



Toolkit to Success

Accessible Walks Scheme



Toolkit to inform Land Owners and Managers about walk accessibility standards in Northern Ireland, with regards to existing routes and developing new routes

Introduction

This 'Toolkit to Success' has been compiled by Venture Outdoors - Creating Healthy Communities in conjunction with a range of experts to introduce and explain the Countryside Access and Activities Network's (CAAN) Accessible Walks Scheme, a uniform method of assessing the accessibility of walks within Northern Ireland.

The aim of the Accessible Walks Scheme is not to define people or their abilities by dictating which walks are suitable, but to provide people with mobility issues with enough information to make an informed decision. It is hoped that by developing and promoting one consistent method of describing the routes on WalkNI.com (CAAN's consumer walking website), that this will increase the confidence of those with mobility issues and therefore the frequency of their participation in outdoor recreation.

The schemes criteria have been adopted by CAAN's Volunteer Rangers to audit the walking routes and will also be useful to land managers when either developing new or redeveloping existing walking routes.

Venture Outdoors - Creating Healthy Communities

This 'Toolkit to Success' is part of the Venture Outdoors - Creating Healthy Communities project. It aims to address the barriers limiting participation in outdoor recreation by three communities, namely people with disabilities, including people with limited mobility, learning disability, hearing and visual impairments; people from ethnic minorities and disadvantaged communities.

Venture Outdoors - Creating Healthy Communities project is a 3 year project led by Countryside Access and Activities Network (CAAN) and has been funded by the Big Lottery Fund's Reaching Healthy Communities Programme and Ulster Garden Villages.

Contents

	Page
Overview	3
Walk Accessibility Features	4
Grade Specification Table	7
Walk Assessment - Information Collection	9
Walk Assessment - Information Collation	9
Walk Assessment Tables	10
Walk Assessment - Evaluation	16
Appendix 1 - Accessible Walks Scheme Audit Proforma	17
Appendix 2 - Accessible Walks Scheme Audit Proforma Guidance Notes	21



Overview

The Accessible Walks Scheme is aimed at informing people with mobility issues. This covers a wide range of users and includes those with physical disabilities, sensory disabilities, learning disabilities and hidden disabilities, but can also include other users such as parents with push chairs or cyclists. People with physical disabilities may require the use of a wheelchair, a mobility scooter, a walking aid or an accompanying carer to provide stability and/or physical or emotional support. People with learning disabilities may also require the use of mobility aids and an accompanying carer, to guide them around their chosen route.

Walks on WalkNI.com will be classified into grades according to the accessibility of features on each route. Each walk will be graded 1-5, with grade 1 being the most accessible and grade 5 being the least accessible. Examples of features to be taken into consideration are path surface, path gradient and presence of obstacles on the route.

CAAN set up a Steering Group to advise on the development of the scheme. Organisations represented on the Steering Group were Disability Action, Disability Sports NI (DSNI), Disabled Ramblers, District Councils, Mencap, Northern Ireland Council for Ethnic Minorities (NICEM) and Northern Ireland Environment Agency (NIEA). A consultee group which was also set up for the Scheme, included environmental organisations, district councils and organisations who worked with people with disabilities.



Walk Accessibility Features

There are several components that can dictate the accessibility of a route. These features could severely impact those with mobility issues either completing the route or put their health and safety at risk. These are discussed below:

Path surface

Path surface type is one of the most obvious features to be taken into consideration when assessing walk suitability for people with limited mobility. Path surface fragments or uneven surfaces present a tripping hazard to those unstable on their feet and/or prove to be hard work for wheeled vehicles such as wheelchairs and/or pushchairs. Ideal path surfaces are compact, stable, non slip and obstacle free. Suitable path surfaces include concrete, tarmac, timber, paving and mown grass. Unsuitable surfaces include sand, loose gravel and stone and woodchip. Wheelchair and walking aid users are most likely to be affected by irregular path surfaces.

Path width

Path width is an important factor to consider with regards to those with limited mobility. The standard width of a wheelchair is 700mm, a double stick user requires 950mm, a double buggy 1000mm and an adult supporting another adult 1200mm. When considering path width, the amount of useable surface should be measured, excluding encroaching vegetation. In order for a path to be fully accessible, its minimum width should be 1.2 m. This will allow two people to walk side by side comfortably and support each other if necessary.

