

Headstone Manor Park Education Pack



December 2021



Headstone Manor Park

A nature visit through time....

Travel back 500 years and this park was part of a noisy, bustling farm, supplying the residents of Headstone Manor and people in the City of London, with food. As you wander around, you can still catch glimpses of its past from woodlands, hedgerows and a water-filled moat.

Today it's a place for local people, and recent work has helped improve the Park for everyone. But the Park's value doesn't stop there - Headstone Manor Park is helping to prevent pollution running into our rivers and reduce the risk of flooding for local communities.

Wetlands and flood basins have been recently added and Yeading Brook (which runs into the River Crane) has been opened up for people and wildlife to enjoy after years of running underground.



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Introduction

Headstone Manor Park was officially reopened in September 2021 following a lottery funded Parks for People restoration project. This refurbished parkland, located in the north east of Harrow, and surrounding the [Headstone Manor and Museum](#), offers fantastic opportunities for learning outside the classroom. This education resource pack is designed to provide ideas, activities and information for planning outdoor learning in the Park. These may be activities you plan as part of the curriculum or as part of an informal visit to the park.

*It is important to note that this pack covers the parkland surrounding the Headstone Manor and Museum and its grounds, and whilst we do make reference to the Museum, and the learning opportunities which it provides, the museum operates a booking system for school visits **so if you are hoping to incorporate visit to the museum as well as the park you must contact the museum in advance:** education@headstonemanor.org*
For more information about the Museum's learning offer please [visit their website here](#).

About the Park

The park as a space for public recreation has been in existence for around 100 years. Prior to that, the land was the farmland of Headstone Manor. The 13th century manor house is now a free museum and venue for weddings. You can still see some of the features which would have existed in the farm's heyday such as hedgerows, woodland, the water filled Moat and Yeading Brook.

Lying on London clay, the Parkland has always been an area subject to waterlogging, and man has tried to control the water for centuries (for more information about this see the information boards in Appendix 1). Climate change has brought about erratic weather and with heavier, more frequent rainfall, flood events in and around the park had become more frequent.

[Yeading Brook](#) rises in the local area and flows through the park (on two different courses). The brook is a headwater of the [River Crane](#) which runs down into the River Thames and into the sea. Before it reaches the park, Yeading Brook is joined by drains from roads, as well as from homes and businesses. This water contains chemicals from road run off and [misconnected](#) drainage from homes and businesses bring in pollution such as chemicals in washing powder or cleaning fluids.

Two new [wetland](#) areas have been created in the park to deal with this flooding and pollution. A wetland system in the north of the park includes sedimentation ponds and a reed bed to filter out pollutants naturally; and the flood basins in the south of the park provide temporary storage for heavy rainfall. As well as dealing with these issues, the new wetlands create fantastic habitats for wildlife. To help control flooding, Yeading Brook has been re-profiled to give it some more gentle meanders and gently sloping banks so the water has space to spread. This allows the river to behave more naturally, slowing the flow of water and improving the aquatic environment.



Introduction cont...

These habitats in the park provide a great opportunity for learning about rivers and other habitats, as well as giving pupils the chance to understand threats to the natural environment and consider the ways that they can help.

***More information about the wetland systems and re-naturalising rivers can be found in Appendix 1 and via links in the Further Resources section.**

The park has range of sports facilities including pitches for cricket and football. There are also tennis courts, however these are currently in need of refurbishment (2022). Surfaced and fully accessible footpaths provide good access around the whole park and link up the habitats including the wetland area, Yeading Brook, the Moat, woodland, hedgerows and small areas of longer grass. All these habitats provide homes for a diverse range of wildlife. For more information about the location of these habitats see the full page 'Where to Study' map.

There are three mapped trails around the park, details of which can be found on the Wayfinder Trails map included in Appendix 2. The Orange Trail links wooden Wayfinder posts, whilst the other trails have no physical markers on the ground. NB: the Blue Trail is only fully accessible during the museum's opening hours. The park has a number of information boards which combine text and images to provide more information about the site, its history and wildlife. Copies of the information boards are included in the appendix and the location is indicated on the 'Where to Study' map.

Getting to the Park & Facilities:

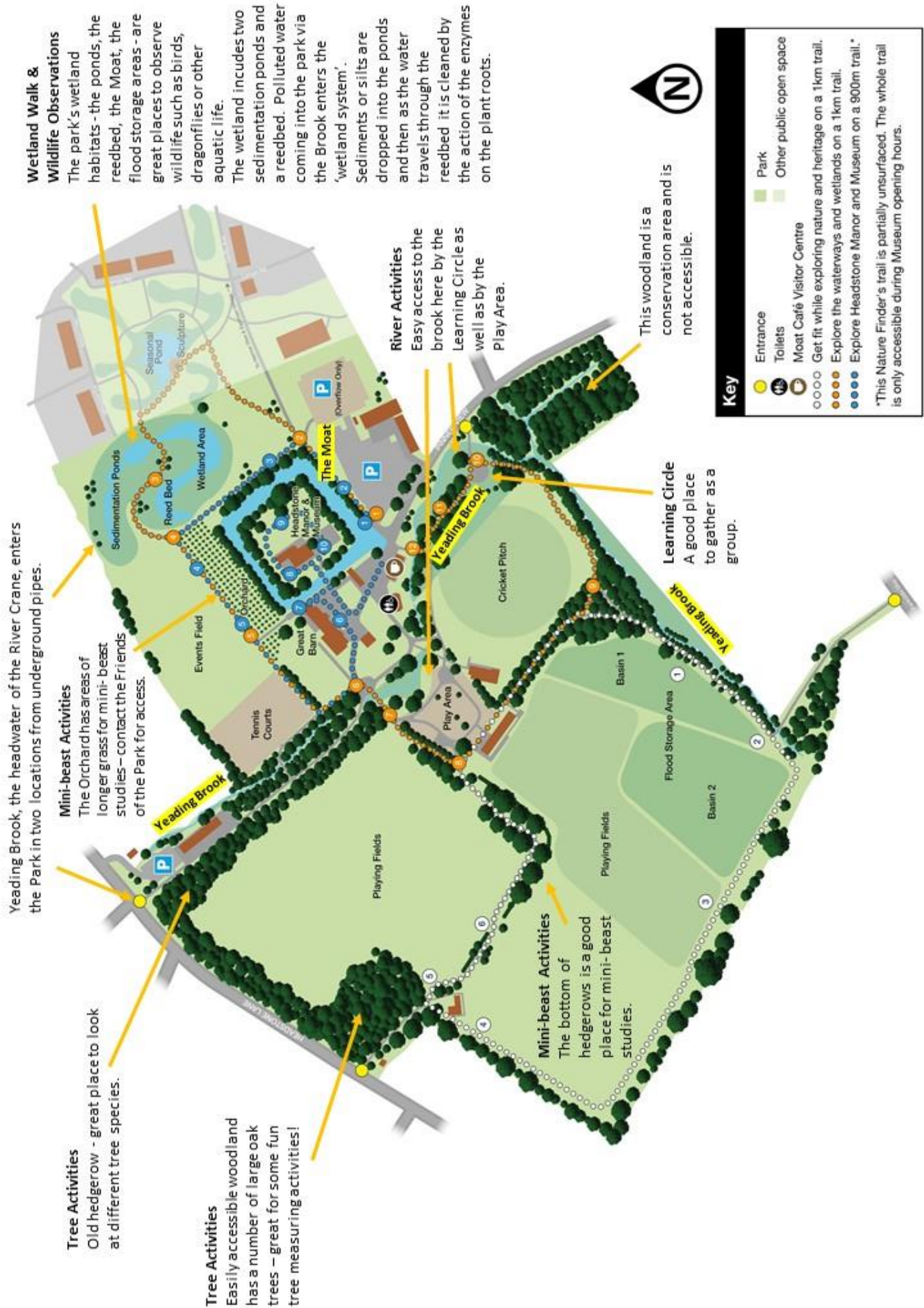
The Park has a café/ visitor centre and toilets which are operated as part of the museum complex. These are open from 10am—4pm Tuesday to Sunday. NB: The whole museum complex is closed on Mondays and operates winter opening hours from November until the end of January. This may affect the opening hours of the toilets, please check on the [museum website](#) or [their Facebook page](#) for information. When travelling to the park, please consider being green! [Headstone Manor and Museum's website](#) has detailed directions for walking to the park and travelling by public transport. **Important:** Although there are car parks at both the Pinner View and Headstone Lane entrances to the park, these are not accessible for coaches or some larger minibuses due to the height barriers. If you are travelling by coach or a larger minibus you will need to drop off on a nearby road.

Equipment Loan:

The following equipment is available for loan from the Friends of Headstone Manor Park — metre rulers/ stopwatch/ nets/ inspection trays/ viewing pots and ID charts. A small donation would be gratefully received which allows the Friends to purchase replacement items. To enquire about loans contact: fohmrg@gmail.com



Where to Study Map—Headstone Manor Park



Curriculum Link Table of Activities

Activity	EYFS	KS1	KS2	KS3
Waterways and Wetlands				
Activity 1: River Dipping		✓	✓	✓
Activity 2: Making a River Profile			✓	✓
Activity 3: Measuring River Speed			✓	✓
Activity 4: River Pollution & Wetland Walk		✓	✓	✓
Headstone's Habitats				
Activity 1: Mini-beast Investigation	✓	✓	✓	✓
Activity 2: Tree Identification		✓	✓	✓
Activity 3: Meet a Tree		✓	✓	✓
Activity 4: How Tall is Your Tree?			✓	✓



Curriculum Links

EYFS

- Understand their physical world by exploring and observing their natural environment.

Key Stage 1 Science

- **Plants**—Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.
- **Animals, including humans**—Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.
- **Living things and their habitats**—Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. Identify and name a variety of plants and animals in their habitats, including micro-habitats.

Key Stage 2 Science

- **Plants**—Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.
- **Living things and their habitats**—Recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. Recognise that environments can change and that this can sometimes pose dangers to living things. Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.
- **Working Scientifically**—Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

Key Stages 3—5

- The park and its habitats offer lots of great opportunities for studying aspects of the secondary school curriculum. Many sessions can be easily adapted to suit these Key Stages.



