

Canal & River Challenge Badge

for Uniformed Groups at

Gloucester Docks, River Severn and the Gloucester & Sharpness Canal

Introduction

The Canal & River Trust looks after most of the canals in England and Wales. This badge has been specially designed to help you discover Gloucester Docks while having lots of FUN!



To earn your badge you must complete one activity from each of the six sections:



Each time you complete an activity fill in the Canal & River Challenge record card (see page 3) and ask your leader to fill in the badge order from and either post or email it to us (see page 2).

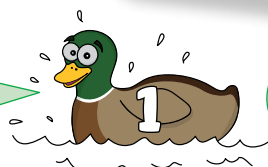
How to order your badge

Ask your leader to [order your badge](#). Let us know how you're getting on with your badge or tell us about the other ways you've been exploring your local canal or river. We might even feature your adventures on our news page!

What's next?

If you enjoyed working towards this badge, then you'll love our downloadable activity sheets for Uniformed Groups. These activity sheets will help you to work towards other badges canalrivertrust.org.uk/explorers/group-leaders

Remember the **SAFE** message:
Stay Away From the Edge



Leaders: for advice on how to plan a visit go to

	Out and About	
	Wildlife	
	Water Safety	
	History	
	Games and Activities	
	Arts and Crafts	
Leader's signature	Activity	Date

Canal & River Challenge Badge Record

How to earn your badge

You must complete 1 activity from each of the 6 sections:

- **Arts and Crafts**
- **Games and Activities**
- **History**
- **Water Safety**
- **Wildlife**
- **Out and About**

Each time you complete an activity fill in the Canal & River Challenge Badge record card and ask your leader to sign it. When you have completed 6 activities ask your leader to fill in the badge order form (see page 2) and either post or email it to us.



Explorers

Canal & River Challenge Badge



Name

Unit

County

Arts and Crafts



Making marks

Gloucester Docks is a very popular tourist attraction because there is so much to see. But how many people miss all the interesting features and textures under their feet?

Your task is to make rubbings of dockland textures. Look for brickwork, textured metal covers, edgings and grates, giant screws and rivets, railway tracks and paving stones worn down by countless dockland workers.

Make rubbings and fill a large sheet of paper with as many different textures as possible.

You will need:

- ✿ Thin paper e.g. photocopy paper
- ✿ A thick dark wax crayon
- ✿ Masking tape to hold down the paper.

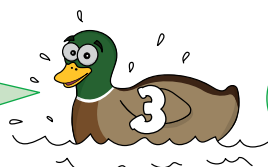


TOP TIP

Devise a trail to highlight where to find interesting texture.



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Arts and Crafts

Build a bird feeder

Gloucester Docks is a great place to see birds. Spot Mallard, Canada Geese, Coots, Moorhens and Swans on the water. Look around dockside buildings for Gulls all year round and Swifts and Swallows in summer. Other birds such as robins, finches, wrens and sparrows can be seen at Gloucester Docks - and in your back garden too.



Make this bird feeder from recycled materials for your back garden.

You will need

An empty milk or juice carton; scissors; a twig 30 cms long; a length of thin wire; some birdseed

What to do

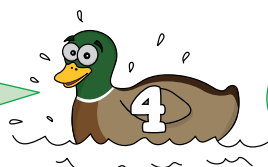
- 1 Wash and dry the carton
- 2 Using scissors, cut windows in two sides leaving margins as shown in the picture
- 3 Cut a small hole in each of the same sides at the base of the feeder
- 4 Push a twig through the holes to make a perch
- 5 Push the wire through the top of the feeder. Twist the end together to make a loop
- 6 Sprinkle some birdseed in the bottom of the feeder - and keep watch!

TOP TIP

Hang the feeder on a high branch outside so that cats can't reach it.