Path gradient

Sustained slopes and steep slopes can be a barrier to those with mobility issues. For example, those using a wheelchair may be able to ascend a short steep slope easier than a prolonged length of gentle slope. Other users such as ambulant disabled people may also find steps easier to use rather than ramps. Different users may also be able to cope with differing slopes, such as a wheelchair user with a high level of fitness, compared to wheelchair user with lower upper body strength. Therefore, the grading system merely states the gradient as a ratio and a percentage and also provides an indicative symbol to illustrate the angle of the slope. This will allow users to make an informed decision with regards to the walk and their ability. Path gradients greater than 6° or 1:10 could prove to be a barrier to those with limited mobility. 6° was arrived at after considering other grading systems as well as consulting and pilot testing with disability organisations.

Walk Accessibility Features

Cross Slope

The cross slope of the path is the slope measured perpendicular to the direction of travel. Cross slopes can be a barrier to those with balance and co-ordination problems who rely on a flat stable surface in order to feel comfortable when participating in outdoor recreation. A path falling away to either side of a person with limited mobility, does not provide for an accessible route, given the potential for the user to become unsteady on their feet or lose control of a wheel chair, walking aid or pushchair. Cross slope with gradients greater than 6° or 1:10 could prove to be a barrier to those with limited mobility. 6° was arrived at after considering other grading systems as well as consulting and pilot testing with disability organisations.

Obstacles

Obstacles are the most obvious barrier to people with mobility issues wishing to participate in outdoor recreation. They are physical features present on the ground that could make a route impassable for a person of limited mobility. Some obstacles present a greater barrier to some users than others, for example a parent with a pushchair may be able to negotiate some steps whereas this may be a complete barrier to a wheelchair user. Examples of obstacles taken into consideration with regards to the Accessible Walks Scheme include kissing gates, stiles, cattle grids and grates.

Surface breaks

Surface breaks do not pose a definite barrier to a person of limited mobility as an obstacle would. They may prove to be a tripping or sticking hazard for people unsteady on their feet, using a wheeled device or a walking aid. Examples of path surface breaks would be a cross drain or a gap in a timber board walk. These can cause problems for people using walking sticks, wheelchairs, walking frames or push chairs. A surface break of greater than 12mm could pose a problem to a path user with limited mobility.

Clear Head Height

A clear head height is important for visually impaired people and people who might have problems with bending or manoeuvring. A clear head height should apply at a vertical height of 210cm across the full width of the path. Features such as overhanging vegetation or built structures such as bridges or buildings could mean that a clear head height of 210cm across the entire width of usable path would not be attainable. Consideration should be given to possible alterations that could make the path more accessible, for example keeping overhanging vegetation trimmed at a suitable level.

Walk Accessibility Features

Passing places

A passing place is an area that allows two wheelchairs to pass each other when travelling in opposite directions. Passing places should be considered when assessing a walk's accessibility when the width of the path is less than 2m in width. If the path is wider than 2m for its entirety, 2 wheelchairs should be able to pass comfortably. If passing places are not available on a path of less than 2m in width, wheelchair users may be forced to risk going onto unsuitable surfaces, e.g. thick mud or grassy banks. For a walk to be considered accessible, passing places should be available as a minimum every 150m.

Rest areas

A rest area is classified as a seat or a perch. These may be constructed features such as a wooden bench or shelter, or may simply be natural seats in the form of a wall, rock or tree stump. For those who are easily fatigued, rest areas are of great importance and can affect their decision to undertake a walk, knowing whether or not there are enough rest areas along the route, should they be short of breath or fatigued. For a walk to be considered accessible, rest areas should be available every 300m.

Facilities

Another factor that influences the decision of people with limited mobility to participate in outdoor recreation would be the facilities available at the walk. This was not included as a feature that would affect the accessibility of the route itself, but rather as extra information that should be provided to the public to allow them to make an informed decision. The provision of a café or toilets could further encourage participation in new routes or routes further away from home than those previously considered. The information regarding facilities available at each walk is as follows: café, shop, visitors' centre, disabled toilets, disabled parking, wheelchair available, mobility vehicle available, hearing loop system available and route lighting.

Grade Specification Table

Please see overleaf for the grading system developed and used by CAAN to complete the Accessibility Audit. This should be used in conjunction with the walk assessment table to classify the route of choice using a uniform grading system. It classifies routes according to grades 1 to 5 rather than subjective easy - moderate - strenuous style classifications, as the terms easy, moderate and strenuous may have differing meanings to different people (by reading each definition it is possible to decide on which route grade is suitable for their level of ability).

