

BRIEFING NOTE: NAVIGATING CANAL TUNNELS SAFELY

Introduction

This briefing note sets out our advice for the safe navigation of canal tunnels on the inland waterways of the UK by various types of craft and is aimed at both waterway users and navigation authorities.

Taking a boat through a tunnel can be an exciting element of any canal journey but it comes with inherent dangers that people need to be aware of.

Due to the history of the canal network that we have today, most currently navigable canal tunnels come under the jurisdiction of Canal & River Trust, although there are exceptions such as on the Grand Western Canal, the Monmouthshire Canal and in Scotland.

Canal tunnels vary in length and width. Some can be very short, such as Dunsley on the Staffordshire & Worcestershire Canal which is just 23 metres, or they can be very long indeed such as Standedge and Dudley tunnels, at 5000 metres and 2900 metres respectively, where special arrangements are in place to allow passage. Some longer canal tunnels have one-way working systems, where passing two boats isn't possible, but others, where they are wide enough, allow two-way passage at any time.

Single way working

With tunnels such as Foulridge on the Leeds & Liverpool Canal, with its traffic light system, or Preston Brook and Saltersford tunnels on the Trent & Mersey Canal, which have timed periods for boats entering at either end, you are unlikely to encounter oncoming boats unless one of you has ignored the lights or signs!

On waterways where wide beam boats are common, for example in London, one-way working will need to be in place even if the tunnels are wide enough for two narrowboats to pass each other, as the boat coming the other way may be wider than 7ft.

Two-way working

Many canal tunnels allow two-way unrestricted passage, allowing narrowboats to pass in the tunnel. Signage at the tunnel entrance will indicate whether two-way passage is allowed, or whether there are time restrictions on entering or whether you need to wait for the tunnel to be clear (where short and straight enough to see all the way through).

Passage by boats wider than 7 feet through tunnels which normally have two-way working, needs to be arranged in advance with the navigation authority. With the increase of wide beam boats, particularly on the Grand Union Canal, there is an increase in cases of the tunnel being closed to other traffic to allow an authorised passage. The number of incidents of meeting wide beam boats in tunnels where permission has not been obtained is also on the increase.

Lifejackets (personal flotation devices)

IWA strongly recommends the wearing of lifejackets or buoyancy aids when travelling through tunnels, in any type of boat. All users of unpowered boats should wear a lifejacket, and the skippers of powered craft are strongly advised to do so, particularly if travelling through single handed.

If a person falls in the water whilst travelling through a tunnel, the darkness will be disorientating in addition to the shock from the cold water, and tunnels give added issues surrounding access and rescue. A buoyancy aid will help keep you keep yourself afloat, while a properly fitted life jacket is designed to turn your body over and keep your face clear of the water, even if you are unconscious or injured.

Permissions for small unpowered craft to use tunnels

Canal & River Trust allows small unpowered boats to use some of their shorter tunnels and [a list can be found here](#). In general, the Trust allows passage of tunnels by small unpowered craft if the tunnel is less than 400 metres long and there are good sight lines through the tunnel. Longer tunnels up to 650 metres long are included in the list if a single way traffic system is in place. Passage of other tunnels can be requested by groups for managed events which would involve closing the tunnel to other traffic for the duration of the event. Boats being towed are excluded from these requirements.

Canoeists and people in other small unpowered boats are reminded that they need to heed the instructions of the traffic lights or time restrictions in order to avoid coming face to face with an oncoming boat.

Advice to skippers of powered craft using all tunnels

All boaters should take great care and keep a good lookout when navigating tunnels. Things to be aware of include catching up the boat in front of you, and looking out for any unpowered craft that may be using the tunnel.

A boat's tunnel light should not be aimed straight ahead but slightly up to illuminate the roof and in order not to blind the steerer of on-coming boats.

Users of powered boats should carefully read the noticeboard at the tunnel entrance for any specific instructions, and to find out whether unpowered craft are allowed and therefore likely to be encountered.

Except where two-way working is the general practice, wait until the tunnel is clear of other boats before entering, or abide by the instructions of traffic lights or time restrictions.

