

# SEVERN PROJECT

## An A-Z River Severn Vocabulary

### A

**Abrasion** - Abrasion is a type of erosion caused by fine particles rubbing against an object. In rivers, the sediment (fine rock particles) carried by the water abrade the banks and bed of the river channel.

**Algae** - marine plants often known as seaweed.

**Alluvium** - The name for material deposited by a river.

**Alney island** - A large island in the river at Gloucester.

**Anchorage** - A place on the river where ships could drop anchor and wait for the tide or weather conditions before proceeding.

**Attrition** - The wearing away of particles of rock as they bounce along the riverbed or knock against each other and wear away becoming more rounded.

### B

**Bar** - A mass of sand or mud that can be removed by wind, wave or water currents.

**Barge** - The name for a type of ship that worked on the river.

**Barometer** - A device that measures atmospheric pressure. Most ships had a barometer to help predict the weather.

**Basin (Drainage basin)** - The area of land that is drained by a river and its tributaries.

**Basket-weir** - Also known as a Putcheon, this was a fixed-trap fishing structure that used conical fish traps or putchers. It was used on the middle section of Severn Estuary.

**Bay** - A cove or inlet on the estuary, often used as an anchorage by ships or as a landing place.

**Bank** - The ground at the side of a river.

**Bed** - The bottom of the river.

**Bench** - A local name for a rock shelf that runs across the river. Some places on the Severn are identified by this feature, i.e. Stonebench.

**Berth** - A place where a ship is moored alongside a quay.

**Bore** - A river tidal wave with a well defined crest that travels up river. It occurs at spring tides on new or full moons where the river channel is restricted in width or depth or both.

**Brackish, Brackish water** - Water that has too much salt to be drinkable, but not enough to be called seawater. The water in most estuaries is classed as brackish.

**Breakers** - A line of surf or breaking waves.

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**Breakwater** - A barrier intended to create a sheltered area for ships and boats.

**Brigantine or Brig** - A sailing-vessel with two mast and square sails.

**Brook** - A small stream.

**Butt** - The end trap-section of a putt fish-trap. The weave of a butt was such that at its narrowest end, it could catch shrimps.

## C

**Canal** - An artificial or man-made river channel or waterway.

**Channel** - A groove in the land that a river flows along or a gap between hazards or obstructions which ships follow.

**Chart** - A map for the use of ships and seamen.

**Cliff (river cliff)** - A cliff is any steep slope that has been made by natural processes. Cliffs formed by rivers are known as river cliffs. They are formed by erosion when rivers cut into the land vertically (gorge) or one the outside of bends (meanders). They can be anything from a few metres to hundreds of metres high. Notable cliffs on the Severn are at Aust, Sedbury, Lydney, Garden Cliff (Westbury-on-Severn) and Wainlodes (Gloucester).

**Cod** - A food fish that was once caught in the Severn estuary in small numbers.

**Confluence** - Where two rivers or streams meet.

**Conger eel** - A marine eel that can grow up to 3m long and 50kgs, which is common in the Severn below Sharpness.

**Crab, Shore Crab** - A type of crustacean common in the lower estuary.

**Current, Currents** - The flow of the river. In the Severn, the currents are very strong due to the large tidal range and can reach speeds of 15mph.

**Customs** - Representatives of the Crown and government who are in charge of collecting money levied on the import or export of certain cargoes, such as wines, spirits and wool.

## D

**Dam** - A barrier built, usually across a watercourse, for holding back water or diverting the flow of water.

**Delta** - A fan-shaped area of sediment built up at the mouth of a river or stream characterised by numerous water channels.

**Deposition** - Deposition is where a river lays down or drops the sediment or other material that it is carrying (such as sand, mud, and small stones or sticks). This usually happens on the inside of meanders and at deltas, because the water is flowing relatively slowly.

**Depth** - How deep the water in a river, lake, pond or stream is. **Discharge** - This

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is the term for the amount of water flowing in a river per second. Measured in 'Cubecs' or 'cubic metres per second'.

**Dock** - A place for ships and vessels to load and unload cargo or to be repaired.

**Dolphin** - A marine mammal that occasionally swims up into the Severn Estuary.

**Downstream** - The direction that the river flows towards the mouth of the river and the sea.

**Drainage Basin** - The area of land that is drained by a river and all of its tributaries. The boundary is called the watershed.

**Dredger** - A boat that removes sediment from the bed of a river or canal to increase the water depth and maintain a navigable channel for ships and boats to pass.

**Drift-net** - A type of seine-net fishing where the net is allowed to drift with the direction of the current.

## E

**Ebb, Ebbing** - The term for a falling tide, i.e. when the tide is going from high water down to low water.

**Elver** - A baby freshwater eel. A Gloucestershire food delicacy they were once caught in huge quantities as they swam upriver in spring time.