Grade Specification Table

	1. Path Surface	2. Path Width	3. Gradient	4. Cross Slope	5. Obstacles	6. Surface Breaks	7. Clear Head Height	8. Passing Places	9. Rest Areas
Grade 1	Hard and firm with no loose material	2m or 1.5m with passing places	Maximum of 1:20 (3°)	Maximum of 1:20 (3°)	No steps, stiles, fences, hedges, gates or walls that restrict access	No surface breaks	At least 1m wide and 2.1m high	At least every 50m, if path is less than 2m wide	At least every 100m
Grade 2	Hard and firm with some loose stones (no bigger than 1cm), not covering the whole surface	At least 1.2m	1:12 (5°)	1:12 (5°)	No steps, stiles, fences, hedges, gates or walls that restrict access	No more than 12mm measured across the line of the path	At least 1m wide and 2.1m high	At least every 150m	At least every 300m
Grade 3	May not be hard and firm in all weathers with loose stones (no bigger than 5cm), occasional tree roots and pot holes	At least 1m	1:10 (6°)	1:10 (6°)	No steps, stiles, fences, hedges, gates or walls that restrict access	Surface breaks are between 12mm and 75mm measured across the line of the path	At least 1m wide and 2.1m high	At least every 150m	At least every 1km
Grade 4	May not be hard and firm in all weathers with loose stones (no bigger than 10cm), occasional tree roots and pot holes	At least 80cm	Gradients not limited	Gradients not limited	Obstacles are to be expected	Surface breaks of greater than 75mm measured across the line of the path to be expected	Overhanging branches are possible	Not formalised	May be provided
Grade 5	Not formalised	Variable, single file trails to be expected	Gradients not limited	Gradients not limited	Obstacles are to be expected	Surface breaks of greater than 75mm measured across the line of the path to be expected	Overhanging branches are possible	Not formalised	May be provided

Walk Assessment

There are three stages involved with assessing a walk for accessibility:

- 1) Information Collection
- 2) Information Collation
- 3) Evaluation

Information Collection

The Accessible Walks Proforma, (Appendix 1) should be used to record route specific information when carrying out a walk assessment. The proforma should be used in conjunction with the guidance notes, (Appendix 2).

Equipment

In order to assess a walk for its accessibility, the following tools are required:

- A measuring tape
- A device for measuring angle of slope - (e.g. 'Maxiclin' clinometer, produced by Geo Supplies Ltd).
- A device for measuring distance - (e.g. either a trundle wheel or a calibrated pedometer).

Information Collation

Once the basic data is collected for the route in question, this information needs to be processed in order for conclusions to be drawn from the information and for it to be digestible by the end user. The Grade Specification Table (pg 7-8) and the Walk Assessment Tables (pg 11-15) are the main tools used to collate and evaluate route specific information.



Walk Assessment

Walk Assessment Tables

Use the grade specification table to assist in completing the walk assessment tables on pg 11-15. The blank squares indicate the grade of the walk feature according to the grade specification table, for example, an entirely tarmaced path is a grade 1 path. However, if a section of this route was also constructed from loose gravel, which is a grade 3 feature, the overall rating of the path would therefore be grade 3. There is a need to classify the route according to the 'most restrictive' features that people will come across; so that they are prepared for the conditions they will discover when they are out on the route.

Some features apply to more than one grade. For example a route that has tree roots present on the path would be a grade 3 or above (see three clear boxes). Simply select the lowest grade as other route factors will determine which grade classification the route falls into.

A set of Walk Assessment Tables should be completed for each route to be evaluated. The highest grade box ticked over all the features, will be the grade assigned to the walk, for example if a route has attained the majority of grade 3 classifications, but with two grade 4 classifications, the route is still a grade 4 route.



a) Path Surface

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Concrete/brick/paving					
Tarmac					
Compacted earth					
Timber					
Mown grass					
Loose earth/mud					
Path constructed of loose gravel					
Path constructed of loose stones					
Sand					
Woodchip					
Tree roots present					
Pot holes present					
Occasional stones (less than 1cm)					
Occasional stones (1- 4.9cm)					
Occasional stones (5 - 9.9cm)					
Occasional stones (greater than 10cm)					

b) Path Width

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
200cm or greater					
150 - 199cm (with passing places)					
120 - 149cm					
100 - 119cm					
80 - 99cm					
79cm or less					

c) Path Gradient

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
0° - 3°					
4° - 5°					
6° or greater					