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Arts and Crafts

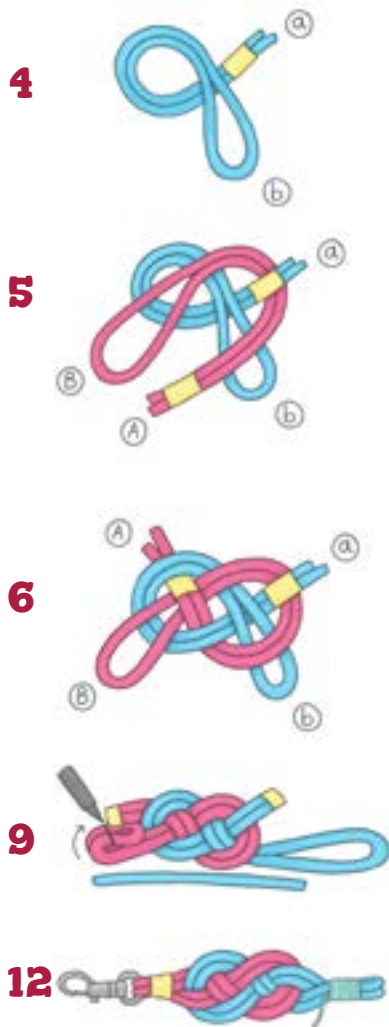
Make a Knot bracelet

Look out for decorative knot work on trows, barges and tall ships in Gloucester Docks. Spot it on fenders (buffers to stop boats crashing into banks and boats).

You will need

Cord, tape measure, masking tape, glue, embroidery silk, large spring clasp, large needle.

What to do



- 1** Measure your wrist for a perfect fit. Cut the cord to the same measurement
- 2** Measure the clasp and cut this length from the cut piece of cord. This is your measuring cord
- 3** Cut two pieces of cord measuring at least 56cms. Fold one piece in half and tape the ends together using the masking tape. Repeat using with other piece of cord
- 4** Take one piece of the long taped pieces of cord and make a loop with the taped end on the underside pointing upwards
- 5** Take the second piece of taped cord and place it on top and under the loop you've made
- 6** Now wrap end A under the loop and over B and back under the loop. Pull all four ends tight
- 7** Finish your bracelet by bringing the ends of the cord together. The taped ends need to be shorter than the looped ends. Cut both taped ends (a and A) to about 2.5 to 3.5cms from your knot
- 8** Place the measuring cord you made in Step 1 next to your bracelet and make sure the knot aligns to the centre of the cord
- 9** Take one of the looped ends and fold it back over itself so that it lines up with the end of your measuring cord. Take the taped end of the bracelet and place it over the folded side. Mark a line where the cords meet
- 10** Unfold the longer, marked cord and tape over the mark. Trim at the line and repeat on the other side
- 11** Slide the clasp on to one end of the longer cord. Fold it make to meet and glue where the end meets. Cover with tape. Repeat on the other side to make a loop for the clasps
- 12** Finish your bracelet, by wrapping embroidery silk around the masking tape.



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Games and Activities








Making a collection

National Waterways Museum Gloucester has a collection of objects and wildlife that tell the stories of the people and animals that live along the River Severn and the Gloucester & Sharpness Canal. You could make a 'museum' too. It could be anything from fossils to football programmes. For example, why not make a collection of feathers? Canal towpaths and riverbanks are a great place to look for them and start your collection.



National Waterway Museum Gloucester ↗

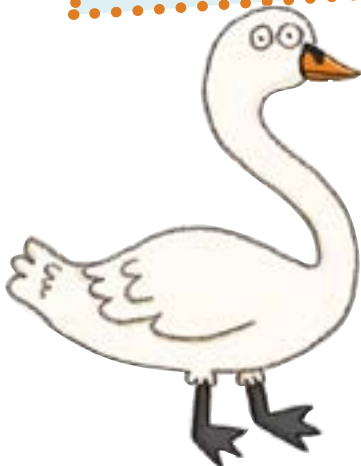
What to do

-  Go for a walk and collect different feathers
-  Identify the feathers using illustrations and books
-  Display the feather by fastening the base of the feathers on to card with sticky tape
-  Label them noting where you found them and when
-  Don't forget to give your museum a name!



TOP TIP

Offer your 'museum' to a local primary school and perhaps help young children make a collection.



NEXT STEP
Don't forget to place any labels at the right height for young children.

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Games and Activities

Play hopscotch

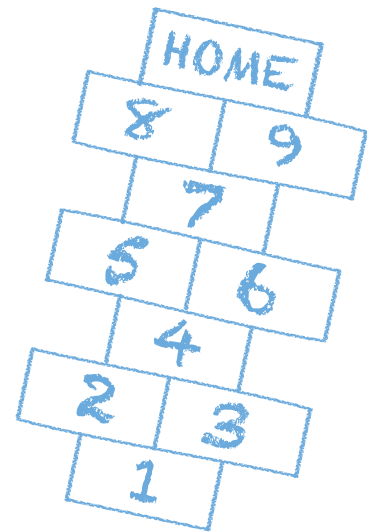
Boaters' children had very few toys – there wasn't any room to keep them on the boat. Hopscotch was a favourite game because they could play it on the towpath when the boat was tied up for the night.

