access takers covered by Scottish access legislation (walkers, cyclists, riders etc). A key objective was to encourage more people to use paths by helping users to be confident in choosing the right path for them.</p> <p>Over 2009-10, SNH involved agency partners, including FCS and Paths for All in a research project into path attribute information. This work provided a useful study of the challenge and parameters but not a finished, adoptable system acceptable to the partners.</p> <p>On behalf of the original partners, FCS subsequently led the development of a simplified system, derived from the initial research. Key partners: SNH, Paths for All and FCS, then came together to user test the proposed system. That research (including this EQA), by behavioural psychology consultants Brainbox, is now complete. The work, including extensive fieldwork, providing in-depth insight into decision processes of path users and non users. It endorsed the system as having met the partner's objectives for path users with only minor amendments.</p> <p>SNH, PfA and FCS will now produce a manager's User Guide to path grading and training to support its adoption across the country, later in 2014. The partners always hoped that a system would achieve cross agency support and adoption, so that users become familiar with a consistent approach and more comfortable about making the right path choices for them, wherever they encounter waymarked paths.</p>	
<b>3. Briefly describe the impact (or potential impact) on people</b>	
<p>The impact of the standardised waymarked path grading system is greater confidence in choosing a suitable waymarked path and so helping to reduce barriers to access.</p> <p>A key approach of the system is to quickly and simply describe key path attributes so that users can decide for themselves whether they are able to complete the route based on their knowledge of their own abilities. The system therefore does not suggest that a route is "suitable for...."</p> <p>Access managers across a range of ownerships in Scotland use a variety of different grading systems at present, some being more inclusive in their approach than others. The Forestry Commission existing system is widely seen as overly complex and fails to give users the kind of information they might need to make informed choices. Perhaps above all else, existing systems lack consistency of application which likely adds to confusion for users and a lack of trust in the accuracy of information provided.</p>	
<b>4. What are the names and contact details of the initiative's owner and the person who completed the Equality Analysis?</b>	
<p>Phil Whitfield (Forestry Commission Scotland) is the lead project contact and completed the equality analysis with Dr Fiona Fylan from Brainbox Research</p> <p>Contact: <a href="mailto:phil.whitfield@forestry.gsi.gov.uk">phil.whitfield@forestry.gsi.gov.uk</a> / 01224 441213          Contact: <a href="mailto:fiona@brainboxresearch.com">fiona@brainboxresearch.com</a> / 0113 238 0157</p>	
<b>5. Is this a new Equality Analysis, or a review of a previous Equality Analysis?</b>	
<b>New.</b>	This is a new Equality Analysis for a newly developed waymarked path grading system.
<b>3 year review.</b>	
<b>Early review, explain why.</b>	
<b>Review due to end</b>	

<b>of the initiative.</b>	
<b>6. If this is a review, when was the previous Equality Analysis signed off?</b>	
n/a	
<b>7. How will this initiative be put into practice?</b>	
<p>The waymarked path grading system will be implemented across a range of different ownerships Scotland. SNH and Paths for All will recommend and promote the system to path managers. Forestry Commission Scotland will implement the system on all the sites under its management.</p> <p>Information panels that display the grading system used for visitors accessing sites. The system will also be implemented in print and online by Forestry Commission Scotland and other path managers.</p>	
<b>8. What evidence regarding the protected characteristics have you obtained to analyse this initiative? Quote sources including details of engagement.</b>	
<p>A specialist social research organisation, Brainbox Research, undertook an evaluation of the new standardised waymarked path grading and information system. There were two elements of the evaluation that inform this Equality Analysis:</p> <ol style="list-style-type: none"> <li>1. Focus groups with four key protected groups</li> <li>2. On-site interviews with site users (included people with protected characteristics)</li> </ol> <p>The complete findings of the evaluation can be accessed in the final report produced for the partners entitled: User testing and evaluation of the new waymarked path grading system (February 2014).</p> <p><b>Focus Groups</b></p> <p>Brainbox Research collected qualitative evidence using focus groups about the impact of the new system on four key protected groups that may be affected by the new system. These groups are: people with disabilities; older adults; black and minority ethnic (BME) individuals; and individuals with low socioeconomic status (SES). The key protected groups are likely to be infrequent users of outdoor sites due to financial, mobility and cultural issues. This qualitative research specifically investigated the impact of the path grading and information system on irregular or non-path users from the protected groups.</p> <p>Five focus groups were held off-site around the Glasgow area, one with each of the protected groups as described above and an additional second group with older adults who also had mobility difficulties. Participants were recruited to each of the groups through local community organisations, for example charities, social housing organisations, disability organisations and older adults' day care centres. All of the participants were irregular users of countryside paths and the majority had never visited Forestry Commission sites. Small incentive payments were provided to participants to encourage those with a variety of views to participate in the research that informs this Equality Analysis. Between 5-10 individuals from each of the protected groups took part in the focus group discussions. Each of the groups is described below.</p> <ul style="list-style-type: none"> <li>• The group with people with disabilities included male and female residents from across Glasgow and surrounding area. They had a range of disabilities include physical disabilities, visual impairment and learning disabilities. Participants ranged in age from their early 20's to their late 60's. Three were wheelchair users.</li> <li>• The low SES group included local residents aged 18–60 years from Castlemilk – a highly deprived area of Glasgow.</li> <li>• The BME focus group included Asian women in their 30's and 40's who attend a local charity venue that provides health and wellbeing services for the BME community in Govanhill, Glasgow.</li> <li>• The two older adults groups included nine males and females aged between their late 60's and early 90's, and one in their early 50's.</li> </ul> <p>Each group lasted approximately 90 minutes during which participants discussed the new grading system. The facilitators used a semi-structured topic guide to probe around participants' understanding of the information provided on the signage boards and their perceptions of the available information. We also explored participants' perceptions of the accessibility of the paths and whether the information available would help them to confidently select a suitable path.</p> <p><b>Interviews on-site with path users and non-users</b></p> <p>The Brainbox Research team undertook on-site research that included exploring the views of people with the key protected characteristics who were visiting the three pilot sites where the new system was in use (Callendar Park, The Lodge and Glenmore Forest Park). The on-site research included older adults,</p>	

