

# The National Path Demonstration Site

at Battleby



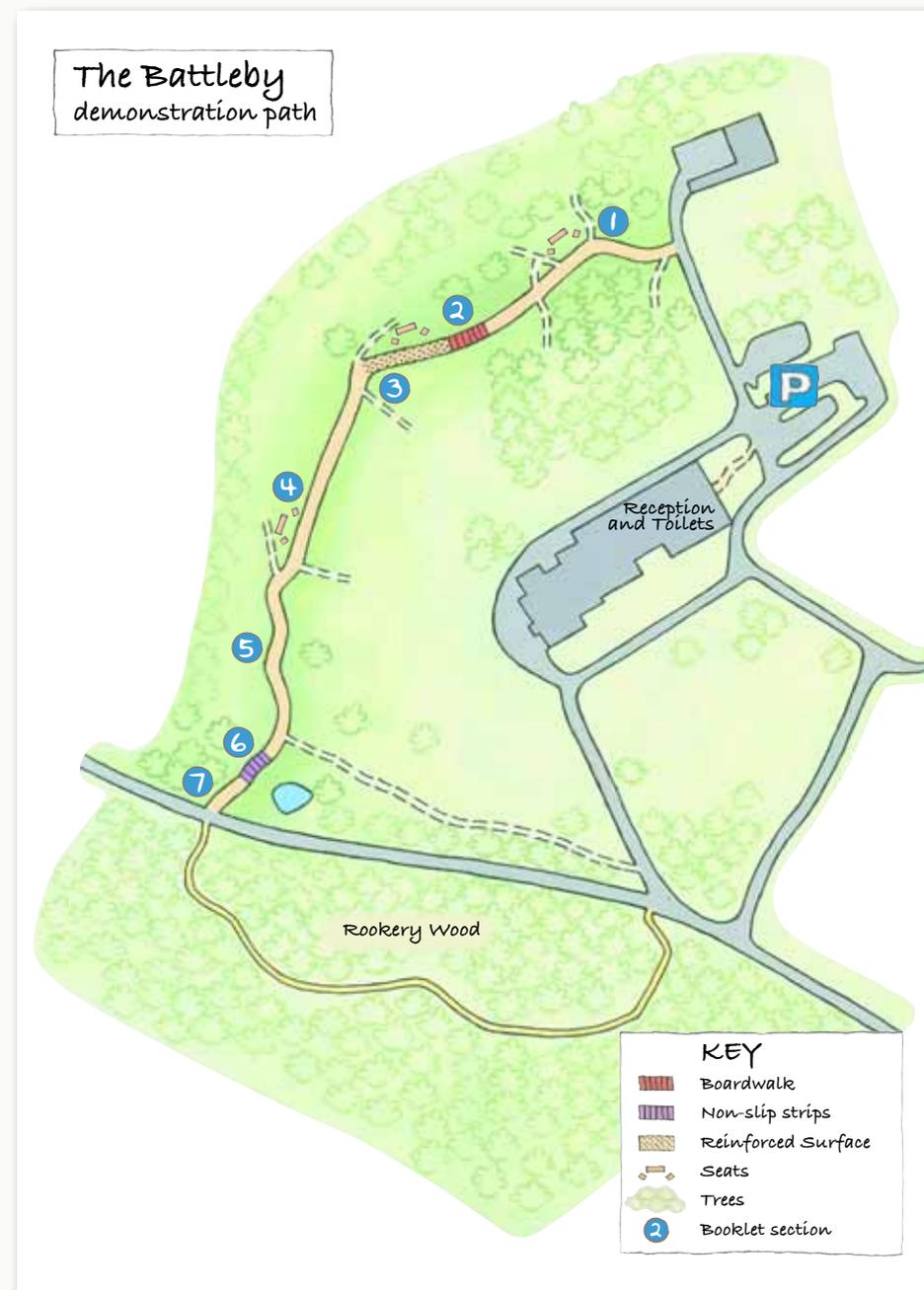
an introductory guide

Good paths are essential if people are to enjoy the outdoors. Thoughtful path design really opens up access – but there's more to building paths than meets the eye. Paths for All and Scottish Natural Heritage want more people to get out and about so we've developed a path through Battleby's woods as a National Path Demonstration Site where people can start learning about path building.