You will need

A stick of chalk; a pebble or coin

How to play

- With the chalk, mark out a 'court' on the ground and number the squares. The top square is labelled 'home'
- The first player tosses a pebble into the first square. The marker must land completely in the square without touching a line or bouncing out
- The player hops through the course skipping the square with the marker in it
- Single squares must be hopped on one foot. Double squares must be straddled with the left foot in the left square and the right foot landing in the right square
- When you reach 'home' you turn round and return through the course in the right order i.e. 9, 8, 7 etc. When you reach the square with the marker you must pick it up and continue on the course without touching a line or stepping into another square
- The person who completes the course in the quickest time wins.

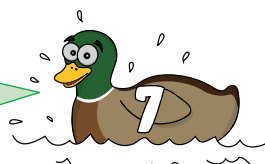


TOP TIP
Did you know that the Romans played hopscotch? Today, it's played all over the world.

NEXT STEP

Organise a hopscotch tournament for your group. The winner is the first person to complete the course successfully in the fastest time!

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Games and Activities

A matchbox map

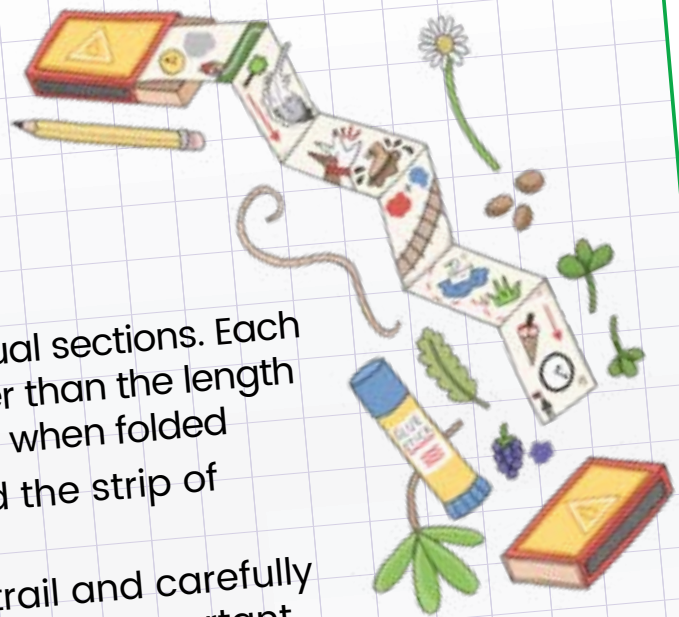
All good Brownies, Guides, Cubs and Scouts learn to read maps - but how about making a map? Make a plan of Gloucester Docks in a matchbox starting at Llanthony Lifting Bridge and finishing at the Severn Lock.

You will need

- ✿ An empty matchbox
- ✿ A strip of paper just wide enough to fit into a matchbox and about six times longer
- ✿ A pencil and felt tips

What to do

- 1 Divide the strip of paper into equal sections. Each section should be slightly shorter than the length of the box so that it will fit inside when folded
- 2 Using the lines as a guide, fold the strip of paper into a concertina
- 3 Decide on the length of your trail and carefully mark on the features you think are important. For example you may like to mark canal features such as signs, bollards, locks and bridges. It doesn't even have to be features - it could be smells or sounds! How about the sound of water trickling through a lock gate?
- 4 Draw and colour pictures and write instructions in each section. Put the map into its box.



TOP TIP

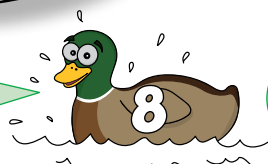
Think about different viewpoints - for example a duck's eye view!



NEXT STEP

Visit National Waterways Museum Gloucester to find maps of the docks and the surrounding area at different times in the past.

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History

Chocolate spiders

Chocolate 'crumb' was imported by ship into Gloucester and Liverpool Docks from the Caribbean. (Chocolate crumb is a mixture of ingredients cooked together, dried and ground to a powder.)

From the docks, chocolate crumb was transferred on to canal boats and delivered to Cadbury's at Bournville, in Birmingham. Some older people still remember that when they were young, passing boaters gave them chocolate crumb to eat!

