Serendipity Travels

Log of the *Trudi*

Notes for Boaters

Whether you are an experienced cruiser or someone with little or no experience operating a boat, you can probably undertake and complete a narrowboat journey. As with any endeavor, the more you know going in the better prepared you will be. The notes that follow are written by a person experienced in cruising in the U.S. Pacific Northwest, with asides comparing that style of cruising to cruising on the English canals.

The notes are organized in the following sections:

- The boats
- Accommodations on board – staterooms, galley, head, cabin
- Handling the boat
- Mooring
- Necessary maintenance
- Navigating the canals and rivers
- Going through the locks
- Electrical power for your stuff

The Boats

English narrowboat are typically less than seven feet wide and up to 72 feet long. Headroom (water level up) on many canals is 6' 6" and the boats have about two feet draft – making the interior high enough for a six-foot tall person. The hulls are very sturdy steel construction. Many have a small outside seating area in the bow. Steering is accomplished using a tiller on a platform at the very stern. Most of the length is occupied by the cabin, with narrow (about 2 inches wide) walkways along the outside. Placement of the engine varies, but most hire boats (the U.K. term for charter or rental boats) have a small diesel engine at the stern. Windows and doors open for ventilation. The Black Prince company, from whom we hired the *Trudi*, has good illustrations of the boats and their accommodations.

Accommodations

The most important decision when hiring a boat is the number of accommodations. The staterooms are aligned along the side of the boat (see the diagrams at the Black Prince site referenced above). A two-berth boat will normally have one "double" bed, which will be cozy for most adult couples. You might consider paying for an extra bed to give yourself more room.

The boat will have one or more heads, depending on capacity. The head will contain a marine toilet, small sink, mirror, and shower. Most of the showers are in a separate stall, *not* using the whole head area as the shower area (owners of small Bayliners will know why this is nice!).

The galley will have a small two-four burner propane stove, a modest size refrigerator, sink, and storage areas. Hire boats are equipped with a good array of cooking, serving, and eating items.

Trudi had a 4-person dining table and a separate seating area with two comfortable chairs. There was a TV and antenna, but we did not use them.

All-in-all, the accommodations were about the same as one would find on a thirty-foot sedan-style cruiser. Comfortable, but not extravagant.

Handling the Boat

The motor is a small diesel, with a single-lever control (combining both direction and throttle, much like a runabout). Like most boats, you steer the stern, not the bow, and you have control only when you are moving through the water – under power or coasting in neutral. In tight quarters, a burst of power will help the rudder do its job. Reverse gear is your brake.

The boats are long and heavy, so you need to anticipate turns, bottlenecks, and stopping. Cruising speed on straight, open canals is about 3.25 M.P.H., but we were rarely able to do that because of congestion (moored or oncoming boats) or limited visibility (curves, bridges, or tunnels). You are on vacation, you are on a boat, and the next pub is less than four miles away – take your time!

The most interesting boat handling times (other than simply keeping it between the banks) are dealing with the very narrow places – locks and bridges – and turning in tight quarters. Maneuvering in tight places usually means going slow and using the tiller *plus* very short bursts of power to align properly. To make a sharp turn (i.e., 90 degrees or more), you will probably have to alternate forward and reverse – using the same techniques single-screw power boaters use.

Read the daily logs to see the sorts of adventures we encountered. A few were a bit stressful, but none disastrous.

Mooring

Mooring is permitted almost everywhere on the canals, especially in the open country. In more populated or congested areas, you might encounter a sign like that on the left. The second symbol from the top indicates that mooring is permitted (one with a red slash would indicate the opposite). Mooring to the left of the post is for taking on water, mooring to the right is allowed for seven days free, and £25 per day thereafter.

Stakes are the default means for securing the boat to the shore. Every boat comes with a mallet and a pair of stakes. Our stakes had welded rings, as you see here – but beware of the temptation to run the line through the ring *unless* you have pounded the stake deeply into the ground. A line run as high as you see at the right gives the boat a lot of leverage, with the likely result that the stake will work loose. This one was very loose in the morning; fortunately it had held us all night.

The next picture shows a properly-used stake: driven far into the ground, with the line tied to it at ground level.