General rules and risks in the park for a class visit

Golden Rules for park visitors

- Please respect the park, its habitats and wildlife. It is your responsibility to treat plants, trees, creatures and the water environments as you would care for each other.
- There are many different users in the park so please be aware of runners, cyclists, ball games, dog walkers and other activities in the park.
- Be aware that there may be vehicles moving around the park, especially in the car parks.
- Always wash your hands before eating or drinking.

General Risks

Below is a list of the general risks to be aware of for your visit. You'll also find an example risk assessment for facilitated river sessions at the Park in Appendix 3, that will help you with your own risk assessment.

- Site visit—We recommend that you visit the park yourself prior to your class visit to conduct your own risk assessment and become familiar with the park.
- What to wear—Pupils should dress appropriately for the weather, including a waterproof jacket if rain is forecast. Wellington boots are not essential but are helpful if the weather is wet and during the months of October—March.
- Recommended activity sites—Please use the recommended activity sites as specified on the 'Where to Study' map, these have been developed to use for these activities and have been tested that they are safe.
- Weil's Disease—Be aware of this during activities where children come into contact with water. Weil's Disease is a bacterial infection carried in rats' urine which contaminates water and wet river banks. The risk of anyone contracting the disease is rare and it is perfectly fine for children to touch the river water as long as proper precautions are taken. These include instructing children not to touch their face (eyes, mouth especially) and any fresh cuts should be covered and a glove worn (cuts that are healing over are fine). If any cuts or scratches occur during the activity, wash as soon as possible with soap and water in the toilet block. Also instruct children not to splash or flick water that can get into someone else's mouth or eyes. If water gets in mouth or eyes, rinse mouth with fresh water or eyes with sterile saline solution as soon as possible. [See this website](#) for more detailed information.
- Uneven surfaces—The river bank 'beach' areas are covered in pebbles which create a slip hazard. Please walk slowly and carefully on these areas.
- Litter and dog poo—This is a public park with many dog walkers, although most dog walkers are responsible for picking up after their dogs, there is sometimes still poo around. Please also look around for any hazardous litter before commencing an activity.
- Prickly and stinging plants—There may be brambles (blackberry plants), holly trees or stinging nettles in the activity area. Show these to pupils so they are aware of them.
- Bees and wasps—In spring and summer bees and wasps will be flying around. There's no need to swat at them, just simply move away.



Education Activities

This pack contains 2x 2 hour activity programmes on the topics of Waterways and Wetlands and Headstone's Habitats. The activities in this pack are designed for use in Headstone Manor Park - feel free to pick and choose from them as you wish. The water based activities are explained in more detail than the land based habitat investigations, as many schools are not as familiar with these. A warm up activity can be useful to help pupils familiarise themselves with the park upon arrival.

Also have a look at the Wild Fun leaflet in Appendix 4 for extra activity ideas.



Warm-up Activity—Can You Find...

Aim: To familiarise pupils with their activity environment and connect with their natural surroundings.

Timing: 5-10 minutes

Activity:

1. Pupils can work in small groups and take 3 minutes to find:

Something prickly	Something soft
Something smooth	Something colourful
An interesting stone	Something rough

2. Compare findings with other groups. As a class or in their groups, pupils can say what is their favourite thing and why.

3. Children could also sort in order of size/ material/ shades of colour/ etc.



Waterways and Wetlands

Activity 1: River Dipping

Please note: the river habitats at Headstone Manor Park are new and the plants and river bed are still establishing. It is recommended that students do not go into the water and that only one adult enters the river course to demonstrate the activity to avoid damaging this sensitive environment.

Aim: To identify different habitats in a river environment and a variety of aquatic invertebrates.

Timing: 30 minutes

Resources:

Wellington Boots	5x Sample pots
1x River dipping net	5x White plastic spoons
1x Extra bucket for water	5x Aquatic Invertebrate ID sheets
6x White trays	

[The Ecology Service](#) has an excellent Pond Pack for KS1-2 with worksheets, identification sheets and lots of information about water invertebrates. [OPAL](#) also has great identification sheets for KS2-3. The [woodland explorers pack](#) by the Plymouth Woodland Project also includes a section about river/pond dipping with further activities.

Introduction:

- Where do the river plants live? (Look for - plants at the edge, with only their roots in the water, plants rooted in but mostly underwater, plants underwater – some of these are absent in parts of the river due to the water flowing too fast for plants to take root.)
- Why are plants so important to the river? (They catch sun energy, animals eat them, they put oxygen into the water, and they provide shelter for animals.)
- Can you see any animals? (You may see water-boatmen swimming or freshwater shrimp clinging onto rocks in the water, or even damselflies or dragonflies flying above the river.)
- What are they doing? (Note: their behaviour will change once you start sampling.)

Activity:

The river dipping activity can be demonstrated by an adult. Set up the activity by filling the bucket with river water then filling 5 of the white trays about a quarter full up on the flat surface away from the water's edge. Refill the bucket about a quarter of the way and place by the white trays. Set up the last white tray by the river, half full.

1. To demonstrate river dipping, step carefully into the river with net in hand and face down stream.
2. Put the net at your feet with the open net facing upstream and gently kick the rocks and bottom sediment until it moves and releases the sediment (and animals!) into the water to flow into the net. You can also 'do the twist' and turn your feet side to side gently in the water into the rocks and sediment to release the creatures. Do this for about 15 seconds, then move to a different part of the river and do the same, perhaps choose a deeper or shallower part to sample different micro-habitats.



Waterways and Wetlands

Activity 1: River Dipping continued...

3. Take your net out of the water and empty into the white tray by the river. Ensure that you turn the net inside out and dip it in the water to remove the creatures inside and outside the net. Check the net carefully for any remaining wrigglers. Repeat if you would like to collect more creatures.
4. Take the white tray over to the other 5 white trays and gently tip a few of the creatures into each of the white trays, careful not to overfill or spill out any creatures and check in the tray for any remaining.
5. Pupils can now use their sample pots and spoons to collect any creatures of interest and identify them using the identification key. The main ones you'll find in this section of the Yeading Brook include: leech, shrimp, blood worm, black fly larvae, midge larvae, lesser water boatman, worms.
6. For an extension activity, look at how pollution tolerant each species is, using the [OPAL identification sheet](#) for KS2-3, and give the river a rating.

Finishing the activity:

Tip the trays and sample pots carefully and slowly back into the bucket, or if you have a steady hand, carry each tray back to the river and put gently back into the water ensuring you are close to the water so they're not cascading over a waterfall! Check the trays carefully and rinse if creatures are still on them. Empty the bucket into the river in the same way and you're done!

Tips for bringing your own resources:

If you don't have white trays, any large white containers will do as long as students can get their spoon in to take out creatures.

If you don't have sample pots, any clear plastic cups will also do fine.

Bug viewer pots can also easily be purchased online, here's an example: [Bug Viewer](#) | [NHBS Wildlife Survey & Monitoring](#) and can also be used for mini-beast hunting (make sure they're dry first!).



Waterways and Wetlands

Activity 2: Making a River Profile

Aim: To use measurements of width and depth to draw a profile or cross-section of the river bed.

For this activity pupils can stand at the river's edge and work in up to 5 groups of 5-6 pupils.

Timing: 25 minutes

Resources: 1x Measuring Tape 5m
10x Metre rulers (metre sticks)

5x Worksheets to record results (see next page)
5x Clipboards and pencils

Introduction:

- How are rivers formed? What are their features? (bank, meander, confluence, etc)
- This is the Yeading Brook. Where is its source and where does it end? Which way is it flowing? [For more info on Yeading Brook.](#)
- What can we measure in a river? (width, depth, speed)
- Observe the river, does it look all the same depth and speed? Or are there differences?

Fun Facts:

- Water has been on earth for 4.6 billion (4,600 million) years! The dinosaurs lived between 230 and 65 million years ago, so water was around long before the dinosaurs roamed the earth.
- We don't get any new water on earth. It is the same water that has been going round and round the water cycle for 4.6 billion years. This means that the water you drink may have passed through a dinosaur! Don't worry though, every time water evaporates, all the nasty stuff in it is left behind so it naturally gets cleaned.

Activity:

1. Demonstrate the activity first by choosing a part of the brook that is up to 1m wide and lay a metre stick horizontally across the river with 0m at the water's edge.
2. Use another metre stick to put vertically into the river along the edge of the horizontal metre stick to take depth measurements at 10cm intervals.
3. To get pupils thinking about how to start the task, ask them which end should they start measuring on the horizontal metre stick (0 or 1m?) and which way should they hold the vertical metre stick (0 in the water or 1m?). Finally, what will be the depth at 0m across the river? (0m)
4. Pupils can now use their set of equipment (2x metre sticks, 1x clipboard, worksheet and pencil) to complete the activity in their groups.
5. They can designate job roles within the group and rotate so each gets a turn at each task.
6. Pupils can record their answers in the table using the worksheet on the next page and then draw their river profile in the graph using the data they collected.