Try making these scrumptious chocolate spiders.

You will need

- 1 packet of ready-to-serve fried noodles (available from supermarkets)
- 2 tablespoons of crunchy peanut butter
- 200g milk chocolate
- Greaseproof paper

What to do

- Heat together the chocolate and peanut butter in a bowl over simmering water, or microwave for 60 seconds on high
- Mix it all together
- Add the noodles and coat with the chocolate mixture
- Put small spoonfuls on to greaseproof paper
- Put in the 'fridge until set. Yum!

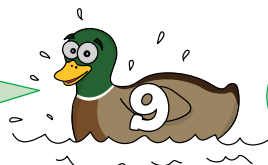
TOP TIP

Use crunchy peanut butter - not the smooth type.

NEXT STEP

Chocolate spiders make great gifts - if you haven't eaten them all first!

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History



Knit a hood

In the days when canals were used for delivering goods all over the country, boaters were out in all weathers. Girls and women wore elaborate bonnets to keep the hot sun off their face and neck and men and young lads wore caps. In winter children wore homemade hats to keep them warm and dry.



A Christening party, 1910. All the women are wearing traditional black bonnets.

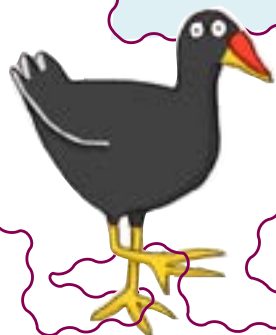
Try knitting this simple hood.

You will need

- 1 ball of wool,
- 15 mm knitting needles

What to do

- Cast on 24 stitches
- *Knit 4, slip 3rd stitch over 4th stitch, knit to last 2 stitches, slip previous stitch over, knit 2. /knit row *
- Repeat * to * until last 6 stitches
- Knit 2, knit 2 together, knit 2
- Knit row
- Knit 1, knit 3 together, knit 1
- Knit row
- Knit 3 together
- Repeat for the second triangle
- Place triangle 1 on top of triangle 2 and join the seam to make a hood.



TOP TIP
Look for cheap knitting needles and wool in your local charity shop.

NEXT STEP
Challenge your Patrol to make the funkiest hood by mixing different colours and types of wool.

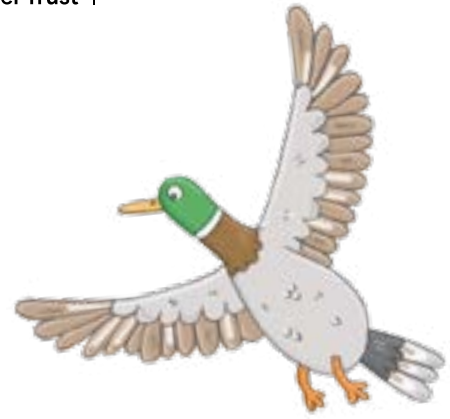
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History