**Equinox** - The times of the year when the hours of sunlight and darkness are equal and the sun is directly overhead at noon. In the northern hemisphere the spring equinox is the 21st March and the autumn equinox is 23rd September.

**Estuary** - The region of a river where seawater and freshwater meet. On the **Severn**, the estuary can be said to start at Alney Island, as this marks the limit of the highest tides.

## F

**Flood** - Flooding takes place when a river has too much water in its channel. The water level increases until the river breaks through its banks and spreads over the surrounding land. Also the term for a rising tide, i.e. when the tide is going from low water to high water.

**Flood barrier** - A barrier that forms a temporary dam to protect a flood-prone area. Some can be erected quickly alongside a river, while others form permanent flood defences.

**Floodplain** - This is the flat land of the river valley on either side of its banks. It is usually found in the lower sections of a river. It is generally a very fertile area of land and is often used for agriculture.

**Ford** - The point where a road or track goes through a river.

**Fore-and-aft sails** - On a boat, these are sails that are held along the ship

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rather than across it.

**Foreshore** - The area of the shore between the high and low water. Also called the inter-tidal zone.

**Forewheel** - The middle section of a putt fish-trap.

**Freshwater** - Water that has no salt in it.

## G

**Glaive** - A multi-pronged spear with flat tynes used to catch eels in the Severn and surrounding wetlands.

**Gorge** - A gorge is a very steep-sided river valley which is narrow and deep. Most have rocky sides. They are formed when rivers erode a deep valley by and are created over thousands of years.

**Gradient** - The steepness of a river. The gradient decreases as the river flows downwards from its source. At its mouth, the gradient is very slight.

## H

**Hobbling** - A process where a large craft is towed by a smaller oared boat.

## I

**Inter-tidal zone** - The area of the shore between the high and low water marks. Also called the foreshore.

**Irrigation** - The supply of water to farmland to allow crops to grow in areas where other water supplies are scarce or unreliable. In areas with low rainfall, farmers irrigate the land by diverting water from rivers to their fields, using channels, ditches or pipes.

## K

**Kype** - The large front section of a putt fish trap.

## L

**Lave net** - A type of Y-shaped handheld net used to catch salmon on the middle section of the Severn Estuary.

**Load** - What the river carries as it flows - such as mud, sand, rocks, wood or litter.

**Lock** - A man-made structure that allows ships and boats to travel from one water level to another and which help control water levels on docks, canals and rivers. Locks have lock gates and sluices which govern the flow of water and the direction of travel.

**Long-lining** - A type of fishing where large numbers of hooks are attached to

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a long length of line anchored in the river and then left for one of more tidal cycles.

**Long-netting** - A type of seine-net fishing used on the Severn.

## M

**Meander** - A bend in a river, usually in the middle or lower course of its length. Meanders continually change shape as the flowing current of water erodes the outside bank of the bend and deposition occurs in the slack water on the inside of the bend. On the Severn, the most notable meander is the Great Horseshoe Bend at Arlingham.

**Mouth** - This is the end of the river. It can be where the river meets the sea, a lake or a larger waterway. Most rivers flow into the sea, which is where they end their journey.

**Moorings** - A place where a ship or boat is berthed or tied up.

**Mudflats** - Mudflats are large areas of mud that are covered and exposed by the tide. They are rich in plant and animal life and play a vital role in an estuary's ecosystem.

## N

**Navigable** - The word used to describe a safe river or estuary channel for shipping.

**Neap tide** - A small tide that occurs when the moon is at its quarters. A neap tide has lower than usual high waters and higher than usual low waters. See spring tide.

## O

**Oxbow lake** - A small arc-shaped lake formed when a meander is cut off by deposition. They are generally found on river floodplains.

## P

**Pill** - A local term for an inlet on the banks of the river.

**Plunge pool** - A pool at the foot of a small water-fall on a river. The pool is deeper than the surrounding river bed because the water plunging into it has eroded the bed.

**Pollution** - the introduction of man-made contaminants into the natural environment that results in instability or harm to the ecosystem.

**Pond** - A small lake.

**Pool** - A name given to a tidal lake or a section of river with a small bay. Often used as an anchorage.

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**Precipitation** - The term for all forms of water particles, such as rain, snow, sleet, dew, hail etc.

**Punt** - A flat-bottomed boat propelled by a pole or oars.

**Putt** - A type of fish trap used on the lower estuary on the foreshore, usually associated with a V-shaped fish-weir. It consists of a kype, forewheel and butt.

**Putcher** - A conical fish trap used in basket-weirs on the Severn Estuary.

**Putcheon** - Also known as a basket-weir, this was a fixed-trap fishing structure that used conical fish traps or putchers. It was used on the middle section of Severn Estuary.

## Q

**Quarage** - A rise in the level of a river caused by a high tide, which checks the regular downstream flow of a river and creates a build-up of water.

## R

**Rapids** - Rapids are fast-flowing stretches of water that form where the river surface breaks up into waves because rocks are close to the surface.