Group Member Names: _____

Making a River Cross-section Recording Sheet

Location: _____

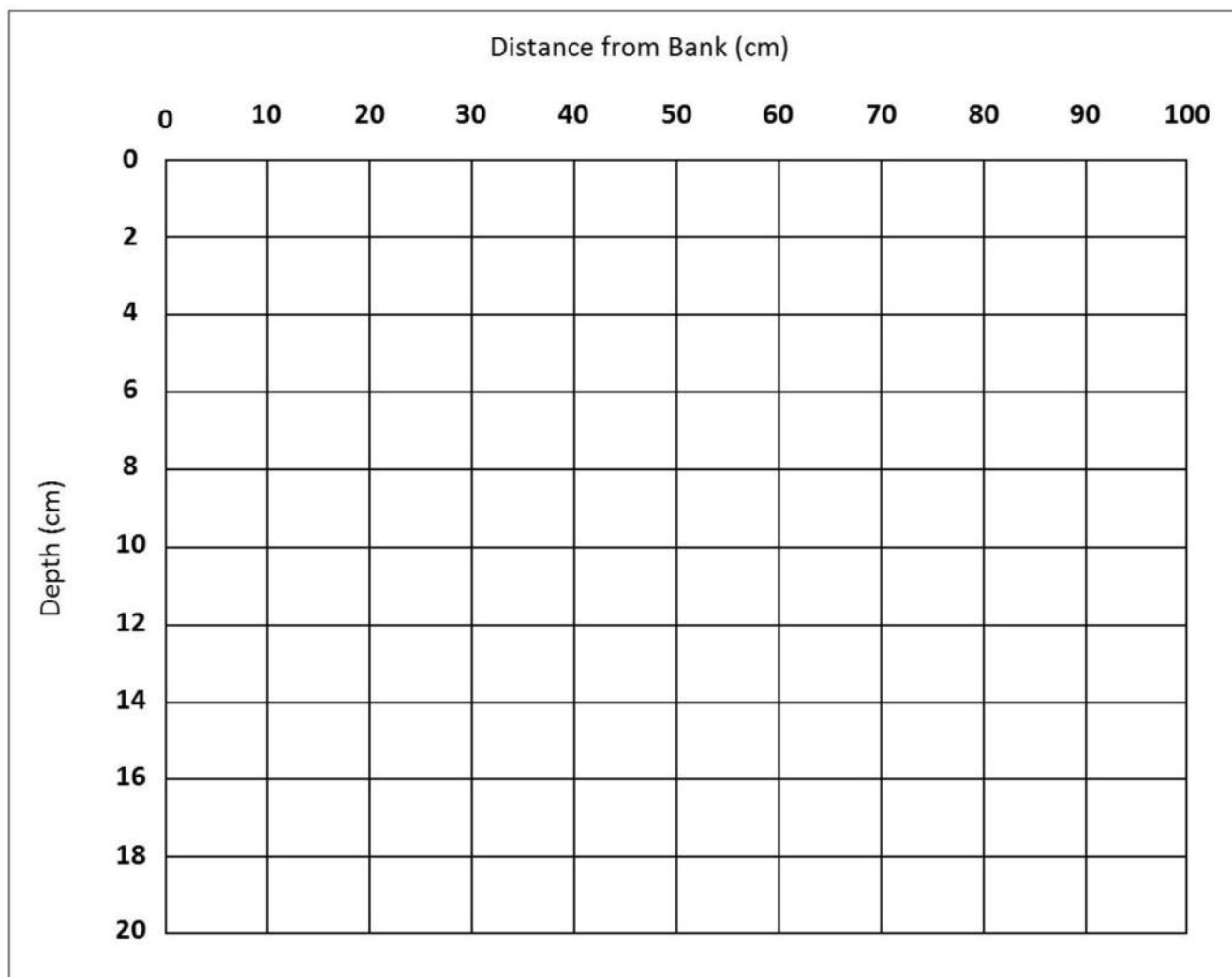
How wide is the river? (cm) _____

Record the depth of the river at 10cm intervals in the table below. You can stop recording when you reach the width of the river, eg: if the river is 70cm wide, your last depth measurement will be recorded at 70cm.

Distance from bank (cm)	0	10	20	30	40	50	60	70	80	90	100
Depth (cm)											

Plotting the River Cross-section

On the graph below, use your data from the table above to plot the depth (cm) every 10cm from the bank. Your graph will look like the shape of the river bed.



Waterways and Wetlands

Activity 3: Measuring River Speed

Aim: To determine the average river flow rate (or speed) in metres per second (m/s).

Timing: 20 minutes

Resources: 1x Measuring tape 5m

2x Metre sticks

1x Stopwatch or timer

5x Worksheets to record results (see next page)

5x Clipboards and pencils

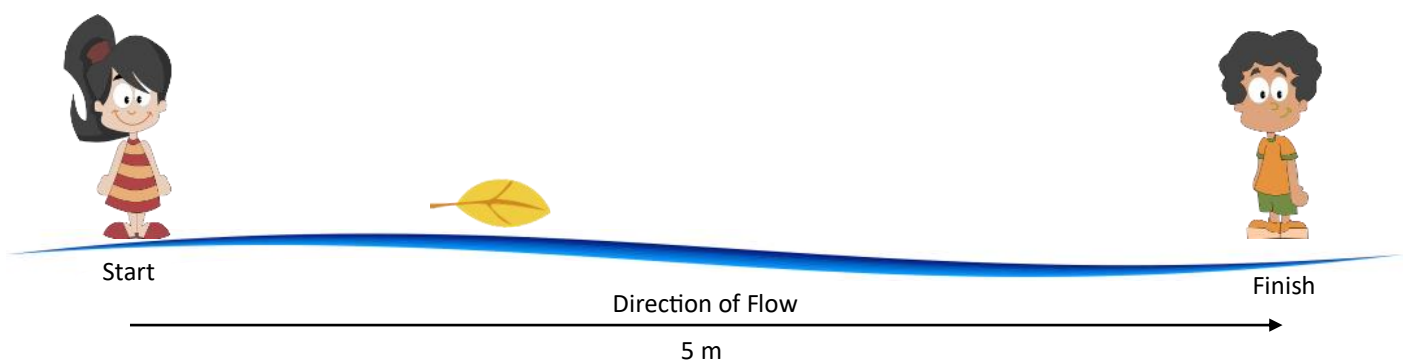
A collection of small yellow leaves from around the park or similar small brightly coloured objects that float.

Activity:

This is a whole class activity.

1. Using volunteers from the class, measure out a 5m length along the river bank using the measuring tape. It's best to find a section of the brook with fewest obstacles as possible to avoid the floating object stopping along the way.
2. Lay down the measuring tape parallel to the bank and mark the start and finish line with a metre stick laid across the river. Or mark the start or finish lines with any easily visible object.
3. Place a leaf in the water before the start line and get pupils at the start line to call out 'Go!' when the leaf exactly hits the start line. Start the timer.
4. Have pupils at the finish line call out 'Stop!' when it gets exactly on the finish line and stop the timer. Collect up the leaf if possible to avoid adding objects to the river channel which can obstruct flow. **Tip**—if the leaf becomes obstructed along the way, you'll have to start again! To avoid this, an adult can carefully move plants out the way, perhaps with a stick or metre ruler, as the leaf goes by.
5. Pupils can record the answer on their group worksheet.
6. Repeat 3 times to get an average, then calculate the flow rate using:

$$\frac{\text{Distance}}{\text{Time}} = \text{Flow Rate in m/s}$$



Group Member Names: _____

Measuring River Speed Recording Sheet

To calculate flow rate of the river, we measure the time it takes (in seconds) for an object to travel a distance of 5m downstream. We can repeat it 3 times to get an average.

Test 1 (sec)	Test 2 (sec)	Test 3 (sec)	Average (sec)

Can you calculate the Flow Rate by using this equation?

$$\frac{\text{Distance}}{\text{Time}} = \text{Flow Rate in m/s}$$

River Processes and their meaning

Match the river process to its correct meaning:

Erosion	Sediments and materials moving along the river
Transportation	The bend in a river
Deposition	Fast flowing water breaks sediments and materials from the bank and bend of the river
Meander	A force that slows down moving objects
Friction	Where the river slows down, sediments and materials are dropped

Waterways and Wetlands

Activity 4: River Pollution & Wetland Walk

Pre-visit learning in class: Pupils can learn about the 3 main sources of river pollution using the worksheets in Appendix 5. This resource can be printed and cut into a card matching activity or used just as it is.

Aim: To explore signs of the main sources of river pollution, identify water birds and discover the function of wetlands.

Timing: 30 mins

Resources: 15x Signs of pollution spotter sheet (see page 19).
15x Water bird spotter sheet (see page 20).
'Where to Study' map earlier in the pack.
Function of a wetland information—see Appendix 1 'Controlling the Waters—Filtering and cleaning our water and reducing flood risk'.
Optional—paper, pencil and clipboards for drawing and recording.

Introduction:

- What is pollution?
- What are the three main sources of river pollution?
- What is a wetland and what is the function of it?

Activity:

1. Follow the [Orange Trail](#) on the activity map starting at point 1, which is the Moat outside the café (the large water area with railings).
2. Pupils can use the signs of river pollution spotter sheet to look around for signs of river pollution and where it can enter the water. What can pupils see or smell? Does the water look grey?
3. Pupils can use the bird spotter sheet to spot different kinds of water birds. How does pollution affect water birds?
4. Continue to follow the [Orange Trail](#) along the Moat away from the café and around the wetland area to point 3. Continue to spot signs of river pollution and water birds along the way.
5. At point 3, talk about the function of wetland and why they are so important. Which areas are deep (sediment settling) and which areas are shallow (so water can flow and habitats)? As an optional activity, pupils can draw the wetland habitats they can see.
6. Continue your walk following any route you wish around the park; there is plenty to explore!



Waterways and Wetlands

Activity 4: River Pollution & Wetland Walk

Post Activity — make a water filter:

Aim: To demonstrate how water can be cleaned simply by trapping sediments and objects in the water, just like in a wetland.

Timing: 20 minutes

Resources: Takeaway container of soil 6x cut in half and inverted plastic water bottles
6x cotton wool balls 6x cups for mixing 'dirty' water
6x spoons or stirring sticks

1. Place a cotton ball in the top of the bottle so it's level with the rim of the bottle, invert and place in the bottom portion of the bottle.
2. Place a couple of spoons of soil in the cup and half fill with water and stir with the spoon or stick.
3. Tip the water slowly into the water filter and watch the water come out much cleaner!
4. There are lot's of different ways to make a water filter—experiment with newspaper, sack cloth, sand, gravel, and more.



Can You Spot Possible Signs of Water Pollution?



Is there litter near the water?



Is there brown or grey water coming out of a pipe?



Is there grey muck on objects in the water?



Is there litter in the water?



Does the water smell?



**Wildlife
Watch**

NATURE SPOTTING SHEET

Name _____



Mute swan

☐

Tufted duck

☐

Mallard

☐

Notes _____

Notes _____

Notes _____



Moorhen

☐

Coot

☐

Little egret

☐

Notes _____

Notes _____

Notes _____



Black-headed gull

☐

Herring gull

☐

Grey heron

☐

Notes _____

Notes _____

Notes _____

Headstone's Habitats

Activity 1: Mini-beast Investigation

Pre visit Activity: The park has a range of habitats, consider what type of habitats, and microhabitats, might be found and which animals live in these.

Aim: To discover different animal habitats and what lives there, in particular mini-beasts/invertebrates. Key Stages 2-3 can incorporate further classification and a grassland invertebrate hunt.

Timing: 45 mins

Resources: 10-15x Magnifying glasses or bug pots with magnifying lid 10-15x Bug collecting pots
10-15x Spoons 10-15x Soft paint brushes (optional)
KS1 Woodland Trust spotter sheets—[Mini-beasts](#) & [Creepy Crawlies](#)
KS2-3 [OPAL Invertebrate spotter sheet](#)
Optional—paper, pencils and clipboards for drawing and recording

For more great resources for your investigation, see this [woodland explorers pack](#) by the Plymouth Woodland Project, including a **tally sheet** and other bug activities.