All about trows

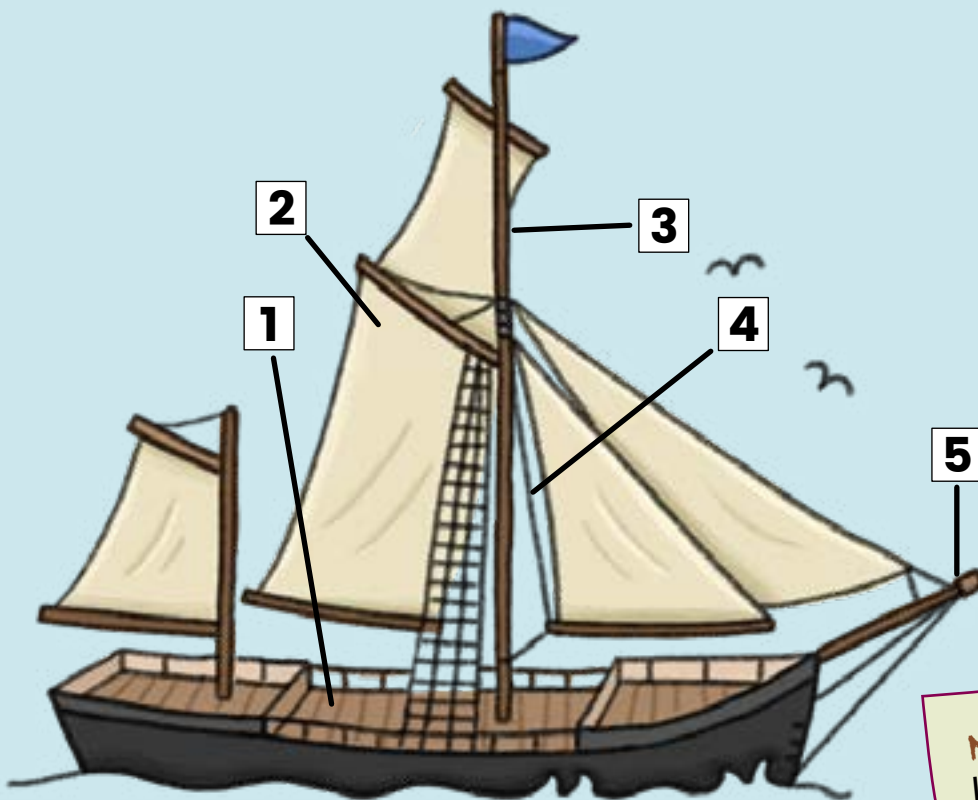


Trows were boats designed to manoeuvre in and around the fast tides and dangerous shallows of the Severn Estuary and the River Severn up to Worcester and Stourport.

Can you name the parts of this trow?

Why not visit National Waterways Gloucester or book a visit to the library there to find out the answers. You could also book a visit to the archive in the Ellesmere Port Museum or research online.

- sails** to power the boat along
- rigging** to adjust the sails
- open hold** to carry lots of cargo
- bowsprit**
- mainmast** to support the sails



NEXT STEP
Look out for a model trow in National Waterways Museum Gloucester.

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History

A boatman's breakfast!

Working on a sea-going barge was tough. Each barge had a crew of four men. They worked around the clock, with two men sleeping while the other two worked.

The crew had three cooked meals a day and never ate between meals. Their only treat was an Oxo cube in a mug of boiling water or strong tea sweetened with Nestle's condensed milk.

Make a healthy breakfast of porridge for a boatman!

You will need

- ✿ Jumbo porridge oats
- ✿ Milk or water
- ✿ Honey

What to do

- 1 Measure two spoonfuls of oats into a microwaveable bowl
- 2 Add enough water or milk to cover the oats
- 3 Put into a microwave oven, full heat for two minutes
- 4 Carefully remove the bowl - it will be HOT!
- 5 Sweeten with honey and EAT. Yum!



TOP TIP

Add a handful of sultanas, a chopped banana or apple for an extra scrummy breakfast.

NEXT STEP

Why not devise another healthy breakfast for the crew?



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Wildlife

Feed the ducks

You can see lots of Mallard around Gloucester Docks. We all love to feed them but did you know that bread – especially white bread – is BAD for ducks? Like you, they need a healthy diet so make sure they eat the right food by making some tasty treats for them.

Mix together a mixture of:

Grapes cut in half

Rice (cooked or uncooked)

Chopped vegetable peel

Grain and birdseed

Porridge oats

Defrosted peas

Chopped lettuce

TOP TIP

Don't give Mallard bread, crisps, chips, crackers, chocolate or nuts - it's like giving them junk food!

NEXT STEP

Why don't you try and copy a duck's funny little waddle? Flap your arms and keep your feet flat and don't bend your knees! Get your whole group to try it and see who is best at being a duck!

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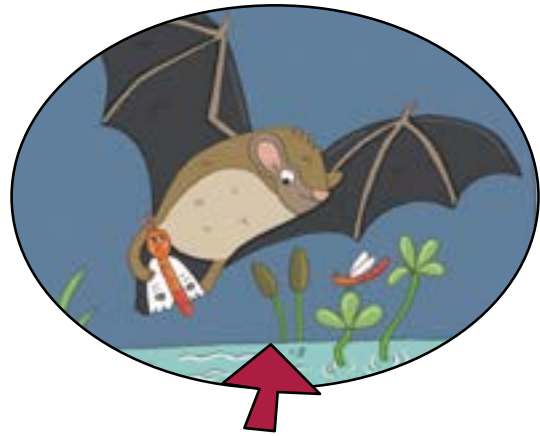
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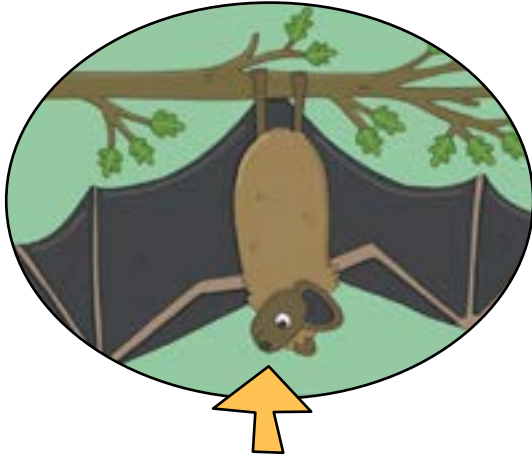
Wildlife