d) Path Cross Slope

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
0° - 3°					
4° - 5°					
6° or greater					

e) Presence of Obstacles

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Kissing gate (non wheelchair & mobility vehicle accessible)					
Wheelchair accessible kissing gate					
Mobility accessible kissing gate					
Steps with ramp					
Steps with handrail					
Steps (no handrail or ramp)					
Gate (wider than 81cm)					
Gate (narrower than 80cm)					
Locked gate					
Stile					
Cattle grid					



f) Surface Breaks

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
No surface breaks					
Less than 1.2cm					
1.2 - 7.5cm					
Greater than 7.5cm					

g) Clear Head Height

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
At least 1m wide and 2.1m high					
Overhanging branches or low structures are possible					

Courtesy of Belfast Activity Centre, Access Ability Programme



h) Rest Areas

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
At least every 100m					
At least every 300m					
At least every 1km					
May be provided					

i) Passing Places

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
At least every 50m if path is less than 2m wide					
At least every 150m					
Not formalised					

Courtesy of Belfast Activity Centre, Access Ability Programme



Evaluation



Routes that fall into the Grade 1 and Grade 2 are deemed to be the most accessible. If your route has fallen into a higher grade due to one or two issues, such as lack of rest areas, or the presence of a large surface break, consideration should be given to measures that can be implemented to make the route more accessible.

For routes where more rest areas can be added, this should be considered and for routes with large surface breaks, can a solution be implemented resulting in a smaller surface break?

Some issues affecting a specific path will not be possible to adjust, for example steep gradients or the presence of steps. Not all routes are accessible for all, but perhaps an alternative route can be recommended for those with mobility issues. Perhaps 75% of the trail is accessible, but after a certain point, the user needs to turn back and retrace the route. These routes should be highlighted for trail users with mobility issues as an alternative to the advertised route.



Appendix 1



* Please complete the proforma in conjunction with guidance notes

Accessible Walks Scheme Audit Proforma

Walk: _____ Date: _____

1a) Please tick all path types experienced on the route

Concrete/paving	<input type="checkbox"/>	Loose earth/Mud	<input type="checkbox"/>	Tarmac	<input type="checkbox"/>
Loose Gravel	<input type="checkbox"/>	Compacted Earth	<input type="checkbox"/>	Loose Stones	<input type="checkbox"/>
Mown Grass	<input type="checkbox"/>	Timber	<input type="checkbox"/>	Sand	<input type="checkbox"/>
Woodchip	<input type="checkbox"/>	Other _____			

1b) Are any of the following present on the path?

Tree Roots Pot Holes

1c) What is the largest size of stones present on the path?

Between 1cm and 4.9cm	Between 5cm and 9.9cm	Greater than 10cm

2) What is the minimum path width encountered?

79cm or less	80cm - 99cm	100cm - 119cm	120cm - 149cm	150cm - 199cm	200cm or greater

3) What is the angle of the steepest gradient on the route?

0° - 3°	4° - 5°	6° or Greater

Appendix 1

4) What is the greatest angle of cross slope on the route?

0° - 3°	4° - 5°	6° or Greater

5) Are any of these items present on the route?

Kissing Gate	<input type="checkbox"/>	Steps with ramp	<input type="checkbox"/>
Wheelchair Accessible kissing gate	<input type="checkbox"/>	Steps with handrail	<input type="checkbox"/>
Mobility Accessible kissing gate	<input type="checkbox"/>	Steps (no handrail or ramp)	<input type="checkbox"/>
Gate (wider than 81cm)	<input type="checkbox"/>	Locked gate	<input type="checkbox"/>
Gate (narrower than 80cm)	<input type="checkbox"/>	Stile	<input type="checkbox"/>
Cattle Grid	<input type="checkbox"/>	Grate	<input type="checkbox"/>
Other _____			

6) What is the widest surface break encountered on the path?

Less than 1.2cm	1.2cm - 7.5cm	Greater than 7.5cm

7) Is there a clear head height of at least 210cm along the length of the route?