Introduction:

- What is a habitat? (A habitat is a place where a creature lives and has the right amount of shelter, space, food and water to suit the living thing. Different habitats are home to different creatures.)
- What do you think lives here in the park?
- Be still, quiet and listen. What can you hear? What can you see?
- Where do creatures like to live? Why do they live there? What are their adaptations? (These can be researched more back in class.)
- Where should we look for mini-beasts/invertebrates?
- How can we tell if a creature is living there? Clues: Tracks, poo, nibbled sticks and nuts, cobwebs, snail shells, bird egg shells etc.



Activity:

1. Demonstrate how to find and collect mini-beasts—use your spoon to brush aside soil and leaf litter and then stop and look, repeat until you find something, scoop up using the spoon and place in the pot with the lid on. If you have a paint brush, creatures can be gently brushed off a tree or log or from the ground into the pot.
2. Top tips and safety—woodland mini-beasts like to live on or close to wood, it's best to look near the base of trees, under any dead wood and in the dirt under leaf litter. Logs and pieces of wood can be heavy, if lifting or rolling, advise pupils to be careful of fingers, toes and others around them.
3. Pupils can use their spotter or identification sheet to identify what they have caught.
4. Pupils can make a detailed drawing of one of the creatures.
5. Make tally sheet of creatures caught to take back to school to make a graph or for further analysis.
6. Return all creatures to their homes safely and ensure any wood is turned back over to protect habitats.



Headstone's Habitats

Further Activity Suggestions

- How could you sort the creatures you have found? Check out this [Learning Through Landscapes 'Get it Sorted'](#) activity for some inspiration.
- Make a Venn diagram on the ground with twigs to sort the creatures. Photograph and record back in school. See Appendix 6 for example diagram.
- Demonstrate a food chain by assigning pupils a creature role and putting them in order of the food chain. Extend the activity into a food web. What happens if one link disappears? Why is it important to protect all these creatures? Try out this [Learning Through Landscapes 'Interdependence in Food Webs'](#) activity.
- Can you make a new habitat for creatures? Search the woodland area for sticks and make a 'mouse house' shelter against a tree. Make sure it's waterproof and camouflaged! Turn this into a Science Investigation with [Learning Through Landscapes 'Hibernation: An Insulation Investigation'](#) activity. Or the ['Nest Building'](#) activity.
- Do your own grassland habitat mini-beast investigation by making your own sweep nets: [How to make your own sweep net.pdf \(lostladybug.org\)](#)
[Homemade Sweep Nets \(from Outdoor Science Lab for Kids\)](#)
- Back at school, you could further research the creatures you have found, to make fact files/ displays/ models.



Headstone's Habitats

Activity 2: Tree Identification

Aim: To name the different parts of a tree and identify different types of trees.

Timing: 30 mins

Resources: Tree identification charts—There are many great resources for identifying trees on the [Woodland Trust website](#) including a Leaf iDial which pupils can make before their visit. Check out this [OPAL tree ID chart](#) for older children.

Optional Activity Resources: A5 blank white paper, several pieces
30x Clipboards or boards to lean on
Several thick crayons of different colours that can be held and used horizontally on paper

Introductory Activity: Build a Tree Game

- Why are trees important? See reasons in the [woodland explorers pack](#) by the Plymouth Woodland Project.
- What are the different parts of the tree and what do they do?
 - * Leaves - use sunlight, air and water to make food/energy for the tree
 - * Trunk - supports tree/ carries water and nutrients between leaves and roots
 - * Roots - support the tree and take in nutrients and water from soilPupils can become the different parts of a tree as a class or in smaller groups.
Check out the [Build a Tree game](#) for helpful instructions.

Younger pupils can act out the parts of tree this way:

- Roots - crouching/lying down and sucking up water.
- Trunk - some children strong like bouncers as trunk, others moving arms up and down to show transporting water and nutrients.
- Branches with leaves - reaching out, catching sun, making into food.
- Animals—birds, insects, squirrels, etc.

Activity: Tree Identification

1. Pupils can use their tree wheel or identification sheet to identify trees by their leaves or bark and twigs in winter.
2. Top tips—in autumn and winter, pupils can look around for leaves on the ground to identify. Not every leaf on one tree is exactly the same so look carefully!

Optional activity: Make a Tree ID Booklet

1. Place a piece of paper over the trunk of a tree and use the crayon horizontally to make a bark rubbing on the paper.
2. To do a leaf rubbing, place a flat, dry leaf on a board, place paper over it and use the crayon horizontally to colour over the leaf.
3. Be sure to name the leaf or bark rubbing correctly and use descriptive words.
4. Put everyone's work together to make a tree ID booklet.



Headstone's Habitats

Activity 3: Meet a Tree

Aim: To identify different types of trees.

Timing: 20 mins

Resources: 15x Blindfolds or material strips or children can just close their eyes.

Activity: Meet a Tree

1. In pairs, one child can lead (the Leader) and one child can be blindfolded (the Follower).
2. The Leader chooses a tree that they want to take the Follower to. The Leader turns the Follower around a few times and then takes their shoulders to lead them to a tree. It's best if they take a winding route so the Follower can't guess where they are going!
3. When arriving at the tree, the Follower can reach out to touch the tree on its bark, leaves, etc, smell it and give it a hug.
4. The Leader takes the Follower back to the starting position, the Follower takes off their blindfold and tries to guess which tree they were at.
5. Safety and top tips—search around the area for stinging nettles and brambles at the base of trees and advise children not to go to those ones. Advise the Leader to look out for trip hazards on their route and also to stop before they get to the tree so the Follower has a chance to put their hands out and slowly approach the tree.



Alternative Activity: Guess the leaf games

1. Children sit in pairs, with one child blindfolded. The other child gives them a leaf to feel.
2. The blindfolded child can then describe their leaf by what they can feel.
3. They then remove the blindfold and try to identify their leaf from a group of 3.
4. Use the identification key to name the type of leaf.

OR

1. In pairs, children choose 3 different leaves. They can both look at them and identify which tree they come from using the [tree iDial](#) or ID sheet.
2. Children can then sit back to back, with one child holding the leaves (if children are younger, they can continue to refer to the identification key for help).
3. The child with the leaves has to pick one to be identified and the other child has to ask 'yes' and 'no' questions about the leaf they picked, eg: 'does your leaf have wobbly edges?'
4. Continue asking questions until they can correctly guess the name of the tree.

Check out the [Learning Through Landscapes 'Poetree'](#) activity which encourages pupils to use all their senses to explore a tree to inspire creative writing.



Headstone's Habitats

Activity 4: How Tall is Your Tree?

Aim: To use measurements to estimate how tall a tree is and what age.

Timing: 20 mins

Resources: 5m tape measures or several lengths of string cut to 1m
Marker pens or lead pencils

For more helpful resources for exploring trees, see the [woodland explorers pack](#) by the Plymouth Woodland Project, which includes a **tree detectives worksheet**.

Activity: How tall is your tree?

Pupils can work in small groups or pairs.

1. Stand a partner next to your tree.
2. Move back about 10m and hold up a stick. Look through one eye and line up the stick with the top of your partner's head. On the stick, mark where their feet come to.
3. Stay standing in the same place and use your stick to see roughly how many times the marked section fits into the tree, vertically.
4. Now measure your partner using a tape measure or string and multiply this by the number of times they fit into your tree (you could use **rounding and estimation**).

More tree height estimation activities:

- Guess where on the ground your tree top would land if it fell over, and measure from here to the tree's base.
- The [RHS Campaign for School Gardening](#) website has a way to measure height by looking through your legs!
- For more ideas check out [Learning Through Landscapes '10 Ways to Measure a Tree'](#) activity.

Activity: How old is your tree?

You can estimate the age of trees that you find by using your hands.

1. Place a hand flat against the tree trunk with your fingers and thumb out-stretched. Each hand span like this is equal to about five years of growth.
2. See how many hand spans it takes to go all the way around the tree. You can either count up in fives as you go around, or count the number of hand-spans and then multiply that number by five. This will give you a rough idea of how old the tree is.



Further Resources

[This animated film](#) about the River Brent is a great illustration of the issues facing rivers and the work being undertaken to re-naturalise and take better care of our rivers.

[Water Survey | Research groups | Imperial College London](#)

[River animals tally sheet \(naturedays.co.uk\)](#)

[School Resources – Rivers and People](#)

[Freshwater name trail – Field Studies Council \(field-studies-council.org\)](#)

[River pollution and human impact on the environment activity \(force.org.uk\)](#)

[The Ecology Service - Pond Pack \(rbkc.gov.uk\)](#)

[River based school learning resources - Friends of the River Crane Environment \(force.org.uk\)](#)

[Wildfowl and Wetlands Trust—Learning Zone resources and visits to London Wetland Centre](#)

[Walthamstow Wetlands | London Wildlife Trust \(wildlondon.org.uk\)](#)

[Minibeast Hunt - Tips for Finding Bugs - Woodland Trust](#)

[Bugs Count Survey | Research groups | Imperial College London](#)

[Woodland name trail – Field Studies Council \(field-studies-council.org\)](#)

[Soil and Earthworm Survey | Research groups | Imperial College London](#)

[Polli:Nation Survey | Research groups | Imperial College London](#)

[Get started with your spotter sheets | Wildlife Watch](#)

[Animal Tracks - Prints and Poo ID for Kids - Woodland Trust](#)

[Biodiversity Survey | Research groups | Imperial College London](#)

[Wild Fun Headstone Family leaflet \(thames21.org.uk\)](#)

[Tree Health Survey | Research groups | Imperial College London](#)

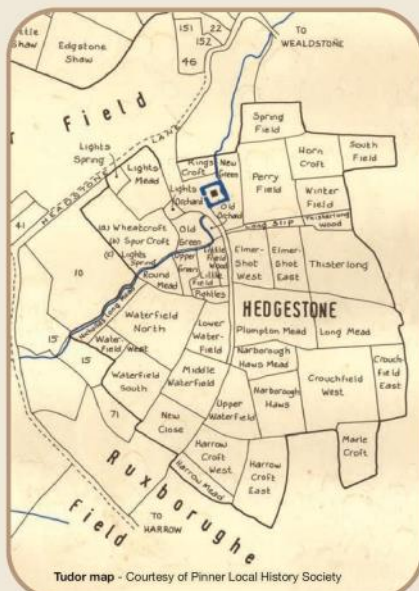
[Tick sheets - Woodland Trust \(treetoolsforschools.org.uk\)](#)

[Water Futures](#)—Secondary school resource for teaching Water Resource Management in London linked to climate change and population growth.