Go on a bat hunt

River banks and canal towpaths are great places for spotting bats especially Pipistrelle, Daubenton's and Noctule bats.



Daubenton's bats love living under canal bridges and tunnels. They feed on water-loving insects using their hairy feet to scoop them up from the surface of the water.



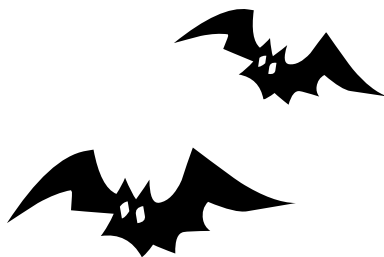
Pipistrelles are our smallest bats and the one you are most likely to see. They are about the size of a ping-pong ball. Like all bats, they send out high-pitched sounds that bounce or echo back to tell them where their prey is.



Noctule bats are our biggest bats – but they could still fit into the palm of your hand. They like to live and hibernate in old woodpecker holes in trees and feed on moths, beetles, flying ants and mayflies. Noctule bats can fly at speeds up to 50 mph!

TOP TIP

Bats are nocturnal so the best time to spot them is dusk when they wake up and fly out to catch their fave food – moths, midges and mosquitoes.



NEXT STEP
Find out more about bats log on to bats.org.uk/about-bats/fun-facts-about-bats and/or bats.org.uk/pages/uk_bats.html

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Two best bugs

Canals and rivers are great places to spot two of the country's most beautiful insects – dragonflies and damselflies.



Common Blue Damselfly

Damselflies are small and more delicate than dragonflies. A rare type of blue damselfly has recently reappeared in Britain. 50 years ago, its only breeding site was washed away in floods.



Emperor Dragonfly

Dragonflies may look beautiful but they are deadly predators! They feed on flying insects and their large eyes enable them to see backwards, forwards and sideways. They can hover, fly fast and change direction quickly so their prey don't have much chance of escape.

TOP TIP

Small dragonflies and damselflies look very similar. How can you tell the difference? Damselflies hold their wings close to their bodies when resting whereas dragonflies hold their wings horizontally.

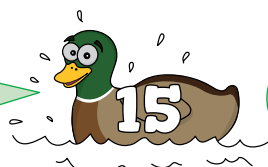


NEXT STEP

To find out more go to The British Dragonfly Society website british-dragonflies.org.uk



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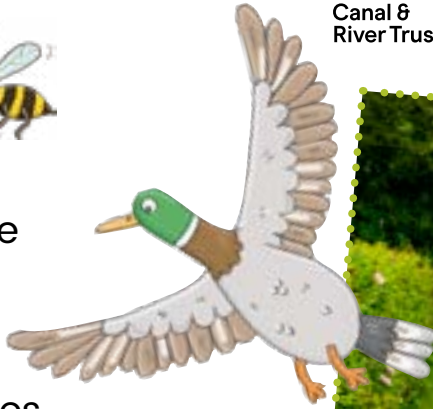


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Wildlife

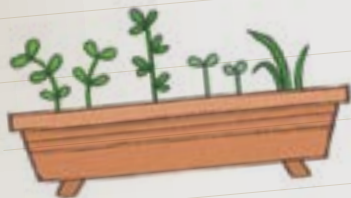
Canal corridors

Rivers and canals such as the Severn and the Gloucester & Sharpness Canal are wildlife corridors. This means that plants, fish and other creatures make their way along from one place to another.



The Llangollen canal

Try this experiment to find which plants 'travel' easily.



What to do

- 1 Put on wellies and go for a muddy walk along the towpath
- 2 When you get back, scrape the soil off your boots into a flat box or an old seed tray
- 3 Keep the soil damp and watch what starts to grow
- 4 Which plants have you 'spread'? Identify them using illustrations and books.



TOP TIP

'The Woodland Walks: A Guide to Trees and Wildflowers' by Charlotte Voake is a great book for identifying plants and trees.