**Ravine** - A name for a narrow gorge. These are a feature on the upper Severn (i.e. Ironbridge).

**Reef** - A mass or ridge of rock in a river or estuary.

**Reservoir** - A reservoir is an artificial lake created by building a dam or breakwaters across a river. Some are built underground.

**Rip, Rip-current** - A rapid, narrow surface current that flows from the shore out to sea.

**River** - A naturally winding watercourse that drains surplus water from a drainage basin.

**River channels** - The course in which rivers flow for most of the year.

**Runoff** - Water that has run off from something, such as a roof, road or field.

## S

**Saline - Salty water** - water from the sea is known as saltwater, or saline due to the presence of dissolved sodium chloride or salt.

**Sand** - Granular mineral particles formed by the erosive activity of ocean or river currents.

**Sands** - The name for a large, fairly permanent sandbank in an estuary. The Severn was notorious for its sandbanks which often shifted positions slightly, so altering the course of the navigable shipping channel.

**Saltation** - Particles bouncing down a river bed. This process causes attrition, and adds to the silt and sediment in the river.

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**Salt marsh** - An area of brackish water and sediments that form a saltwater marsh.

**Schooner** - A ship with 2 or more masts carrying fore-and-aft sails.

**Sediment** - The name given to material that has been carried by rivers or the sea and then deposited. It is alluvium if it is deposited on the riverbed or a beach when deposited by waves on the coast.

**Seine net** - A type of fishing net where the top is held up by floats and the bottom is held down by weights.

**Silt** - Tiny pieces of sand or rocks. These are dropped or deposited by the river on the inside of a meander where the current is slow.

**Sediment** - Fine particles of mud and rock carried in suspension by river water.

**Shad** - A group of fish related to the herring which are found in the Severn.

**Shallows** - An area of shallow water on a river or estuary.

**Shrimp** - A group of small crustaceans with a transparent body and a fantail that live in the lower reaches of the Severn. They are fished for commercially and are an important part of the estuary's ecosystem.

**Sloop** - A sailing vessel with one mast with a fore-and-aft sail.

**Spar** - A timber that supports a sail. It can be a mast, a boom or yard.

**Spring tide** - A large tide that occurs when the moon is new and when it is full. A spring tide has higher than usual high waters and lower than usual low waters. See neap tide.

**Source** - The place where a river begins, usually where there is a spring on the side of a hill or mountain.

**Spring** - A place where water naturally seeps or gushes from the ground - often in marsh or bog areas.

**Spur** - A ridge of land that extends partly across a valley.

**Squall** - A strong, but short-lived, wind or storm that springs up suddenly.

**Square sails** - On a boat, these are sails that are held at right-angles across the boat.

**Stream** - A small watercourse that flows into a river.

**Stop-net boat** - A type of boat used exclusively on the Severn to catch salmon by a technique called stop-net fishing. This was similar to lave-netting but using a bigger net.

**Stop-net** - A type of fishing net that resembled a large lave net but which was used on a stop-net boat.

## T

**Tidal fall** - The difference in height between the high water mark and low water.

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**Tidal cycle** - A full cycle of the tides from high water to low water to high water or from low water to high water to low water.

**Tide** - The twice daily rise and fall of the sea caused by the gravity of the sun and moon.

**Transportation** - A process where the river carries or moves material (the river's load) from one place to another.

**Tributary** - A stream or river that feeds into a larger watercourse or river. The main tributaries for the Severn in Gloucestershire are the: Wye, Avon (Tewkesbury), Frome, Leadon, Cone, Chelt and the Twyver.

**Trow** - Pronounced to rhyme with 'crow'. A type of cargo-carrying boat used on the River Severn and the estuary. The trow evolved over the years from a small, simple flat-bottomed barge suitable only for use on the river to a vessel capable of undertaking coastal voyages.

## U

**Upstream** - Opposite of the currents flow - i.e. towards the rivers source.

## V

**Valley** - A valley is a long trough in the landscape that has been created by the erosion of a river or a combination of river and glacier action.

## W

**Watershed** - High ground that surrounds a drainage basin. The boundary of a river basin.

**Waterfall** - A place where the river course is interrupted by a tall step.

**Water table** - The water table is the natural level of water in a soil or rock. Below the water table the soil or rock is saturated with water.

**Wele, Weel** - A fish trap made of wicker that was used to catch eels or lampreys on the Severn.

**Weir** - A man-made barrier that helps control water levels on a river. There are 3 main weirs on the lower section of the Severn: one at Diglis in Worcester and two at Gloucester - one at Upper Parting and one at Lower Parting.

**Whale** - Large marine mammal. They sometimes venture into the estuary and become trapped in the shallows.

**Wrecker** - A person or persons who steal material washed ashore from a shipwreck or, someone who tried to deliberately lure a ship onto the shore.

**Wye** - The largest tributary of the Severn.