FARMING AT HEADSTONE

In Medieval times Headstone Estate was part of the manorial lands of Harrow, which were owned by an important lord and leased to local farmers. Tenants paid rent to the Lord and provided him with a share of their crops, vegetables, orchard fruits and animals.



We believe people have been farming here for at least a thousand years. The farm (now 'Headstone') was called 'Hegton' which comes from the old English words 'hege' (hedge) and 'tun' (a large homestead).

The field you are standing in is known as Kings Croft. A "croft" is an old English word meaning a small piece of land close to a house. In the past ridges and furrows from ploughing could be clearly seen.

Headstone was a mixed farm, animals were kept and crops such as beans and wheat were grown. We know fruit also was grown on this field and on Headstone Manor Island. There were areas of pasture where animals would graze and hay meadows fed animals over winter. Animals raised at the farm included horses, cows, pigs, hens, ducks and geese.

One hundred and sixty six (166) new trees have been planted to create this orchard. There are 17 different types of fruit including apples, pears, plums as well as the more unusual - quince, medlar, mulberry and persimmon. The orchard, which is cared for by volunteers, provides shelter and food for a host of birds, mammals and insects.



6 Brownless Russet apple

15 Bushey Grove apple

4 Persimmon

7 Royal Medlar

10 Monarch plum

3 King James mulberry

6 Lane's Prince Albert apple

5 Westerveld Medlar

6 Allington Pippin apple



25 Conference pear

15 President plum

10 Hornead Pearmain apple

10 Meeches Prolific quince

7 Crimson Newton Wonder apple

4 John Downie crab apple

25 Egremont Russet apple

8 Nuvar Marble crab apple



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THE PEOPLE AND WATERS OF HEADSTONE

There are fascinating clues to the Neolithic people who were hunter-gatherers on this land over 6000 years ago. Fragments of pottery, shards of flint, stone hand axes and scrapers for cleaning skins have all been found!

We believe that people settled here permanently around a thousand years ago. The fresh water streams and springs which cross this area would have been important for attracting people to farm.

The Yeading Brook is one of Headstone's streams. It starts its journey at nearby Pinner Park and flows through the lands of Headstone Manor Park, where it meets other small water courses. The Yeading Brook joins the much larger River Crane at Hayes, which then joins the mighty River Thames at Isleworth.



The Yeading Brook has been flowing through pipes in this part of the park, since 1968. This was an attempt to stop flooding. Unfortunately this did not solve the problem and therefore the pipe has been removed to open up and naturalise the river providing a small wetland refuge (a haven for wildlife) and flood storage.

The new channel for the Brook looks deep for a little stream, but during heavy rainfall it will help slow the waters and reduce flooding.

Ponds were an important feature of any farm. At times of flood they hold water and during drought they provide a store for farm animals to drink from. In the past Headstone had many ponds, which would have been connected to fishing and farming activities. Wells have been found on the site, suggesting water for cooking and washing was taken from a different source.

Close to where you are standing is an old hedgerow. Hedgerows were another important feature of a farm. They divided up fields and stopped animals wandering. The hedgerow running along the path towards Headstone Lane has been there for at least 500 years. It is full of different types of trees and plants. The hedgerow is also a fantastic home to wildlife.



1911 map



1905 pond



Volunteers working in our rivers



Yellow flag iris



Purple loosestrife



Marsh marigold



Flowering rush

Produced by Fitzpatrick/Woodman - 01834 771 771



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A CHANGING LANDSCAPE

Humans have been changing the landscape at Headstone for hundreds of years as due to the presence of clay soils and the many small streams the land would often become waterlogged. There are maps showing where farmers changed the courses of streams running across the land to improve the drainage on what could be a very muddy farm.

People have attempted to manage the waters here by digging networks of drains, ditches and ponds and most significantly, the moat which was built around 1300.

Later records show that in 1848, Mr Hill a local farmer, laid a system of drains using pot and iron pipes to drain the Wheatcroft and Spur Croft fields.



In the past the moat had no barrier railings. The corner near where the Moat Café now stands was a gradual dip down to the water. Farm animals would have been taken to drink here, like these ducks photographed in the 1920s. After the farm became a park, this is where children would paddle!

More recent times have unfortunately seen the water in the moat become polluted as a result of run off from the highways and sewers therefore the work to construct the sedimentation pond and reed beds that you will see along your journey will help to control flooding, improve water quality and provide a new habitat for wildlife.



As you stand here you may see many different birds, ducks, egrets and maybe even a heron or kingfisher and hopefully in the future more diverse wildlife in the park.



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CONTROLLING WATERS

Protecting properties and infrastructure



North Harrow flooded

The Headstone Manor Park Flood Alleviation Scheme aims to address surface water flooding in the North Harrow area. The scheme provides basins within the park that will temporarily store water and reduce the risk of the downstream drainage system exceeding capacity during rainfall events.

The basins will normally be dry, however during rainfall events, some water will be diverted and temporarily held in the basins instead of entering the downstream drainage network. This will free up capacity in the drainage network, reduce the volume of sewer overflow and reduce surface water flooding levels in North Harrow. This project will increase flood protection for homes and businesses downstream adding to the overall Environment Agency target of 300,000 homes better protected by 2021.



Headstone Manor Park flooded

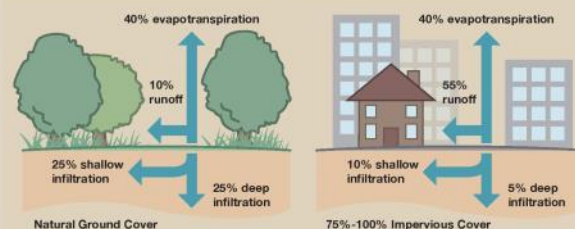
After rainfall ceases and once there is enough capacity in the downstream drainage system, water temporarily held in the basins will slowly empty from the basins and return to the Yeading Brook channel.

The works for the flood alleviation scheme will also provide additional benefits within the Headstone Manor Park including:

- Improved access to the Yeading Brook
- Improved playing field drainage
- New walking paths and wayfinding around the park

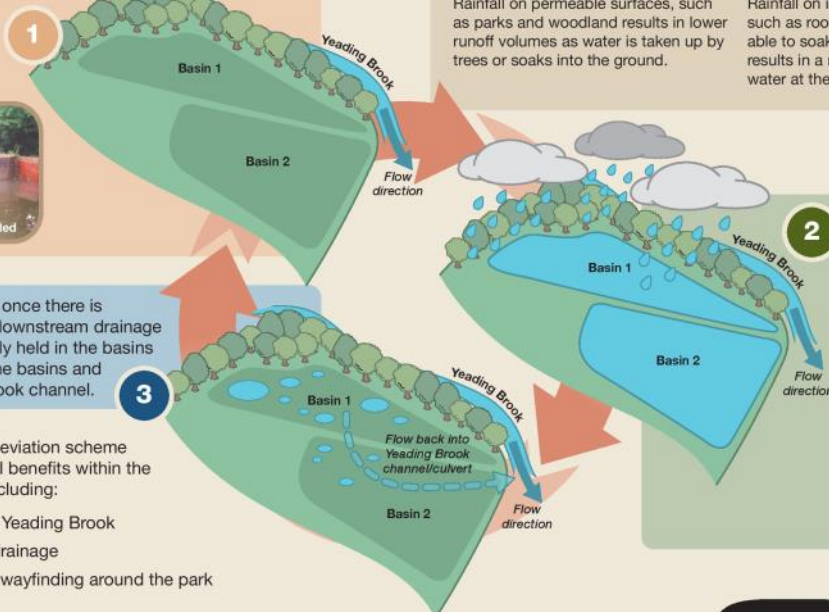
Surface water runoff is becoming increasingly problematic in the UK. Surface water flooding and sewer overflow are occurring more frequently, and the threat of climate change will only worsen these problems.

The increase in surface water runoff in urban areas is largely driven by the change of permeable surfaces to impermeable surfaces, particularly as development seeks to keep up with growing populations.



Rainfall on permeable surfaces, such as parks and woodland results in lower runoff volumes as water is taken up by trees or soaks into the ground.

Rainfall on impermeable surfaces, such as roof tops and roads, is not able to soak into the ground and results in a much greater volume of water at the surface.



Once the first basin fills up, water will overflow into the second basin. In extreme rainfall events, the second basin may fill up and start overflowing back to the natural flow path around the Yeading Brook. The basins can hold over 20,000 cubic metres of water, equivalent to about 8 Olympic swimming pools.