NEXT STEP

Be inspired by Charlotte Voake's illustrations. Why not make an illustrated guide to the plants you find along your local canal or river bank?

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Water Safety

Learn to throw a rope



Every year hundreds of people are drowned in rivers and canals so it's vital to learn what to do if someone falls in. Learn to throw a rope by following these simple steps.



You will need

A length of rope about five metres long (a washing line is perfect)

What to do

- 1 Split a coil of rope into two, one in each hand
- 2 Throw the one coil first, followed by the other one.

TOP TIP

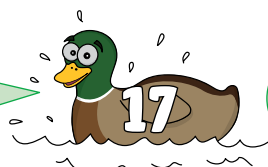
Carry a mobile phone when walking by a canal or river. Learn how to make an emergency call and how to ask for help.



NEXT STEP

Some Canal & River Trust sites have water safety boxes available for loan, if you can collect them. Contact the education co-ordinators for more information at explorers@canalrivertrust.org.uk

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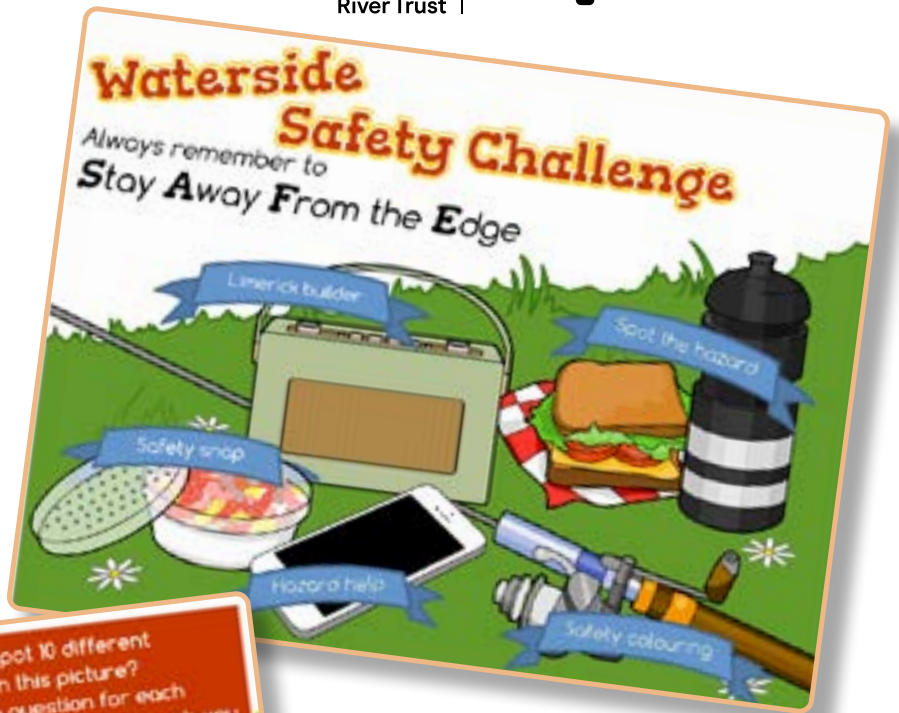


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Water Safety

Hidden hazards

Visit the Explorers website: canalrivertrust.org.uk/explorers/waterside-safety-challenge. Take part in our Waterside Safety Challenge.



Play Spot the Hazard and answer a question about each hazard you find to find out how much you know about water safety.

TOP TIP
Always remember to stay **SAFE** near water
Stay Away From the Edge.

NEXT STEP
Younger children are not always aware of the hidden dangers at the waterside. With your group design a poster to explain the hidden dangers to them. The poster must have the **SAFE** message, identify some of the hidden dangers and show what type of water it is e.g. a canal, river, reservoir, a lake or a pond.



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Water Safety

How to steer a boat

Going on a canal or river holiday?
Learn how to steer a boat without
bumping into banks and other boats!

Here are the 'rules'



SIX THINGS YOU SHOULD KNOW ABOUT THE WATERWAYS

- Boats keep to the **RIGHT** on canals and rivers. That's the opposite of cars on roads
- The maximum speed on canals is 4 miles an hour. You can go a bit faster on rivers. Don't forget the wind and currents will affect your steering
- In narrowboats, you push the tiller the opposite way you want to go. In cruisers, you turn the wheel the way you want to go
- When you come to locks, you'll have to jump out and help adults open them
- You might have to go through dark tunnels and open swing bridges too
- At the end of the day, you'll need to tie up your boat. Otherwise you will drift off!