Before entering a tunnel:

- Switch on headlight and also some internal lights. Make sure that additional lighting in the form of a waterproof torch is available for the person steering.
- Check that there is no boat already in the tunnel coming towards you if it is too narrow for two boats to pass.
- Ensure nobody is on the roof or sides of the boat.
- Put on waterproofs as tunnel roofs are often wet with dripping water.
- Put on a lifejacket, especially if you are single handing.

Advice on entering a tunnel:

- In tunnels where two-way working is allowed, enter the tunnel slowly in case there is anything about to exit the tunnel. Once in the tunnel aim to keep in the middle of the channel in order to avoid scraping your cabin top or chimney on the tunnel walls.

- Watch out for the changing profile of the tunnel – tunnels are seldom dead straight!
- Keep a distance of at least 160 metres from the boat in front of you (about 2 minutes apart at normal cruising speed).
- If traffic is two-way, keep a good look out for oncoming boats. If you meet an oncoming boat in the tunnel, slow right down and move over to the right.
- In tunnels where unpowered craft are allowed you need to look out for small craft at low level going your way.
- If you have to stop for any reason turn off your engine. This will avoid any danger from exhaust fumes.
- If you break down, sound long blasts on your horn to attract attention. Do not swim out. As a last resort, you could try to push the boat out using a boat pole.
- All on board should avoid directing hand-held and head torches at the steerers of oncoming boats.

Advice to people using small unpowered craft (where access by such craft is allowed)

When planning your journey:

- Check the [list on Canal & River Trust's website](#) when planning your route to find out which tunnels you are allowed through:
- If tunnels that allow passage by unpowered craft are included in your route, arrange for others to join you on your trip so that you do not go through alone.
- Make sure you have a forward facing strong white light of a minimum of 80 lumens (which can be a head torch) and that you have spare batteries for it.
- Don't forget your buoyancy aid/lifejacket and whistle.
- Consider fitting reflective strips to clothing and paddles to help your visibility whilst travelling through a tunnel.

On the day:

- Do not enter any canal tunnel unless signage explicitly says that unpowered craft are allowed.
- Do not enter the tunnel if you can see any oncoming boats in the tunnel, even if two-way working is allowed. Stay clear of the tunnel entrance if it is not clear to enter.
- Do not ignore traffic lights or timed passages – where these exist, they apply to all craft, powered and unpowered.
- Turn on your headlight/headtorch.
- Ensure that you are wearing your lifejacket/buoyancy aid and that you have your whistle to hand.

- Enter the tunnel as part of a group of two or more.
- Proceed directly through the tunnel, no loitering or turning around.
- If you do pass a powered boat in a tunnel, keep to the right side of the tunnel, and be prepared for turbulence as the larger boat passes.
- Avoid dazzling steerers of oncoming boats by not pointing your head torch directly at them.

Note for navigation authorities

IWA recommends that navigation authorities ensure that clear signage exists at all tunnel entrances, and suggests that two sets of signage is desirable:

1. Positioned for the steerers of powered boats – well back from the tunnel entrance so that the information on the sign can be taken in before getting too close to the tunnel, and in large enough lettering to be seen clearly).
2. Signage specifically for users of smaller unpowered craft can be closer to the tunnel entrance but should be positioned lower down so as to be visible by someone closer to water level.

Both sets of signage need to be kept clean and clear of vegetation.

IWA suggests that Canal & River Trust's current criteria for access to tunnels by unpowered craft should be maintained (i.e., passage allowed if the tunnel is less than 400 metres long and there are good sight lines through the tunnel, longer tunnels should only be included in the list if a single way traffic system is in place). Passage of longer tunnels should continue to be prohibited other than by special request for managed events which would involve closing the tunnel to other traffic for the duration of the event.

All tunnels should have chains fitted along the sides of the tunnel to allow people to hold on to and pull themselves out if necessary.

Other navigation information

For more detailed information about using small unpowered craft on the inland waterways, including information about access and licensing, please see [IWA's Briefing Note about Using Canoes and Small Unpowered Boats on the Inland Waterways](#).