

Locks and Bridges on Ireland's Inland Waterways

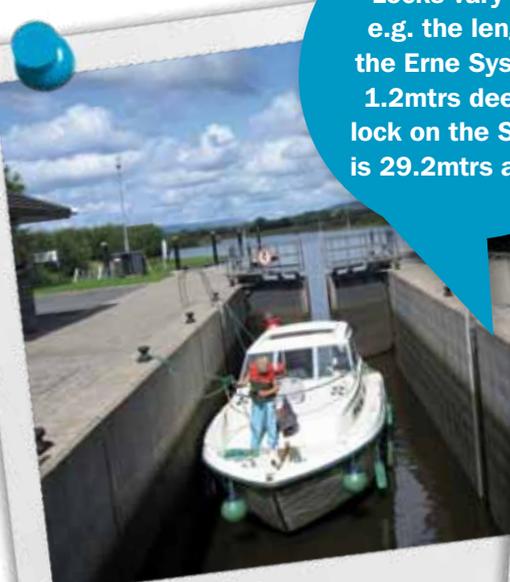
Ireland's inland waterways boast an abundance of fixed and moveable bridges as well as offering a variety of locks to experience as you journey along the different waterways.

Did you know?

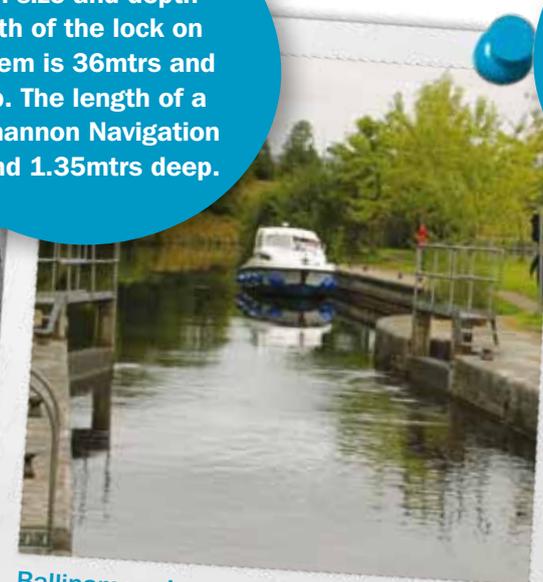
Locks vary in size and depth e.g. the length of the lock on the Erne System is 36mtrs and 1.2mtrs deep. The length of a lock on the Shannon Navigation is 29.2mtrs and 1.35mtrs deep.

Did you know?

The locks on the Shannon Navigation and the Shannon-erne Waterway are hydraulically operated while the locks along the other navigations are manually operated.



Drumshanbo Lock
Located on Lough Allen in Co. Leitrim Drumshanbo Lock is a hydraulic lock operated by a Lock-Keeper



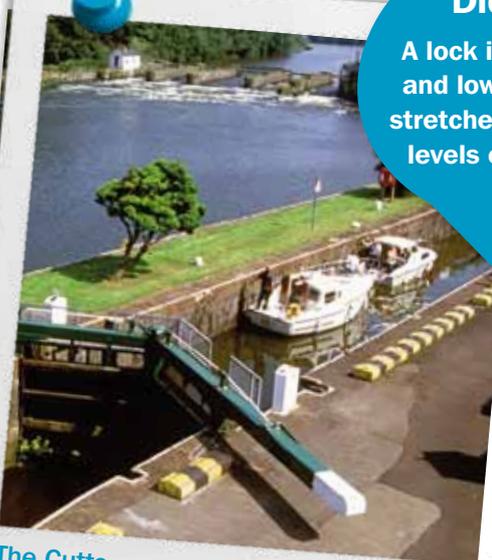
Ballinamore Lock
Located on the Shannon-erne Waterway this lock is a hydraulic lock operated by boat users through the use of a smart card



The Grand Canal 30th Lock
Located on the Grand Canal the 30th Lock is operated manually through the use of a lock key

Did you know?

A lock is a device for raising and lowering boats between stretches of water of different levels on rivers and canals.



The Cutts
Located on the Lower Bann at Coleraine this lock is manually operated by a Lock-Keeper

Activity

Arrange a visit to your nearest lock and find out the following information:

- The name of the lock?
- Is it a manual or automated lock?
- How old is the lock?
- When is the lock busiest and why?
- How many boats pass through the lock during the busy period?

Did you know?

Most of the moving bridges are of steel construction except for Begnagh Bridge on the Royal Canal which is a concrete bridge. The moving bridges are hydraulically operated.