Yes No





Equipment required:
 Measuring tape
 Clinometer
 Pedometer / trundle wheel
 Audit proforma

Quality Walk Accessibility Audit Proforma Guidance Notes

- 1a) Please tick all path types that are applicable to the walk you are auditing. Several of the options listed may apply. Loose gravel and loose stone paths are paths that are constructed entirely from gravel or stones. Information provided here will be of interest to those using wheelchairs, prams and walking aids as well as people with balance issues or who may need a companion to guide them along the route. An accessible path will be compact/ firm, stable, non slip and obstacle free.
- 1b) Protruding tree roots and pot holes represent hazards to those with mobility issues as they provide an unpredictable surface. Tree routes can be exposed or in the form of causing broken surfaced bitmac or concrete. Note if either of these features are present on the route in question.
- 1c) If there are occasional stones or gravel present on the path, please tick the box relating to the largest size of loose material encountered. Measure a selection of stones at the widest point of the stone and record the sizes on the audit proforma. The largest size of stone is required, so if you have placed marks in the '1 cm – 4.9 cm' box and the '5cm - 9.9 cm' box but none in the 'greater than 10cm' box, 5 cm – 9.9cm is the category that the stone size would fall into.
- 2) Measure the width of the narrowest section of usable surface of the path. An accessible walk will have a minimum width of 120cm (1200mm) to allow two people to walk side by side and support each other if necessary. Again, to make this easier, use the table provided to keep track of your measurements, should you need to measure several areas that may be the narrowest.



- 3) What is the angle of the steepest path gradient on the route? Measure the angle of the slope parallel to the edges of the path. A clinometer is a commonly used tool. Make a note of the slope angle on the audit proforma, and repeat on each section of path that could be a contender for the steepest section of the path. Angles measured will fall under either 0°-3°, 4°-5° or greater than 6°.

Quality Walk Accessibility Audit Proforma Guidance Notes

- 4) What is the angle of the steepest path cross slope on the route? A slope across the line of a path can make it very difficult to push a wheel chair and other people with mobility issues may find a cross slope makes them feel unbalanced. Measure the angle of the cross slope perpendicular to the edges of the path. A clinometer is a commonly used tool. Make a note of the cross slope angle on the audit proforma, and repeat on each section of path that could be a contender for the steepest cross slope on the path. Angles measured will fall under either 0°-3°, 4°-5° or greater than 6°.
- 5) Please tick any of the features listed if they occur on the path being audited. If any of these 'obstacles' have been adapted for wheelchair users, such as a wheelchair accessible kissing gates or steps with an adjacent ramp, please make a note of this. A wheelchair accessible kissing gate refuge has the dimensions of 100cm x 160cm. A Powered Mobility Vehicle (PMV) accessible kissing gate refuge has the dimensions of 125cm x 170cm.
- 6) Examples of path surface breaks would be a cross drain or a gap in a board walk. These can cause problems for people using walking sticks, canes or wheelchairs. Measure the width of the greatest surface break. An accessible path will not have any surface breaks greater than 1.2cm. Measure and record each path surface break that may be a contender for the largest path surface break on the audit proforma sheet.
- 7) A clear head height is important for visually impaired people and people who might have problems with bending or manoeuvring. A clear head height should apply at a vertical height of 210cm across the full width of the path. Overhanging vegetation as well as walking under structures such as bridges, should be assessed. Use a measuring tape to assess if a clear head height of greater than 210cm exists.
- 8&9) A rest area is classified as a seat or a perch. These may also simply be natural seats on walls, rocks or tree stumps. A passing place is an area that allows two wheelchairs to pass each other when travelling in opposite directions. If the path is wider than 200cm, passing places are not specifically needed as the wheelchairs could pass at any stage of the path. If the path is narrower than 200cm, passing places should be present every 100m for the route to be accessible.

Use the table on the audit proforma to note distances between the start of the walk, rest areas and passing places. A worked example has been provided on the table. Start measurements from the start of the walk and note the distance of each rest area and passing place using a measuring device such as a trundle wheel or calibrated pedometer with distance functionality. Make a note of the measurement when you come across each passing place and rest area in the table provided. This should be done on a cumulative basis so that the distance from the start of the walk to each rest area or passing place and between each resting area and passing place can be worked out. If paths are over 2m wide, passing places do not need to be taken into consideration as two wheelchairs can pass freely.

The next stage is the evaluation of the data. Use the Grade Specification table and the Walk Assessment tables to assign a grade to the route.



For more information contact **Venture Outdoors - Creating Healthy Communities** team:

Countryside Access Activities Network
The Stableyard, Barnett's Demesne, Malone Road, Belfast BT9 5PB
Tel: +44 (0)28 9030 3930 Fax: +44 (0)28 9062 6248
Email: maeve@countrysiderecreation.com

This guide is available on request in alternative formats.