minority ethnic individuals, and people with disabilities. The three methods used were:

- Structured interviews with people using the path information boards that have been installed on-site to choose paths and use them. Visitors were interviewed before and after using the paths;
- Semi-structured interviews with a sample of people across the sites who had chosen not to use any of the paths;
- Observations of people using the information boards, making-decisions and accessing (or not accessing) the paths.

Each of the methods allowed the research team to explore: understanding of the information boards containing the new grading system; perceptions of the accessibility of paths; and how the path grading system influenced confidence to choose a suitable path. Before using the path, visitors gave feedback about the path choices that they made and why they made them. After using the paths, visitors were also asked about how the path met their expectations based on the information the grading system provided. Those who chose not to use a path were asked about their reasons for this. Additional on-site observations were made by the research team and reported in field notes.

#### 9. What gaps are there in the available evidence?

	Describe the gaps and what you have done to fill them, or why you cannot fill them.
<b>Age</b>	Extensive qualitative, quantitative and observational research has been carried out to explore the impact of the policy on older adults with a range of health and mobility issues. We do not believe there are any evidence gaps on the impact of this policy on this protected group.
<b>Disability</b>	Extensive qualitative, quantitative and observational research has been carried out to explore the impact of this policy on people with a range of physical and learning disabilities and visual impairment. We do not believe there are any evidence gaps on the impact of this policy on this protected group.
<b>Gender</b>	<i>Not deemed applicable to this policy initiative</i>
<b>Gender Reassignment</b>	<i>Not deemed applicable to this policy initiative</i>
<b>Marriage and Civil Partnership</b>	<i>Not deemed applicable to this policy initiative</i>
<b>Pregnancy and Maternity</b>	We interviewed some women who were pregnant during our on-site research. These women were in relatively early stages of their pregnancies, although we believe that the new system will provide all pregnant women with increased confidence to choose a suitable waymarked path because of the standardised information about path terrain.
<b>Race</b>	Extensive qualitative, quantitative and observational research has been carried out to explore the impact of the policy on ethnic minority groups. We do not believe there are any evidence gaps on the impact of this policy on this protected characteristic.
<b>Religion and Belief</b>	Extensive qualitative research has been carried out to explore the impact of the policy on Muslim individuals. We do not believe there are any evidence gaps on the impact of this policy on this protected characteristic.
<b>Sexual Orientation</b>	<i>Not deemed applicable to this policy initiative</i>

#### 10. What does all the evidence tell you about the actual or likely impact on different groups?

	Positive Impact	Negative impact	High, Medium or Low	Comments
<b>Age</b>	✓		Low	Standardised information will give older adults greater confidence to select a suitable waymarked path. Information on terrain is particularly useful for this group, particularly for those with mobility problems as they need information about any steps along the path and the gradient involved.
<b>Disability</b>	✓		Medium	Standardised information will give people with disabilities greater confidence to select a suitable