We used stakes only as a last resort. Although there is virtually zero current and wind effects are small, there is always the danger that a stake will pull loose as passing traffic rocks the boat. Whenever possible, we sought out permanently-installed rings and bollards or places where metal canal edges allowed us to use the special hooks.

Bollards (see picture at left) are the easiest mooring devices: take a few turns around the bollard and return the line to a cleat on the boat. Unfortunately, these are rarely found at places where one can moor overnight.

Rings (see right) are also fairly scarce. They seem most prevalent adjacent to pubs or other waterway businesses – a great enticement to stop and stay awhile!

Large sections of the canals on which we traveled have metal sides – a modern attempt to reduce erosion. The boats come equipped with special metal **hooks** that slide into the gap between the vertical canal sides and a horizontal rub rail. We were often able to find a convenient mooring place where we were able to employ those hooks, which lead to great peace of mind.

Necessary maintenance

Experienced boaters know that there are usually a few things that must be attended to on a regular basis, even on a boat that is "ready to go" on the first day of a cruise. Some of the items will be familiar to Northwest boaters, others not so much.

You will be asked your intended route as part of the checkout process. The boats sip **fuel** and normally will carry enough, which was the case for us. In fact, there was no fuel gauge on the boat. If, for some reason, you would need to take on fuel, there are a number of marinas and the marina staff would advise you accordingly.

Of slightly more concern is the **holding tank** (for non-boaters … that is where the toilet empties). Again, no gauge, and I am not sure how you know the level until it overflows (hopefully through a vent over the side). Since there were two of us on a boat designed to carry four people for a week, we did not fret too much about the holding tank. Again, the marina staff should advise if a pumpout might be necessary. The same marinas that have fuel also have pumpout stations, costing about £15.

The **fresh water tank** is another matter. The marina staff suggests refilling daily. We did not see a water point every day – but at least every other day we passed places where water could be taken on. We are fairly conservative in our use of water and it took about six days for us to empty it. But you really should avoid emptying your water tank. The water tank is near the bow of the boat. As it empties, the bow tends to rise, setting the stern (and your propeller!) lower in the water. Our advice – refill the tank at least every other day; and daily if convenient.

Something that is unique on canal boats is a **weed hatch**. This is a means for the boater to reach down to the propeller – obviously when the boat is stopped and made fast to the shore – to remove debris. As we motored near the urban areas of Birmingham and Coventry, we encountered a lot of junk in the water – especially plastic and bits of clothing. At one point, there was so much junk on the prop that the boat was virtually dead in the water (the infamous "hoodie incident" on the outskirts of Birmingham).

In the pictures above, you see the hatch closed (on the left) and open. The water is murky and we could not see the prop, so everything is done by feel. Below, left, is the hatch itself. On the right is one day's haul.

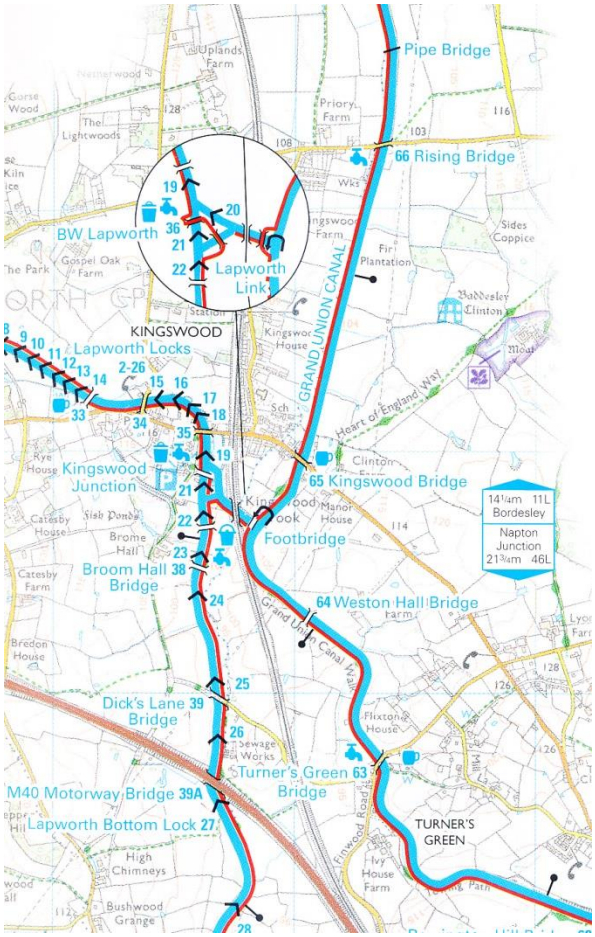
The final bit of maintenance concerns the **stuffing box**. This is the seal where the propeller shaft exits the hull. In the engine compartment is a greasing mechanism that simultaneously provides lubrication for the prop shaft as well as providing a barrier to the water. Each evening, a few turns of a handle ensured that the prop would spin and the water stay out.