NEXT STEP

Go to the Canal & River Explorers website and test your steering skills with the 'Boat Afloat' game.



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Water Safety

Water safety workshop

Learning about water safety is very important. Canal & River Trust volunteers do a great job in helping to teach young people about keeping safe near water.



Use the Explorers online enquiry form to see if we have a team of volunteers nearby that can visit your group to run a water safety workshop.

Step 1 Go to canalrivertrust.org.uk/explorers



Step 2 Click on **Water Safety**



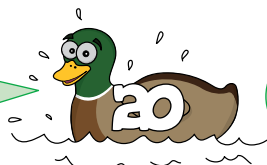
Step 3 Click 'book a visit' and complete the enquiry form



TOP TIP
Don't forget to confirm with your Group Leader first!

NEXT STEP
Go online and send away for FREE water safety booklets for your Group.

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Out and About

Eye spy!

Before canals were built, goods were delivered by horse and cart. Journeys were slow, rough and dangerous. When canals were built, boats delivered goods more safely and journeys took days rather than weeks.

Take a walk around Gloucester Docks

How many of these things can you spot?



1 Bollards or iron rings to tie up boats

2 Bridges



3 Signposts with distances to other places along the canal



4 Locks



5 Narrowboats specially designed for canals



6 Warehouses where goods were stored



7 A pleasure boat



TOP TIP
If you like doing trails why not make your own by using the Explorers Trail Builder canalrivertrust.org.uk/explorers/build-a-trail

NEXT STEP
Share your trail with another group.

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Out and About

Adopt a canal

Why not work with your group to adopt a section of canal or river near you? The aim is to care for stretch of a waterway and make a difference to your community.



Adopting a canal could include:

- ✿ Keeping the canal and towpath clean, smart and clear of obstructions
- ✿ Recording and improving wildlife habitats
- ✿ Promoting the waterways to other local people
- ✿ Running events and guided walks
- ✿ Creating a community garden.

TOP TIP

If you're a Scout group go to www.amillionhands.org.uk to find out more about Pocket Adoptions.



NEXT STEP

Email volunteer@canalrivertrust.org.uk for further information.

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Out and About

Paddle power!

Canoes have been used as a way of getting around for thousands of years. If you fancy seeing the waterways using people power rather than on a motor boat, why not get paddling? Nearly two million people already go canoeing in Britain and your Patrol could join them.



Plan a canoe trip for your Patrol

1. Look for a good place for a canoe trip online at canalrivertrust.org.uk or britishcanoeing.org.uk
2. Find a coach or canoe club
3. Check what safety equipment you need
4. Work out how much it will cost
5. Complete booking forms and paperwork with your Patrol leader
6. Get paddling!



TOP TIP

Make sure you canoe with someone experienced as water can be dangerous.



NEXT STEP
We're creating England's first ever coast to coast canoe trail. The Desmond Family Canoe Trail will stretch 150 miles connecting Liverpool to Goole along the Leeds & Liverpool Canal and Aire & Calder Navigation. Find out how you can get involved on the Canal & River Trust website.

Remember the **SAFE** message:
Stay Away From the Edge



Leaders: for advice on how to plan a visit go to

Out and About

Gone fishing



Our canals and rivers teem with a wide variety of fish. It's not surprising that fishing is one of Britain's most popular outdoor activities.

These fish are especially popular with anglers. How many can you identify?



Clue: one of our largest fish. It lurks in dark pools and ambushes fish, ducklings, frogs and grass snakes.



Clue: this is anglers' most popular fish. Maybe because they are large, easy to catch and fight hard.



Clue: anglers love this fish because it puts up a good fight.



Clue: this fish has a spiky dorsal fin and pointed gills, so they have to be handled carefully.



Clue: this fish can be found on every canal that supports fish life.



Clue: this fish takes its name from the sensitive barbels found on its under-slung mouth.

NEXT STEP
The Canal & River Trust website has lots of information on the fish in our waterways. Why not use it to invent a fishy game?

TOP TIP
Fancy going fishing? Visit the Canal & River Trust website and search for a place to fish. Remember, anyone over 12 will need a rod licence to go fishing.



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Answers: 1 pike; 2 chub; 3 roach; 4 carp; 5 perch; 6 barbel