The path here shows off some of the materials and construction techniques that can go into building a path accessible to many different users including disabled people. At Oatridge College, near Edinburgh, there's another demonstration site that shows other approaches to path and bridge building and where you can test out different types of gates and barriers.

We hope both sites will help you think about what makes a good path and give you some ideas as you develop your own. You'll find more information and technical details on the Paths for All website [www.pathsforall.org.uk](http://www.pathsforall.org.uk).

Numbered plaques along the way link to sections in the booklet.



## 1 Take a breather

Some people will welcome a seat so close to the start of the path. The ideal place for a seat is somewhere sheltered and with a good view. It's not always possible to find the ideal place, especially if you need a lot of seats at regular intervals.

In rural and working landscapes resting places should be no more than 300m apart to reach Countryside for All accessibility standards – specifications for paths most disabled people can use. You can find out more about improving access for disabled people at [www.fieldfare.org](http://www.fieldfare.org)

These 'perches' are a simple and cheap design. They don't take up much space and are really handy for people who find it difficult to get up from a low sitting position.

Seating areas are hot spots for maintenance. Litter often accumulates and the ground surface will wear more quickly than the rest of the path. The seats themselves need checking regularly too.



*This table is accessible for wheelchair users, so no-one is excluded. Think 'inclusive' when planning and designing seats and other path furniture.*

## 2 Two ways to board a walk

Boardwalks can get us into places that might otherwise be impossible: they're often the only way to let visitors appreciate a moss or bog. People can keep their feet dry without affecting the natural movement of water – the hydrology. In some places it is important not to disturb the hydrology: it can affect the plants that can grow there and change the habitat completely.

Some people feel a boardwalk divorces you from the environment, and that walking on it somehow separates you from the place. What do you think? Boardwalks can be more visually intrusive than a natural surface, although they may not actually cost more than a heavily engineered path.



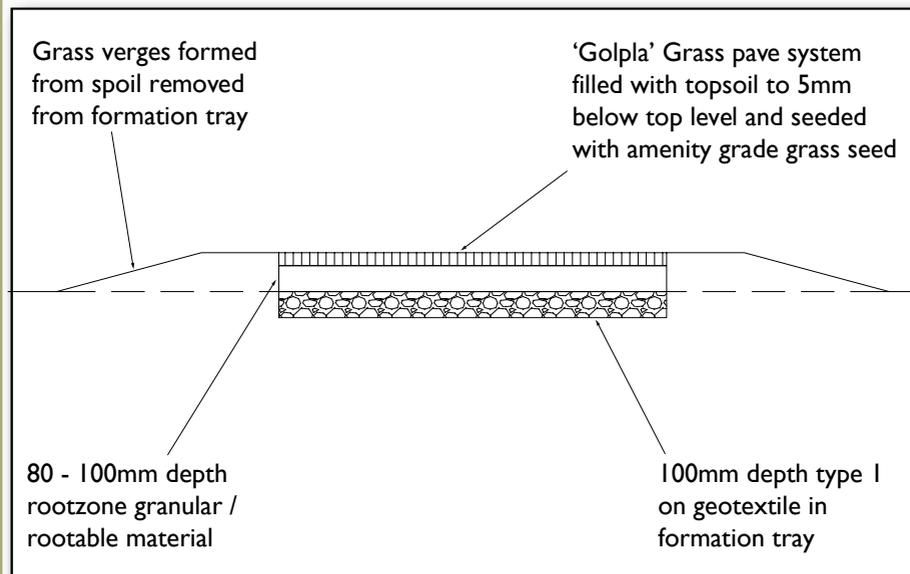
*Boardwalks can be supported on driven posts or bearers that lie on the ground. Either way, water can flow past freely.*

### 3 Send reinforcements

The section of path here might look like a natural desire line through the grass, but it's actually a sophisticated bit of sustainable engineering that will take a lot of wear and tear on this wet ground.

First, the line of the path was dug out as a tray or shallow trench. Turf from the original surface has been re-used along the sides to hold the path material in place and 'soften' the transition to the surrounding ground. Next the tray was filled in, first with a free draining gravel, then a layer of sand. Finally cellular paving was laid on top, filled with soil and seeded with grass.

Depending on the site and the logistics of transporting materials, building this path might cost around £55.00 per square metre at 2010 prices. That's a big investment - but you can save money on maintenance costs. All of the cellular paving can now be mown by machine. The spur path to the left, which is just a line through the grass, usually has to be kept clear by hand.