Navigating the canals and rivers

Finding ones ways on the canals is generally less difficult than it is on the open waters of the Pacific Northwest. Navigation involves three questions:

1. Where am I?
2. Where am I going?
3. How do I get there (including – what hazards are along the way)?

A good chart can help in answering all three questions, and we found the charts in *Birmingham & the Heart of England: Waterways Guide 3* to be extremely useful. A portion of one page is illustrated on the right. The basic maps are from the British Ordnance Survey®, overlaid with information specific to the canals.



Our route proceeded from the lower right of the chart, past the junction, and exited at the top center, all along the Grand Union Canal. The following features helped us determine our location:

- Most of the bridges are numbered, and many are named (e.g., 63, Turner's Green Bridge). These numbers are usually on a metal plaque on the bridge.
- The locks are usually numbered as well, with the numbers painted on the lock gates. The center of the lock symbol ("Λ") points uphill – the canal to the left of our route is steadily descending from lock 8 to lock 26.
- Points of interest (primarily pubs!) are indicated on the map by symbols and usually described in the accompanying text.
- Tick marks (they look like stick pins) are placed each mile on the canal, the portion of canal we traversed on this chart is about three miles.

Knowing where you are, combined with the chart, makes it easy to determine what is ahead. The canals are generally well maintained, so there are few submerged rocks or other unseen hazards – most navigation is simply keeping the boat between the banks and spotting the next bridge, lock, or pub.

We used the guide book, plus Google Earth and other online resources, to plan each day's journey. Usually lunch and evening stops were timed to coincide with a nearby public house.

Going through the locks

All locks have the same basic operation, whether on the Panama Canal, Ballard Locks in Seattle, or a waterway in England:

- There is a watertight gate on either side of the lock chamber. These gates usually swing open to allow the vessel to enter or exit, although there are other possible configurations, such as a vertical-sliding lock gate. Both upstream and downstream gates must be closed before the boat can be lifted or lowered.
- There is some sort of a valve that allows water to enter the lock when lifting the boat. Once the valve is open, gravity fills the lock chamber and the buoyancy of the boat does the heavy lifting.
- There is another valve that allows water to exit the lock when lowering the boat. Again, gravity does the work of emptying the lock chamber.

In the picture above, you see three locks. On the left, both gates are closed. In the center, the upstream gate is open and a boat is entering the lock.

The same locks are shown in the picture at the left. Typical of most of the locks we encountered, the gate is composed of two pieces, hinged on the shore, that swing open or closed and meet at a point in the middle of the lock. The point of the lock gates always points upstream.

There are two sets of duties that must be accomplished to traverse a lock. We use the terms "Lock Operator" and "Boat Operator" to denote the two. Although persons sometimes traverse locks single-handed and accomplish all these duties by themselves, it is much easier for one person to work on each task.

The duties of the **Lock Operator** are more strenuous. If there are three or more persons on the boat, the extra people should assist in the operations of the locks. The lock operator must prepare the lock for the boat, secure the gates, let water in or out, open the gates, and finally leave the lock in the proper condition. The following steps accomplish these duties:

1. If the water level is correct in the lock (i.e., at the same level as the boat), go to step 2. If not, do the following:
    a. Close all lock gates.
    b. Open the valves (the British call them *paddles*) closest to the boat. This will fill the lock to the same level as the boat if you are going down, or empty the lock to the same level as the boat if you are going up. The paddles are operated by a crank mechanism; you see one style in the picture above.
    c. Once the water is at the proper level, close the paddles. In the picture above, you see a rod sticking up from the paddle mechanism – this means the paddle is open.
2. Open the gates and allow the boat to enter.
3. Once in, close the gates behind the boat.
4. Open the paddles at the exit end of the lock. This allows the water level to adjust to the level needed for your onward journey.
5. Once the water is at the proper level, close the paddles.
6. Open the gates and allow the boat to exit.
7. Close the gates behind the boat. Proper etiquette is to close all gates when leaving a lock unless there is an oncoming boat, when you should leave the gates open.

