Wildlife on Our Waterways

London Wildlife Trust

What are they?

Waterways are flowing bodies of water. Rivers, streams and lakes are examples of waterways, these are mostly natural. Rivers are fed by a much larger area of land known as a catchment, rain falls everywhere - from the high places to the low. Rivers are dynamic and respond to conditions of geology, soil, chemistry and our own interventions.

The River Thames is the largest river in London and flows through the city. It began around 140 million years ago, during the Jurassic period.

Others bodies of water like canals have been made by humans. Canals were created to help transport goods around the country. The longest canal in the UK is the Grand Union Canal, stretching 220km from London to Birmingham.

The New River flows from Hereford to Stoke Newington in London. It is neither new nor actually a river! It is a manmade body of water which was built over 400 years ago to bring drinking water from Hertfordshire to north London.

There is over 600km of waterways flowing through the capital, that's more than the distance from London to Manchester and back again!

Why are they important?

Waterways are not only important as a way for people to travel and transport goods but they also provide a home for much of London's wildlife. Waterways provide a variety of habitats for different plants and animals.

Life is uniquely dependant on water, and for many species of plant and animal, adaptation to a life cycle in or very near water is the main spring of their survival.

This guide will explore the waterways ecosystem and help you discover some of the wildlife you could spot on, in, or near the canals, rivers and streams of London.

Key words

Aquatic

A living thing that lives or grows in a water environment

Canal

A man-made open channel for transporting water

Catchment

An area of land from which water flows into a river, lake, or reservoir

Carnivore

An animal or plant that feeds on an animal

Ecosystem

A community of living things and their environment

Estuary

The wide, lower part of a river where it flows into the ocean

Habitat

The physical environment in which a plant or animal lives

Herbivore

An animal that only eats plants

Invertebrate

An animal that does not have a backbone

Larva

A young animal that is developing into an adult that is very different from its full adult form

Nymph

A young form of insects such as dragonflies, damselflies and mayflies (these nymphs are all aquatic whereas their adult forms are not)

Omnivore

A living thing that feeds on both plants and animals

Source

The starting point of a river

Tributary

A stream that flows into another stream, river or lake

Vertebrate

An animal with a backbone. This group includes amphibians, birds, fish, mammals and reptiles

How many invertebrates, plants and fish can you spot?

Tick the ones you've spotted!

Invertebrates | Plants | Fish

Use a magnifying glass to see the smaller animals

Invertebrates:

1. Damselfly
2. Dragonfly
3. Mayfly
4. Water scorpion
5. Water boatman
6. Diving beetle
7. Snail
8. Pea mussel
9. Freshwater shrimp
10. Leech
11. Pond skater
12. Crayfish
13. Damselfly nymph
14. Dragonfly nymph
15. Mayfly nymph
16. Hoglouse
17. Daphnia
18. Bloodworm

Plants:

Waters edge:

1. Common reed
2. Reedmace
3. Water mint
4. Purple loosestrife
5. Willow
6. Alder

On/in water:

7. Floating pennywort
8. Yellow flag iris
9. Marsh marigold
10. White water-lily

Fish:

1. Stickleback
2. Roach

How many amphibians, birds, reptiles and mammals can you spot?

Amphibians:

1. Common Frog
2. Common Toad
3. Smooth Newt
4. Frogspawn
5. Toadspawn
6. Tadpole
7. Newt larvae

Birds:

1. Kingfisher
2. Grey heron
3. Cormorant
4. Little egret
5. Mallard
6. Mute swan
7. Canada goose
8. Coot
9. Moorhen

Reptiles:

1. Grass snake

Mammals:

1. Water vole
2. Brown rat

Tick the ones you've spotted!

Amphibians Birds Mammals

How to go river, stream or pond dipping

Safety first:

- **Weather:** Heavy rain and wind can make rivers dangerous. Take extra care after a storm; hazardous debris may be on the riverbed.
- **Depth:** Stay where the water is below your knees – riverbeds can be uneven and shallow areas can drop off suddenly.
- **Flow:** Always observe safely from the bank, never by going in: use a floating leaf or stick to check how fast the water is flowing.
- **Footwear:** Rivers can be very cold, so wear wellies to keep your feet warm, plus protect them from sharp rocks or debris.
- **Exit plan:** Make sure there's an easy place to get into and out of the river. If the bank is safe you can lie or kneel near the edge. Don't crouch!
- **Other users:** Be aware that some rivers are used by boats and other visitors.

Be prepared:

- Wear old clothes and wellies
- Cover all cuts and scratches with waterproof plasters
- Go with a friend, and take a responsible adult too
- Take your invertebrate spotter guide and a magnifying glass if you have one
- Take a net, shallow tray, or washing up bowl and jam jar