				waymarked path. The wheelchair symbol and terrain information are particularly useful for wheelchair users as they provides reassurance that the entire path will be suitable.
<b>Gender</b>				n/a
<b>Gender reassignment</b>				n/a
<b>Marriage and Civil Partnership</b>				n/a
<b>Pregnancy and Maternity</b>	✓		Low	Standardised information, particularly on the terrain, will give pregnant women greater confidence to select a suitable waymarked path.
<b>Race</b>	✓		Low	Standardised information will have very little differential effect on this protected group. Where there is an effect, it is with people who have no previous experience of walking waymarked paths. The difficulty grading would give them greater confidence they are able to complete the selected path.
<b>Religion and Belief</b>				Our research shows that the standardised information system will not have a differential effect on this group.
<b>Sexual Orientation</b>				n/a
<b>11. What have you changed in the initiative to reduce or eliminate any negative impact?</b>				
The conclusions drawn from the evidence collected indicate a low positive impact of the Standardised Waymarked Path Grading System on individuals with the protected characteristics. As such, no recommendations to change the initiative are necessary to reduce or eliminate any negative impact.				
<b>12. Where negative impact can not be reduced, give the reasons why.</b>				
n/a				
<b>13. Does this initiative fulfil the General Equality Duty?</b>				
	<b>Comment</b>			
<b>Eliminate unlawful discrimination, harassment and victimisation.</b>	The Standardised Waymarked Path Grading System will give greater confidence to people with the protected characteristics described above to choose and use a suitable waymarked path. It will not unlawfully discriminate against people with protected characteristics.			
<b>Advance equality of opportunity.</b>	The Standardised Waymarked Path Grading System will give greater confidence to people with the protected characteristics described above to choose and use a suitable waymarked path. The system meets the needs of these individuals and will not disadvantage them. This system will advance equal opportunities between people who share a protected characteristic and those who do not to participate in outdoor activity using waymarked paths.			
<b>Foster good relations.</b>	The impact of the Standardised Waymarked Path Grading System is greater confidence in choosing and using a suitable waymarked path. The impact on people with the protected characteristics described above is positive and will promote path accessibility for people with protected characteristics. This will promote understanding and foster good relations between people who share protected characteristics and those who do not.			
<b>14. Describe the arrangements to measure and monitor the actual impact of this initiative on people from the protected characteristic groups.</b>				

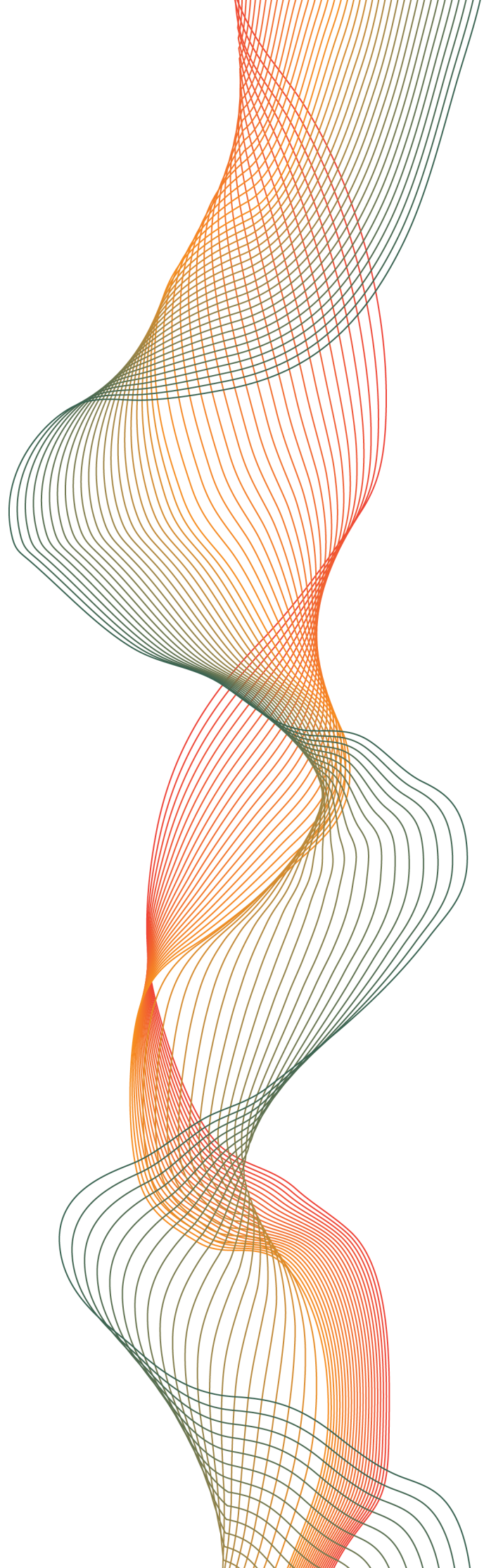
<b>How will you measure the effects of the initiative?</b>	As part of the evaluation research, standardised path grading information boards were installed at three Forestry Commission Scotland sites. The effect of the initiative has been measured on-site using quantitative, qualitative and observational research methods. This research has informed this equality analysis. No further monitoring of the initiative is required to establish its actual impact on users with protected characteristics.
<b>What type of information is needed for monitoring and how often will it be analysed?</b>	n/a
<b>How will you engage stakeholders* in implementation, monitoring and review?</b>	n/a
<b>Who will be responsible for the monitoring and review?</b>	n/a
<b>15. What is the review date for this Equality Analysis?</b>	
<b>Date of next review(s)</b>	
<b>What could trigger an early revision?</b>	
<b>16. Senior manager sign off</b>	
<b>I agree with this Equality Analysis and its supporting evidence relating to this initiative and that it demonstrates that it advances or will advance, the three aims of the General Equality Duty.</b>	
<b>Name</b>	
<b>Signature</b>	
<b>Job Title</b>	
<b>Date</b>	

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