

Navigation introduction

The benefits of good navigation skills

The ability to safely navigate is a core skill of a walk leader, and a useful skill for any walker in to have. Appropriate navigation skills enable you to:

- Accurately **plan** a trip
- **Communicate** the plan to others
- **Estimate the time** a walk is likely to take
- **Change plans** when something unexpected happens
- **Communicate positional information** to the emergency services if needed

As we become more reliant on technology in all walks of life, it's important that you understand the benefits and limitations of GPS devices and maintain 'traditional' navigation skills, using technology as a helpful complement to a map and compass.

Key principles

- Always apply **common sense** and reasoned judgement
- Be **objective** about what will keep you **safe** in the most challenging scenario
- Lead **well within your capabilities**
- Don't rely exclusively on technology – ideally **have more than one way to navigate** so you have a back-up

Related factsheets

Use this factsheet alongside

- **Navigation skills learning and development**
- **Navigation technology**

These are also available on the Assemble document hub.



The navigation skills needed

The navigation skills you need depend on the grade of walk you are leading so there isn't a 'one size fits all' approach we can take to determining the navigation skills required.

You should consider:

- ✓ The **complexity and grade** of the walk
- ✓ The **terrain**, including how it may have changed since you were last there
- ✓ The possible **weather conditions**, especially when the conditions may be extreme and visibility poor
- ✓ The **worst-case scenarios** that may occur
- ✓ The **wider skills of the group** (if they are known)

Good navigation practice also requires **confidence**. Walk leaders can build confidence through **practice** in a variety of settings:

A **recce** gives a walk leader a good opportunity to practice their navigation skills before leading a group.

- ✓ When out walking, don't wait until you need to apply your navigation skills; take the opportunity to do small **navigation exercises** throughout your walks to remind yourself of key skills and to build your confidence.

Involving other people when you are practicing navigation skills can help to build collective confidence, sharing knowledge, build trust and a create a culture of learning in your group.

Navigation skills – Quick reference guide

Key: ● You are most likely going to need these navigation skills for this level of walk ○ Depending on the terrain, weather and walking conditions you may also need these skills too

Walk Leader Navigation Skills	Easy access routes	Easy routes	Leisurely routes	Moderate routes	Strenuous routes	Technical routes
Understand map scales and use to plan and estimate the duration of a walk from a map	●	●	●	●	●	●
Ability to pace and time a walk	●	●	●	●	●	●
Understand access rights	○	○	●	●	●	●
Understand map colours, symbols and keys/legends and basic contours	○	○	●	●	●	●
Understand how to orientate a map using key features or a compass and determine direction of travel	○	○	●	●	●	●
Ability to re-plan short parts of the route on the move in response to changing circumstances	○	○	●	●	●	●
The benefits and limitations of digital mapping and GPS devices in pathed terrain	○	○	○	●	●	●
Understand and apply the use of 'tick', 'handrail' and 'catching features'	○	○	○	●	●	●
Understand how to provide a 6-figure grid reference to give accurate location for emergencies and meet up points	○	○	○	●	●	●

Walk Leader Navigation Skills	Easy access routes	Easy routes	Leisurely routes	Moderate routes	Strenuous routes	Technical routes
Understand contours and how to identify up and downhill, gradients and major land feature			○	●	●	●
The parts of the compass and their use			○	○	●	●
How to make a bearing along a linear feature			○	○	●	●
Measuring distance accurately on the map and estimating distance travelled on level terrain			○	○	●	●
Relocation techniques			○	○	●	●
Grid north, magnetic north and their relevance for navigation			○	○	●	●
Use of contour details such as aspects of slope, re-entrants, ridges, ring contours in un-pathed terrain				○	●	●
Use of map and compass to estimate the distance travelled on a bearing over varying terrain				○	●	●
Route planning on un-pathed terrain				○	●	●
Strategies for navigating on un-pathed terrain (e.g. aiming off; use of attack features; boxing; mental & physical catch features)				○	●	●
Strategies for navigating in poor visibility (e.g., inundated by cloud, whiteout or darkness)				○	●	●
Understanding of the benefits and limitations of digital mapping and GPS devices in un-pathed terrain				○	●	●

Walking Grades

Ramblers walks are described using a **difficulty rating**. These ratings serve as a guide to help walkers choose grades of walk that suit them. The grades also provide a useful tool to help walk leaders understand what skills are useful to have so they can lead safe walks with confidence.

The ratings used for our routes are:

Easy Access are routes for everyone, including people with conventional wheelchairs and pushchairs, using easy-access paths. Comfortable shoes or trainers can be worn. Assistance may be needed to push wheelchairs on some sections.

Easy routes are for anyone of a reasonable fitness level who doesn't have a mobility difficulty. Suitable for pushchairs if they can be lifted over occasional obstructions. Comfortable shoes or trainers can be worn. Paths are clearly identifiable on the ground.

Leisurely routes are for reasonably fit people. They may include unsurfaced paths. Walking shoes or boots and warm, waterproof clothing are recommended. Paths can be identified on the ground or through following clear landmarks.

Moderate routes are for people with a good level of fitness and at least a little country walking experience. May include some steep paths and open country. Walking boots and warm, waterproof clothing are recommended. Most paths are clearly defined.

Strenuous routes are for experienced walkers, with a high level of fitness. They may involve some pathless sections across wild valleys, rough country, open moorland or mountains tops. Walking boots and warm, waterproof clothing are necessary. Paths may be unclear on the ground so map and compass skills are essential.

Technical routes¹ are for very experienced walkers, with a high level of fitness and competence. They may involve some pathless sections across wild valleys, rough country, open moorland, or mountains tops. They may also involve some scrambling or exposed sections. Walking boots and warm, waterproof clothing are necessary. Paths may be unclear on the ground so good map and compass skills are essential.

¹ A note on technical routes, including winter walking, mountaineering and the use of special equipment

Ramblers provides our volunteers with liability insurance to protect you from a claim if an individual is injured or property is damaged due to something you did as a walk leader. Ramblers insurance covers walking activities but not activities deemed to be climbing or mountaineering.

Where equipment such as crampons, ice-axes, ropes are needed for safety reasons (due to the conditions over ground that could normally be crossable without this equipment), the Ramblers consider this to be walking, and it has been accepted and covered by our insurance policy.

Climbing activities (which include "pitched climbing" where members of a party ascend in stages one after the other with the aid of a rope) are not covered.