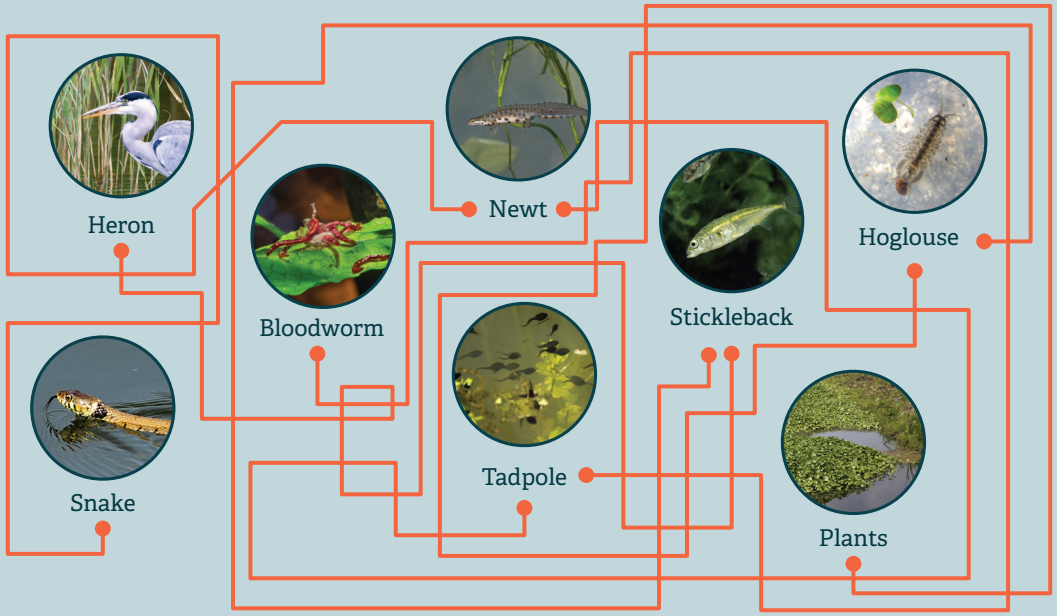
Get ready, be steady, dip!

1. Put a small amount of water from the river into your tray. Put the tray onto the bank
2. Hold your net so the water flows into the mouth of the net - try wiggling your feet to encourage animals on the bottom
3. Empty your net into the container and look carefully (some creatures are very small!)
4. Tick animals off your spotter guide when you see them
5. When you're finished, gently empty the container, wash your hands and disinfect the net

Activities

Lunch on the river

Follow the lines to find out what the different animals on our waterways eat, use this to complete the two food chains below



Heron → _____ → _____ → _____

Snake → _____ → _____ → _____

From these food chains, which of these animals are carnivores and which are herbivores?

Water Wildlife Wordsearch

How many plants and animals from the spotter guides can you find in the wordsearch below.

- alder
- bloodworm
- coot
- cormorant
- crayfish
- damselfly
- daphnia
- dragonfly
- frog
- goose
- heron
- hoglouse
- iris
- kingfisher
- leech
- mallard
- mayfly
- newt
- rat
- reedmace
- roach
- shrimp
- snake
- snail
- stickleback
- swan
- tadpole
- toad
- vole
- willow

Extra challenge:
Circle all the vertebrates in red
Circle all the invertebrates in blue
Circle all the plants in green

r	i	v	r	h	p	t	h	w	n	g	l	r	g	m	q	s	g	r	i
l	b	o	t	d	a	o	s	i	e	x	e	y	f	a	w	w	f	a	k
e	u	d	t	d	p	o	i	p	v	d	m	a	e	l	w	a	m	x	i
g	q	b	p	k	t	c	f	j	l	q	q	s	n	l	o	n	a	x	g
p	f	o	k	t	j	g	y	a	o	w	u	m	t	a	l	q	y	t	r
y	l	f	l	e	s	m	a	d	y	o	v	v	k	r	l	o	b	o	q
e	t	v	d	b	o	s	r	r	l	l	c	y	t	d	i	c	a	x	f
e	z	a	w	f	a	b	c	g	x	h	f	o	h	b	w	c	w	q	q
w	b	x	r	l	g	o	o	s	e	y	a	n	f	r	h	b	j	i	d
l	l	i	d	i	k	h	y	z	d	d	f	c	o	u	f	f	q	n	h
l	o	n	q	a	t	i	o	h	m	h	o	d	y	g	w	y	g	g	a
e	o	i	e	m	p	a	n	z	w	r	e	z	o	f	a	t	o	s	j
e	d	d	j	w	z	h	n	g	m	e	y	r	i	k	b	r	x	y	l
c	w	j	c	k	t	f	n	o	f	d	u	h	o	p	f	s	d	e	k
h	o	i	r	i	s	r	r	i	b	i	y	v	f	n	m	e	l	o	v
e	r	m	v	e	k	a	n	s	a	z	s	a	l	u	s	i	h	t	c
i	m	s	l	c	n	y	l	f	y	a	m	h	k	i	u	w	r	i	r
i	l	c	w	t	m	x	s	t	i	c	k	l	e	b	a	c	k	h	j
p	w	r	e	e	d	m	a	c	e	k	d	l	w	r	u	n	x	p	s
l	l	j	j	u	o	p	h	t	x	c	f	y	p	m	w	p	s	b	g

Waterways in your area

There are many local parks in the London Borough of Brent through which tributaries of rivers flow. You may not always be able to explore what's in the water at these spaces but it will be a fantastic opportunity to discover the wildlife that you can see from the banks.

Fryent Country Park – Fryent Way, NW9
Woodcock Park – Shaftsbury Ave, HA3
Northwick Park – The Fairway, HA0 3TQ
Gladstone Park – Dollis Hill Lane, NW2
Welsh Harp Open Space – Birchen Grove, NW9

Always be aware that in urban waterways, water can be unsafe due to pollution.

Get involved

Since 2016, London Wildlife Trust, alongside other environmental partners have taken part in an annual week long campaign to celebrate London's rivers, **London Rivers Week**. The week engages the public about London's network of rivers and how we all have a role to play in making their future a healthy one. There are many hands-on practical activities that you can take part in. Check out the London Rivers Week website for the latest information. **www.thames21.org.uk/joinacampaign/londonriversweek/**