Produced by Fitzpatrick Woodman - 01844 711 717



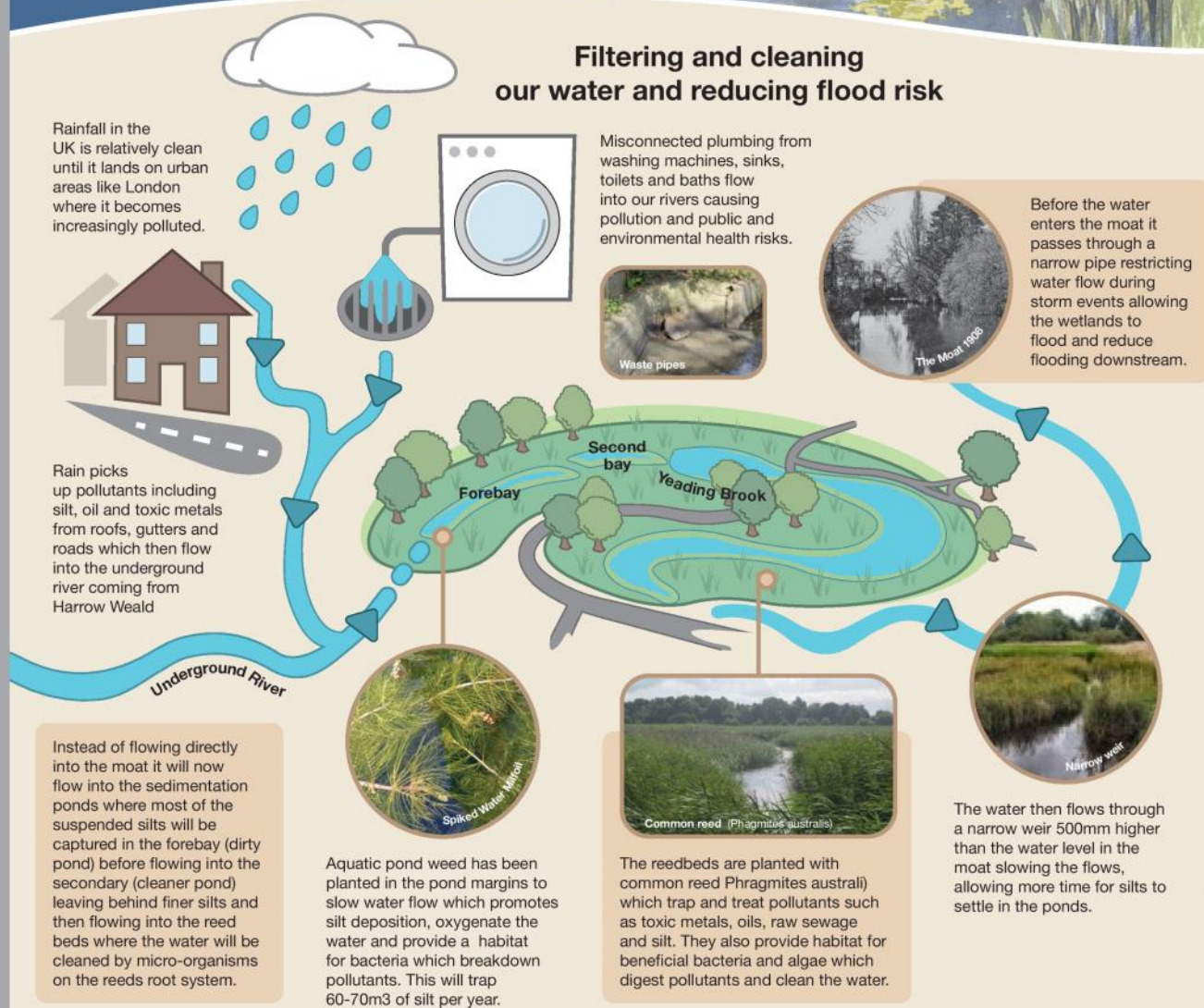
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CONTROLLING THE WATERS



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Headstone Manor Park

Wayfinder Trails

Play
Discover
Explore



© Neil Greenhalgh

Three trails to
discover, explore
& enjoy the park



Welcome to Headstone Manor Park

Travel back 500 years and this park was part of a noisy, bustling farm supplying the residents of Headstone Manor and people in the City of London with food. As you wander around you can still catch glimpses of its past from woodlands and hedgerows and a water-filled moat.

Today it's a place for local people, and recent work has helped improve the Park for everyone. But the Park's value doesn't stop there - Headstone Manor Park is helping to prevent pollution running into our rivers and reduce the risk of flooding for local communities. Wetlands and flood basins have been recently added and Yeadling Brook (which runs into the River Cranel) has been opened up for people and wildlife to enjoy after years of running underground.

Orange Trail

Follow the wayfinder posts to discover the waterways and wetland of the park on this 1km trail.

1 Moat

The moat provides a home for fish such as the stickleback. In spring, the male develops a bright red throat and belly and performs a courtship dance to attract a mate.

2 Heron

Despite its urban setting, the park attracts much wildlife. Birds are easy to spot but look more closely and you may see insects, like dragonflies. Mammals such as bats and badgers may also be seen at dawn or dusk.



Badger



Reed bunting



Three-spined stickleback

Continue on past the 'Kodak' big lens sculpture.

3 Sedimentation Pond

New homes like those on the old Kodak factory site put pressure on watercourses. Pollutants such as silt, oil and toxic metals are washed off roofs and roads. The ponds trap some of this silt.

4 Reed Beds

The reed beds are a fantastic habitat for birds such as the reed bunting. Reeds are, however, fast growing so need managing to provide the conditions needed by different animals.



Redwing

5 Orchard

Birds love to feed on the fruit in the orchard. As well as the familiar blackbird you may see other thrushes such as a song thrush or winter visitors like the redwing.



Freshwater shrimp

6 Yeadling Brook

Now open to daylight after years underground, Yeadling Brook is healthier. The presence of animals such as freshwater shrimps indicate cleaner water. Volunteers also test the water for hidden pollution.

7 Picnic Place

Water has been a magnet for people for centuries. In our busy modern lives, the brook offers a calming place to stop and enjoy a picnic, or to take a paddle on a hot day.

8 Trees and Hedges

Trees and hedges provide safe corridors for wildlife. Listen out for the high-pitched calls of flocks of long-tailed tits as they flit from tree to tree.



Long-tailed tits



YEADLING BROOK

9 Sport

The park is valued by the local community as a place for sports such as cricket and football. Flood basins and new drainage installed in 2020 help to keep pitches dry.

10 Outdoor Learning

The old oak trees in the woodland copse close by provide a great nesting site for many birds and mammals, such as bats. Listen out for a woodpecker drumming in late winter or early spring.

Key	
	Entrance
	Park
	Toilets
	Moat Café Visitor Centre
	Get fit while exploring nature and heritage on a 1km trail.
	Explore the waterways and wetlands on a 1km trail.
	Explore Headstone Manor and Museum on a 900m trail.

*This Nature Finder's trail is partially unsurfaced. The whole trail is only accessible during Museum opening hours.

11 Environment

Research shows that 80% of ocean plastic comes from rivers. Water from Yeading Brook enters the sea, via the River Crane and the River Thames. Help the environment – please take your litter home.

12 Pollution

Are your drains connected properly? Dirty water from washing machines, dishwashers and even toilets still gets into rivers, killing wildlife. It's estimated that one household in every street has a misconnection. Visit www.connectright.org.uk to check.

Wildlife poisoned by pollution



Common pipistrelle



Common toad

White Trail

Look out for some local landmarks and birds such as the red kite overhead on this 1 km trail around the south of the park. (NB: there are no posts in this section, the numbers on the map are as a guide only)



Lady's smock

1 Wheat Fields

Old maps suggest that these were once wheat fields. Food was also grown here during World War 2 as part of the Dig for Victory campaign. Goats were also grazed in war time and one local resident remembers chasing them as a child!

2 Flood Basins

Excavated in 2020 the basins hold water for short periods when rainfall is high. This prevents flooding downstream. The temporary ponds attract wildlife such as toads and plants like lady's smock which thrive in the damp soil.

3 Views from the Park

On a clear day look to the north to see the hills that mark the boundary between Greater London and Hertfordshire. At around 150m in places, these hills are the highest place in North London.

4 Looking south from this point you can see St Mary's Church spire at Harrow on the Hill. The church is next to the famous Harrow School.

5 Mighty trees

Giant redwood trees stand tall and straight amongst the mighty oak trees in this woodland. The redwoods are estimated to be about 75 years old so they are still relatively small. They can grow to over 70m. That's taller than the white chimney on the old Kodak site!



Jay



Giant redwood

6 Hedgerow harvest

In early autumn look out for jays as they collect fallen acorns to store away for food in winter. In the summer you can see the pretty flowers of the dog-rose.



Red kite



Dog-rose



© Headstone Manor and Museum

Blue Trail

Pick up a Nature Finder's trail leaflet from the visitor centre to explore the Scheduled Ancient Monument, which is home to Headstone Manor & Museum. The trail takes you around the moat and inside the grounds to discover the Great Barn and the history of this medieval farmstead. Please note – parts of the trail are only accessible when the Museum is open. For information about the Museum, including hours of opening:- www.headstonemanor.org

Find out more about Headstone Manor Park

www.harrow.gov.uk - visit the Headstone Manor Park page for information about facilities available at the Park and details of how to get to the Park.

www.headstonemanorpark.org - a website run by the Friends of Headstone Manor Park. Lots of information about the Park, activities and wildlife. The Friends are a group of volunteers who donate their free time to looking after the Park to ensure it's a special place for people and wildlife.

Produced by Thames21 www.thames21.org.uk with the support of the Friends of Headstone Manor Park www.headstonemanorpark.org



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RISK ASSESSMENT – School visits to Headstone Manor Park for Waterways and Wetlands Session

Date of risk assessment: 13 th July 2021	Location: HA2 6PX Headstone Manor Park/ Recreation Ground	Assessor: Vicky Duxbury Deb Frankiewicz	Next Review Due: 13 th January 2022
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Hazards	Possible Risks (of injury or illness)	Likelihood of injury or illness with no Risk Reduction Measures	Severity of injury or illness	Risk Reduction Measures	Likelihood of injury or illness with Risk Reduction Measures	Likelihood of injury or illness on the day of the event (write in pen)	Equipment needed to reduce likelihood of injury or illness
Covid related hazards	Death	Medium	Major	<ul style="list-style-type: none"> School groups will remain separate if more than one on site at a time Toilet facilities will not be shared, separate toilet and hand washing facilities for each school group Resources are used by one class/year group bubble only and are either sanitised or left untouched for 48 hours before being used by the next group 	Low		Anti-bacterial hand gel available at all times Copy of RA