### 4 On stony ground

The basic path material here is known as 'Type 1'. This is a standard specification, so each load will have the same proportions of different particle sizes: Type 1 has particles from 40mm down to dust. But crushed stone often separates as it's transported from the quarry to the path construction site. If it's used straight from the stockpile left by the delivery truck the first few dumper loads will be different from the rest. Make sure you check your materials and be prepared to mix them on site, before loading the dumper, to get a good mixture that will provide a uniform quality finish.

Type 1 is a loose material with 'lumps and fines'. To make a durable and usable path it must be well compacted. A roller or vibrating plate (sometimes called a whacker plate) 'shoogles' and presses all of the material contained in the tray until it forms a solid mass that can support the weight and resist the action of feet, wheels and hooves.



Photo courtesy of Anthony O'Connor - Trail Motions Mountainbike Skills

## 5 Is it accessible?

The path here has been built to meet Countryside for All accessibility standards. Building paths 'up to standard' means being very careful about design and construction. Small things can make a big difference – using a wheelchair on a cross-slope steeper than 1 in 50 feels precarious, although walking on it feels fine. Paying attention to detail is vital.

This is a typical 'Type 1 and dust' path, common to much of Scotland. The path is built in layers but you wouldn't know from looking at the surface! As with stop 3, work started with digging out a shallow tray. Generally a tray contains aggregate 'fill material' and stops the edges losing definition. Here it was lined first with a geotextile (a thin woven plastic blanket), giving extra separation and support to the fill material on this soft ground. Filled up with Type 1 and surfaced with whindust, in cross section the whole thing's rather like a Mars bar!



*Laying the foundation geotextile blanket.*

## 6 Non-slip strips

Slippery deck boards on a boardwalk or bridge are a real hazard – but easily avoided. There are lots of options: cutting grooves in the boards themselves, applying anti-slip paint, or buying proprietary glass reinforced plastic (GRP) panels with grit embedded into the surface as you can see here. They all need different maintenance – if you cut grooves in the boards, for example, they have to be cleaned as they collect dirt, hold water and begin to rot. Always try to 'design in' slip resistance rather than dealing with it as an afterthought once the structure is built. Paths for All's guide Path Bridges, available at [www.pathsforall.org.uk](http://www.pathsforall.org.uk) has more details.

Gaps between decking boards allow air to circulate and water to drain away helping prevent rot in the wood. The gaps should not be too wide (walking sticks get stuck, while wheelchair and buggy wheels turn sideways and get trapped) or too narrow (the water can't get away quickly enough). About 12mm is best.



*It's not just difficult to get out of, it's embarrassing!*

## 7 A barrier - or not?

Across the road the path continues around Rookery Wood. It's not wheelchair accessible but it has been built using a principle called 'least restrictive option'. That means that in the planning stages potential barriers have been 'designed out' wherever reasonably practicable. The path climbs a hill, but by using a series of bends the gradient is reduced, there are no steps and the small bridges are wide enough to allow a wheelchair to cross.

You might argue that a wheelchair user couldn't get up the slopes, so why not cut costs and make the bridges narrower? We all have very different abilities and ambitions. Some of us are adventurous, others more careful. How far people stretch themselves is a personal decision for each of us to make, not for path designers to dictate. Often it's not the terrain itself that really prevents access, but the barriers we construct, like gates, bridges, steps and stiles. Paths designed using the least restrictive option really open up possibilities for everyone.

You're welcome to explore the paths in Rookery Wood. Look for some ingenious drainage as well as subtle treatments of the gradient. When you're ready, just go back the way you've come.



*Access is a personal decision: good paths leave as many options open as possible.*

We hope you've enjoyed using the demonstration path, and that it's given you plenty to think about. You'll find a lot more about path design, construction and maintenance on the Paths for All website: [www.pathsforall.org.uk](http://www.pathsforall.org.uk). There is a feedback form there too: we would really appreciate your comments! At the other National Path Demonstration Site, at Oatridge College, you can try out a range of gate designs and find out how to make a path feel like part of the landscape.

It is sometimes possible to arrange guided visits to the demonstration sites so you can really get down to the nitty-gritty of path construction. Contact us for more details.



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