Monasterevin Lifting Bridge
Situating on the Barrow Line of the Grand Canal in Co. Kildare, this bridge is automatically operated by a Lock-Keeper



Shannonbridge
A sixteen arch masonry road bridge located at Shannonbridge on the Shannon Navigation linking Co. Roscommon with Co. Offaly

Did you know?

The original canal bridges which are approximately 200 years old were built using masonry materials.



Tarmonbarry
A vertical lifting bridge located on the Shannon Navigation linking Co. Roscommon with Co. Longford, which is automatically operated by a Lock-Keeper.

Did you know?

Most of the bridges carry roads over the navigations but some are aqueducts carrying canals over roads and rivers. Some bridges carry railways over the navigation.

Did you know!

All of the bridges built in the last 100 years use modern construction materials, mainly steel and concrete.



Whitworth Aqueduct
This multiple span masonry arched bridge carries the Royal Canal over the River Inny in Co. Longford

Activity

Pick a bridge on one of the waterway systems you have learned about. In small groups, use the internet or an encyclopaedia to find out how this bridge may have been constructed. Include the following information:

- Why was the bridge constructed?
- How long it took to complete construction?
- What kinds of materials and equipment were used?
- Is the bridge being used today?

Interview with a Lock-Keeper

The following interview with Jim Butler, a Lock-Keeper on the Barrow Navigation, is an extract from the Waterways Ireland newsletter, 'Water Matters'. Read the article and answer the questions on the next page.

Water Matters

Lock-Keeper on the Barrow Navigation

"Jim Butler"



The Barrow Navigation is a stretch of the River Barrow between Athy in Co. Kildare and St. Mullins in Co. Carlow. Above Athy the Barrow Line of the Grand Canal links the Barrow Navigation to the main line of the Grand Canal at Lowtown in Co. Kildare. From there

the Grand Canal crosses the country west to the river Shannon, the back bone of Ireland's inland waterways networks, and east to Dublin city.

Jim Butler is one of the lock-keepers who works on the Barrow Navigation. Jim patrols the locks between Ballykeen and St. Mullins. Ballykeen Lock is the narrowest and deepest on the Barrow Navigation and the only one with a double chamber. The river is tidal below St. Mullins and hired craft are not permitted to pass through this lock. St. Mullins is the last lock on the system and the most southern point of the navigation. As well as these locks Jim also looks after Upper Tinnahinch, Lower Tinnahinch and Carriglead locks giving him a total of six locks including the double lock. These locks are all manually operated as they have been for the preceding two hundred years.

Jim informed me that the Butler family preceded navigation. The Butler dynasty came from England and Normandy. Lock-keeping is a tradition in

the family and goes back nine generations. Jim's ancestors worked on the locks where horse drawn boats were the order of the day. They had various occupations such as stores transport managers canal agents (when goods were to be dispatched by barge along the river, agents checked in all goods and saw all was in order for the local merchants in the town). The canal agents also supervised the lock-keepers to ensure that boats got through the locks efficiently. Back then the lock gates were made almost wholly of timber whereas now steel forms the greater part of the assembly.

A lock-keeper's work has a great variety to it. Apart from controlling water levels Jim also puts the various boats through the lock, writes boat permits for these boats and maintains the lock itself. This involves cutting grass around the locks and surrounding areas and painting the locks, cleaning the masonry work etc. Jim has an area of thirty four kilometres to cover on the Barrow Navigation. He is also involved in enforcing Bye-laws (trespass e.g. cattle vehicles etc.). On the Barrow Jim's work involves inspecting weirs which is very important because if a weir breaks, water will run away and navigation will not be possible. There are salmon passes on the Barrow and these are also used by canoeists for going through the rapids.

Jim also loves another part of his job which is interacting with all canal users which includes fishermen, boat people, canoeists and walkers and of course as Jim says the nature of the Canal itself.

Question Time!

1. Jim Butler patrols the locks between Ballykeenan and St. Mullins. Use the map of the Barrow Navigation to find out the names of all the locks Jim works at. _____

2. Name the deepest and narrowest lock on the Barrow and why is it different to the other locks on the navigation? _____
3. Why are hire craft not permitted to pass through the lock at St. Mullins? _____
4. How long has lock-keeping been a tradition for the Butler family? _____
5. List 3 duties Jim performs as a Lock-Keeper. _____

Activity

Imagine you are a reporter with your local newspaper. Write an article entitled 'A Day in the Life of a Lock-Keeper'. Mention the following:

1. The name of the Lock-Keeper and the lock
2. The waterway the lock is on
3. The number of locks patrolled by the Lock-Keeper
4. Any family history associated with the waterways