				<p>All participants must:</p> <ul style="list-style-type: none">• Not touch face with hands.• Catch coughs and sneezes with tissue or sleeve. <p>Indoors:</p> <ul style="list-style-type: none">• Indoor spaces will only be used for toilets and hand washing or in extreme circumstances.• All attending adults must bring and wear a face mask.• Adult numbers are restricted to follow current Government guidance.• Toilet block is cleaned before each group visit. <p>Outdoors:</p> <p><u>Parents / helpers / volunteers who are not part of school staff:</u></p> <ul style="list-style-type: none">• Maintain a distance of 2 metres from children (except their own) and adults or wear face mask and keep 1m distance. <p><u>Teachers and school staff/vols:</u></p> <ul style="list-style-type: none">• Maintain a distance of 2 metres from other adults not from the school or wear face mask and keep 1m distance (not required for children). <p><u>Educators:</u></p> <ul style="list-style-type: none">• Use antibacterial gel or wash hands before each session.• Maintain a distance of 2 metres from children and staff or wear face mask and keep 1m distance			
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Weather: Wind	Slippery surfaces; risk of slips & falls	Medium	Major	<ul style="list-style-type: none"> Advise school that children and adults should wear appropriate clothing & sun protection Cancel in extreme weather/ high winds Check forecast & adapt timings/ activities accordingly. Work in a sheltered & shady area as needed 	Low		First Aid Kit Mobile Phone Copy of RA Sun tan lotion
Rain	Heat Stroke/ sun burn Head/ eye injury due to falling branches in high winds	Medium	Major				
Heat	Slips, trips & falls leading to cuts/ bruises/ fractures	Medium	Major	<ul style="list-style-type: none"> Plan activity area to avoid immovable hazards & areas of very uneven ground Advise participants that there may be uneven ground 	Low		First Aid Kit Mobile Phone Copy of RA
Uneven surfaces, fallen branches, mud, slippery surfaces including bank of stream	Drowning	Medium	Major	<ul style="list-style-type: none"> Divide children into groups with a supervising adult Advise teachers and adults to closely supervise children when close to brook or moat Modify activity according to age of children 	Low		First Aid Kit Mobile Phone Copy of RA
Water bodies	Cuts, puncture wounds, broken limbs	Low	Major	<ul style="list-style-type: none"> Litter pick in teaching spaces before activities Advise all to be careful if touching things on the ground 	Low		First Aid Kit Mobile Phone Copy of RA Litter Picker Litter Sacks
Sharp objects or litter (broken glass, metal, needles, etc)							

Natural materials collected for activities	Cuts/ scratches Biological Contamination	Medium	Minor	<ul style="list-style-type: none"> Safety briefing to advise participants of the kind of items to collect and those to avoid & to advise all to wash hands after activity and before eating. Provide anti-bacterial hand gel 	Low		Anti-bacterial hand gel
Incorrect use of classroom and field equipment	Cuts Bruising Puncture wounds Adhesive or chemical contact with skin and eyes	Medium	High	<ul style="list-style-type: none"> Briefing on safe use of equipment. Adult supervision of participants utilising equipment. Remove and store equipment when not in use. When using chemical phosphate tablets, adults will handle these and put them in test tubes. 	Low		First Aid Kit Mobile Phone Copy of RA
Using clay soil from site	Cuts/ scratches Biological Contamination	Medium	Minor	<ul style="list-style-type: none"> Staff to collect soil sample from safe location before session Staff to visually check for contaminants – stones/ glass, litter etc. Spoons provided to handle soil sample Waterproof plasters available for participants who have cuts Advise participants to wash gloves afterwards in warm soapy water or use anti-bac gel 	Low		Anti-bacterial hand gel First Aid Kit Mobile Phone Copy of RA
<u>Other park users</u> Dogs Sports people Footballers	Bites Footballers or cricket balls	Medium	Major	<ul style="list-style-type: none"> Advise participants that:- The Park is a popular dog walking place and to be aware that some dogs may not be under control. Be aware of informal games – if necessary ask to relocate. 	Low		First Aid Kit Mobile Phone Copy of RA

Biological hazards	Bacterial contamination Weils disease Sickness & Diarrhoea	Medium	Major	<ul style="list-style-type: none"> Staff and vols to check before event and remove any dog mess in vicinity of activities. Advise all to be aware of dog faeces Advise all to cover any cuts beforehand & wash hands afterwards & especially important if touching river water School group will not go near the road or car park during the visit Participants advised that there may be cyclists coming through the Park, adults to remain vigilant if near pathways 	Low	First Aid Kit Mobile Phone Copy of RA Shovel Dog poo bags
	Moving vehicles and bicycles	Medium	Major	<ul style="list-style-type: none"> School group will not go near the road or car park during the visit Participants advised that there may be cyclists coming through the Park, adults to remain vigilant if near pathways 	Low	First Aid Kit Mobile Phone Copy of RA
	Lone working with a child or vulnerable adult	Medium	Major	<ul style="list-style-type: none"> Visit is supervised & risk assessed by a staff member with DBS clearance. Adults will be asked to supervise their group of children at all times Staff & vols reminded of the need to avoid situations where they are alone with a child/vulnerable adult. Teachers are to allocate their own staff/vol helpers to any child who needs to leave the group, for example using the toilet 	Low	First Aid Kit Mobile Phone Copy of RA

Lifting/ moving equipment	Sprains/ strains	Medium	Major	<ul style="list-style-type: none"> Advise all staff and vols to use good manual handling techniques – sharing load/ using trolleys/ bent knees straight back & load close to body 	Low	First Aid Kit Mobile Phone Copy of RA
Overcrowding	Crush injuries	Medium	Major	<ul style="list-style-type: none"> Control entry to avoid overcrowding in pavilion – max 30 persons 	Low	First Aid Kit Mobile Phone Copy of RA
Fire	Burns/ scalds / smoke inhalation	Medium	Major	<ul style="list-style-type: none"> No smoking allowed in buildings Avoid overcrowding in pavilion – max 30 persons Unlock window in Pavilion 	low	First Aid Kit Mobile Phone Copy of RA

Accompanying adult to child ratio that must be provided by the school or the session will be cancelled on the day

Child's age	Amount of adults	Amount of children
0-3	1	3
4-5	1	4
6-8	1	6
9-12	1	8
13-18	1	10

Safe to carry out event? YES/NO	Yes
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Session Leader/s (print name): Vicky Duxbury	Signature: <i>V. Duxbury</i>	Date: 13.07.21
Debra Frankiewicz	<i>D. Frankiewicz</i>	13.07.21

Headstone Manor Park



Wild Fun

CREATE  DISCOVER  PLAY  EXPLORE  LEARN  SHARE

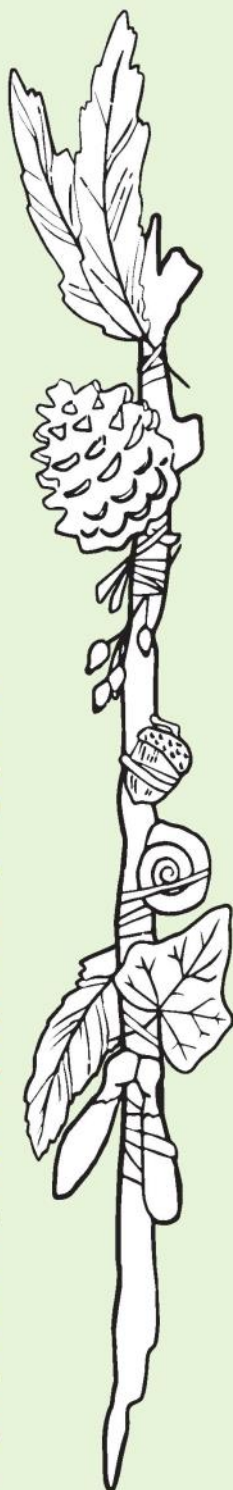


CREATE  DISCOVER  PLAY  EXPLORE  LEARN  SHARE

Ready for an adventure?

Find a stick and some 'string' such as grass. Look out for fallen objects to remind you of your visit and tie them to your stick. Please do not pick flowers!

Why not colour in this journey stick when you get home?



Make a home - Collect some sticks and make a bird's nest or a cosy shelter for an animal.

Sail away - Make a raft and sail it on the brook. You could use twigs tied with grass and maybe a leaf for a sail. Can you float a pebble passenger on board?

Sort it out - Collect leaves, sticks or stones. Are they the same size? Check with the ruler. Sort them by size or shape. How else can you sort them?



Take some mud and a stick - make a magical creature

Be creative - Make some art from nature's recycling, such as pine-cones, leaves or feathers. You could make a mud sculpture such as a magical creature. Leave your work for people to enjoy.

Take 5 - Find a comfy spot and sit quietly for 5 mins. Describe what you see, hear, smell and feel.

Make friends with a tree -

Can you reach round the tree? How many people does it take to reach round? Listen to the tree, can you hear anything? How many times bigger than you do you think the tree is?

Let's play - Play noughts and crosses with sticks and stones. Can you invent a new game of your own?

Be a detective - Look for clues to see which creatures live in the Park. Can you find any nibbled nuts, feathers, holes in trees, cobwebs or poo?

Find a mini-beast - Lift up rocks or logs to find woodlice. Look on plants, logs or on the ground. Be gentle with any creature you find.



Look out for woodlice under rocks and stones

Wild play is mucky! Don't forget to wash your hands afterwards.

Follow some ants!            

There are so many colours in nature! How many can you find?

Look and listen for sights and sounds of nature...



Bluebell
© Vicky Duxbury

☐ Spring flowers



Hazel catkins
© Vicky Duxbury

☐ Winter flowers



Common banded hoverfly
© Big Stock

☐ Insects



Fox poo
© Shutterstock

☐ Signs of animals



Moorhen
© Neil Greenhalgh

☐ Birds on the moat



Grey squirrel
© Neil Greenhalgh

☐ Animals in trees



Jelly ear fungi
© Vicky Duxbury

☐ Fungi



House Sparrow
© Shutterstock

☐ Birds around the Museum



Common Ivy
© Vicky Duxbury

☐ Winter berries



Flag Iris
© Big Stock

☐ Summer flowers



Black headed gull
© Shutterstock

☐ Bird on the wetland



Speckled wood butterfly
© Neil Greenhalgh

☐ Butterflies



Rosehips
© Shutterstock

☐ Fruit



Blackthorn
© Shutterstock

☐ Spring blossom



Sycamore buds
© Shutterstock

☐ Buds on trees

For more fun ideas and wildlife information visit:

www.rspb.org.uk
www.wildlifetrusts.org.uk
www.woodlandtrust.org.uk

Do you love learning about nature?
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Produced by Thames21 with the support of the Friends of Headstone Manor Park. www.thames21.org.uk | www.headstonemanorpark.org

Littering and Fly-tipping

One of the most common forms of pollution is littering.

People drop it or leave it on the ground.
Rubbish is then blown into the river by wind or washed into drains when it rains.

Fly-tipping is when people dump large items such as mattresses, fridges, toys, electrical items and building materials in a quiet place, sometimes near rivers.
Disposing of large items can be expensive and time consuming so people dump them instead.

Wildlife has no choice but to live among the litter that ends up in the river. Swans can eat litter thinking it is food.
Plastic doesn't break down in their stomach so the swan feels full when in fact it could starve.