All this is a fair amount of work. The lock operator must be able to turn the crank that opens and closes the paddles – requiring some degree of upper-body and arm

strength. The lock operator must open and close the lock gates – requiring primarily leg strength. And, the lock operator will normally walk some distance, especially if the locks are spaced closely together. One certainly need not be a tri-athlete to do these tasks, but it is worthwhile to spend some time walking and light lifting (~20 pounds) in preparation.

The duties of the **Boat Operator** are less strenuous, but there are challenges. On approaching a lock, you will normally find a place where the lock operators can disembark. Once they are off, and while they prepare the lock for your entry, you must either stay along the shore or maneuver the boat in the waterway to stay out of the way of oncoming traffic. Once the gates are open for you, you must drive the boat into the lock. If two boats will occupy the same lock, then your challenge is to stay to one side or the other so both will fit with a minimum of collision.

Once inside the lock, you must maintain the boat's position between the gates. A line can be wrapped around a bollard to help, or you can use the engine.

There is a particular hazard when going down. The photo to the right shows an empty lock. Notice, just inside the gates, the concrete area that the water is splashing on. This is called the cill (U.S. spelling is "sill"). If the boat operator does not keep the boat forward of the cill, the prop and rudder can hang up and possibly do some damage. There are signs on almost every lock gate reminding you of that fact, and white lines painted on the locks to indicate where the cill is located.

Once the water level has equalized in the direction of travel, the lock operator will open the gate and you will proceed to exit. Depending on the distance to the next lock, you will either pick up your operators or they will walk to the next lock.

Electrical power for your stuff

Modern travelers usually take an array of electronic devices along. We might carry more than most – our load included an iPhone, two iPads, a notebook computer, and two cameras. One of the cameras uses AAA batteries; all the other devices have rechargeable batteries.

Our boat (and the two other canal boats we have used) had a single 12-volt outlet – using the familiar "cigarette lighter" plug. There was no "household voltage" (240 volts in the U.K.) outlet and no way to connect to shore power.

If at all possible, obtain 12-volt chargers for your stuff. Your only challenge will be keeping items charged – rotating them as necessary. It is possible to drain a boat's battery charging items overnight, so we tended to use the 12-volt socket only when the engine was running, or immediately after mooring.

The charter company makes available a 12-volt to 240-volt inverter (pictured at right). The rather odd-looking plug allows just about any type of electrical cord to plug in, including our familiar North American two- or three-prong plugs. The output of the inverter was sufficient to charge camera and computer batteries, but not enough to run a hair dryer.

In preparation for your trip, ensure that you have as many 12-volt chargers as you will need. It is possible to buy a plug that has typical USB output with enough amperage (2.1 amps) to charge iPhones, iPads, Kindles, Nooks, and just about any other smart phone or tablet device.

If you do not have a 12-volt charger for your device (and we did not have one for either the computer or camera battery), you will need a "household voltage" charger. *Be careful!* Household voltage, and that output by a European Inverter, is twice that of North America. Carefully read the fine print on your charger – if it says something like **INPUT: 100-240V ~ 50/60Hz** then it should work fine. If you do not see dual voltages, do not use it overseas.

For More Information

The Boater's Handbook, published by British Waterways, is an excellent place to start – *even if you think you know a lot about boating*.

Many of the charter companies have very informative websites – containing information about bases (marinas), the boats, routes, and local attractions.

There are books written about canal boating (our friend Roger Van Dyken has written one entitled *Barging in Europe*) and the Waterway Guides (e.g., *Birmingham & the Heart of England: Waterways Guide 3)* have several pages of general information.