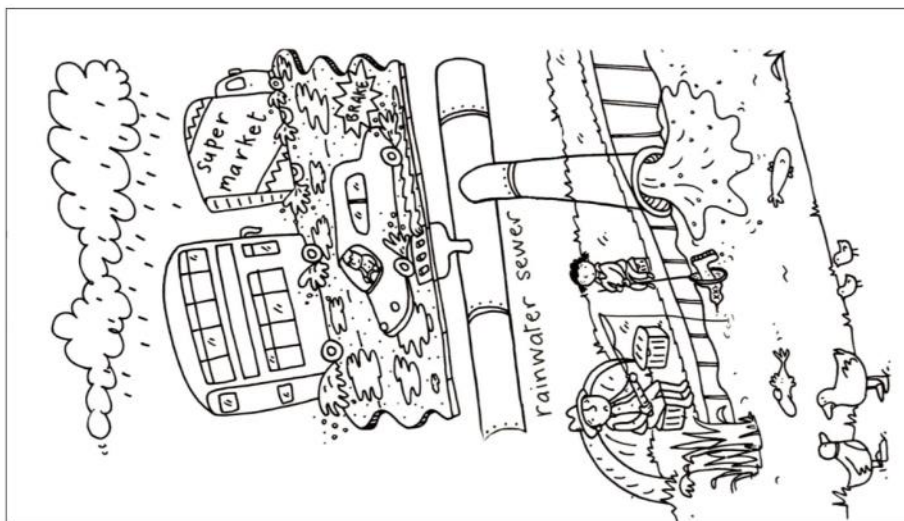
Littering and Fly-tipping

Picture	Description
Picture	Description
Picture	Description

Run-off from the Road

When cars and trucks drive or park on the road, they can leak oil and petrol due to old age and not being repaired. The oil and petrol sit on the road until it rains, then they are washed into drains on the side of the road and straight into the river.

Litter such as cigarette butts, snack packages and plastic bottles are washed down the drains on the side of the road when it rains. When a vehicle drives over bottles and cans, they are squashed flat and fit down the drain. The litter may have been thrown out of the car or truck window or blown there by the wind.



Run-off from the Road

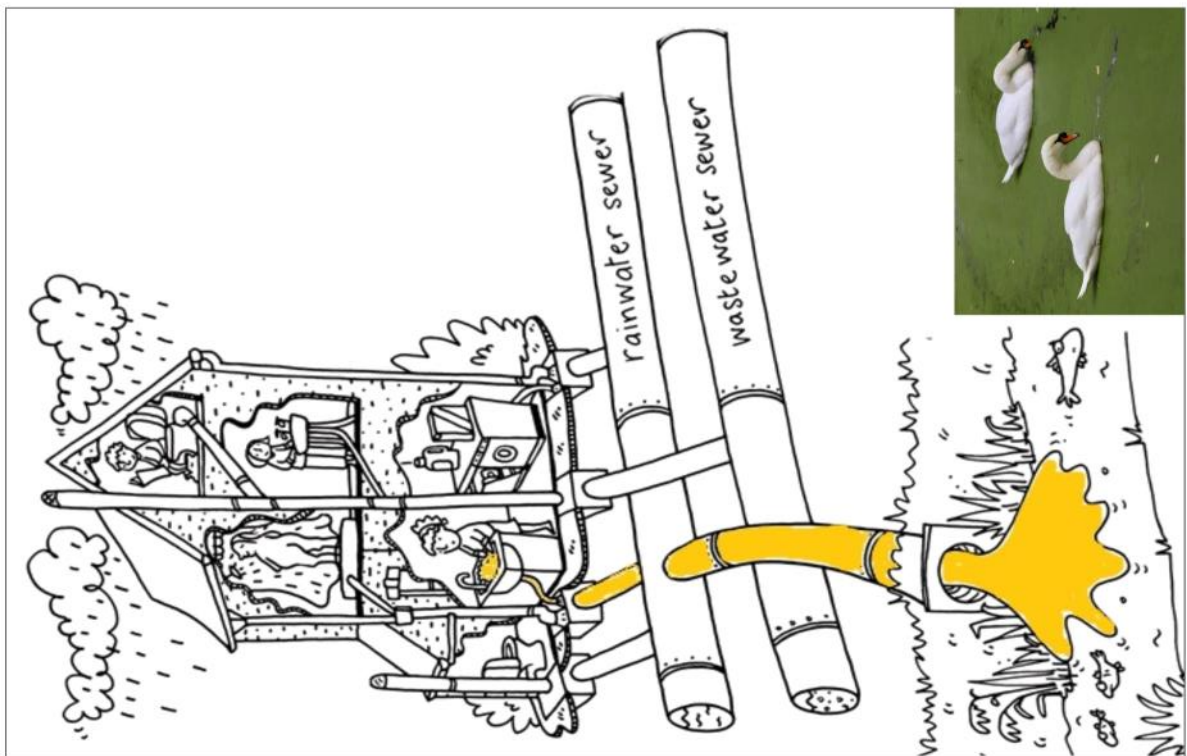
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Misconnections



Most of the pipes in our homes carry wastewater from showers, sinks and toilets into the wastewater sewer. This water is then taken to the water treatment plant where it is cleaned and put back into the river.

Some homes have pipes that have been connected wrongly and instead of the wastewater going into the wastewater sewer, it goes directly into the rainwater sewer and into our local rivers. This includes all of the shampoo, soap and cleaning products used in the home and sewage.

This is called a misconnection.

There is an invisible chemical in cleaning products and sewage called phosphate which goes into the river when there is a misconnection.

Phosphates have negative effects on the wildlife and plants that live and grow in the river. It can cause a plant called duck weed to grow as a blanket over the surface of the water, blocking out all sunlight.

Plants cannot grow and animals run out of food.

Misconnections	<div>Picture</div>	

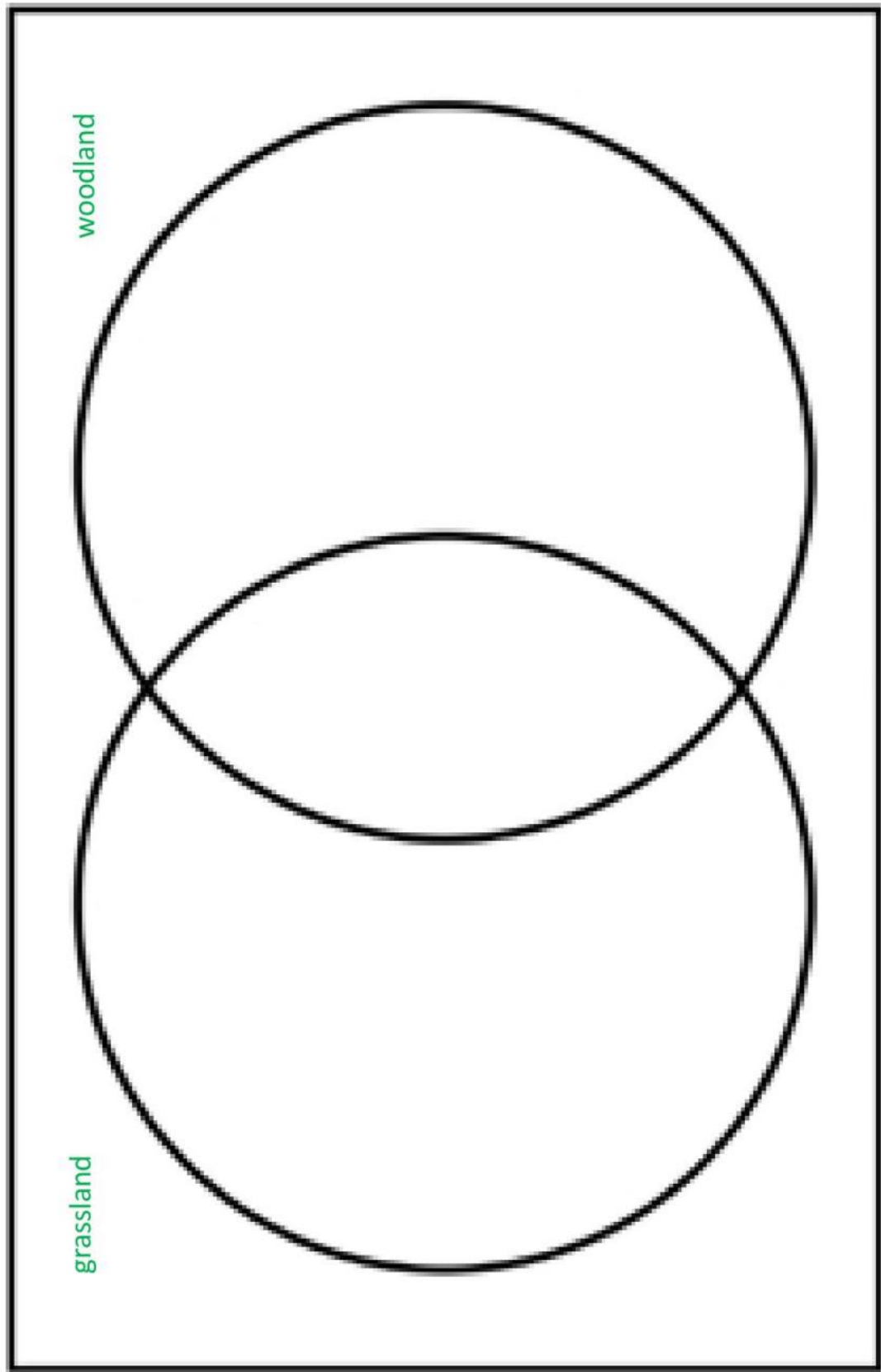
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Habitat sorting

Which animals live in which habitat? How do you know? Do any live in both? How are they suited to their habitat?



For more information...

[Thames21 | Putting Healthy Rivers at the Heart of the Community](#)

Thames21 is a River's Trust which reconnects people to nature by helping them enjoy, protect and enhance their local rivers. Please contact us for more information about local freelance teachers/educators who can help you with these sessions. There is a charge for this service.

[Harrow Council](#)

Visit the Headstone Manor Park page for information about facilities available at the Park and details of how to get to the Park.

[Friends of Headstone Manor Park](#)

A website run by the Friends group with lots of information about the Park, activities and wildlife. The Friends are a group of volunteers who donate their free time to looking after the Park to ensure it's a special place for people and wildlife. To contact the Friends of the Park, email: fohmrg@gmail.com

