In partnership with Garfield Weston Foundation

# URBAN NATURE YOUTH WORKER TOOLKIT



## THE URBAN NATURE PROJECT

NATURAL HISTORY MUSEUM


# WELCOME

Hello! Welcome to the Natural History Museum and The Prince's Trust's Urban Nature Youth Worker Toolkit.

It aims to empower youth workers with activities and conversation starters for use with young people, a doorway into engaging with the wonderful urban nature that can be found in cities and towns up and down the UK.

Once you've tuned your senses into nature, you'll be amazed at how much you can discover and the life-enriching benefits it can bring to us all.

You don't need any prior knowledge of the subject, this toolkit is for all who work with young people. So, the door is open, step on in...

# CONTENTS

Before jumping into the activities on page 15, the following few pages provide an introduction into the what, why and how of engaging young people with urban nature.

# GETTING STARTED WITH URBAN NATURE

# WHAT IS URBAN NATURE?

Urban nature is simply the living and non-living aspects of nature that can be found in towns and cities. Examples of the living are animals, plants, fungi and bacteria. Non-living elements include air, water and rocks.

There is a great variety of life, or biodiversity, in towns and cities. But, due to our busy lives, it can often go unnoticed.

Some plants and animals thrive in urban areas. The humble pigeon, first brought to towns as food for humans, is hard to imagine living anywhere else. The fastest animal in the world – the peregrine falcon – has also made a home in our cities. They nest on tall buildings instead of cliffs and hunt the abundant pigeons. These common, easy to spot species can tell us so much about the fascinating connections between all life on Earth.

At the Natural History Museum, we believe that urban nature holds great potential to benefit the lives of people who live in towns and cities up and down the UK.

# SUPPORTING YOU

'I can't take my young people to the park because I'm not an outdoorsy person!' Does this sound familiar?

Or are you terrified you don't know your woodpeckers from your woodlice? Well, even Sir David Attenborough is unlikely to know all of the 4,000 different beetle species in the UK; no one can know everything about the natural world.

Even if you were able to memorise Earth's 8.7 million species, you wouldn't have all the answers as to how they interact with each other. So, we shouldn't fret that we're not all nature professors.

These concerns are legitimate, but can be navigated, and this toolkit will help you do this.

It's ok not to know all the answers. We should be willing to appear genuinely confused or curious in front of young people. It's about sparking interest to find more information.

# WHY NATURE?

Do you feel uplifted when you take time to watch the pigeons in the park, stop to smell the roses, or look up at the night sky? It can feel magical to experience those moments, giving a sense of calm, awe, wonder and gratitude. This is noticing nature.

And science backs it up! *

- spending time noticing nature can improve mental and physical health
- we can experience reductions in anxiety and stress
- we are likely to get an increase in positive emotions and feel calmer

It is thought that because strong connections to nature have benefited us throughout our evolution, our bodies are wired to respond positively to us being in nature and appreciating it. In turn, these positive responses we feel, improve our connection to nature – and so the positive feedback loop begins!

Greater connection to nature also means that we have a better understanding of how we fit in with it. More time spent in nature in our youth means we're more likely to protect the environment as adults. Win-win!

*Capaldi et al, (2015), Flourishing in nature: A review of the benefits connecting with nature and its application as a wellbeing intervention. *International Journal of Wellbeing*.

# SEVEN TIPS TO NOTICE NATURE

Research by the University of Derby's Nature Connectedness Research Group found that simple forms of engagement – everyday acts of paying attention to nature – were the most closely linked to a greater connection to nature. These can enhance wellbeing and the likelihood of environmentally positive behaviours.

In particular, they identified seven significant 'noticing nature' behaviours:

**01** Watching wildlife (for example, bird-watching).

**02** Listening to birdsong.

**03** Smelling wildflowers.

**04** Taking a photo/drawing or painting a picture of a natural view, plant or animal.

**05** Taking time to notice creatures such as butterflies and bees.

**06** Watching the sunrise.

**07** Watching clouds.

# ATTITUDES TO URBAN NATURE

You don't have to jump in a minibus to the Lake District or another national park to get your nature fix.

The beauty of urban nature, is that there are opportunities everywhere to engage with it: a small patch of grass in front of a building or a tree in a courtyard.

Our perception of what and where nature is, and how we access it, has as much to do with our own attitudes, as it has to do with the nature around us. And attitudes can change.

If we choose, we can cherish the flowers that grow in cracks in walls and in unmown patches of grass. We can appreciate that insects swarm to flowers; that birds flock to eat the insects; that when we breathe in, we're breathing in oxygen that the plants around us have exhaled.

An appreciative attitude can be fostered and cultivated to gain a sense of enchantment and connection to urban nature. It only takes a little extra effort – it is hidden in plain sight!

# NATURE IS FOR EVERYONE

Nature is for everyone. Yet, there are barriers to accessing it, and these are more significant for some than for others.

- we know that some wheelchairs won't make it through mud
- we know that attention spans and learning styles differ
- we know that girls typically feel less safe in urban green spaces
- we know some cultures and families value spending time in nature differently to others

It is so important that we strive to be inclusive by listening to our young people. Ask them questions like:

- what are your experiences with nature?
- what do you like or not like about nature?

We should repeat back to them what we think they are telling us, so that we don't make any assumptions and so that we can understand their experiences. We can use this information to co–create engaging and enriching opportunities that meet their needs.

# DON'T GET MY TRAINERS MUDDY!

Often, just getting young people to spend time outdoors can be difficult. The key is finding enjoyable activities and creating positive memories.

Some young people may love to socialise in parks already, so that's a great starting point to capitalise on.

But perhaps some of your young people are self–conscious and it's hard to get them to leave home.

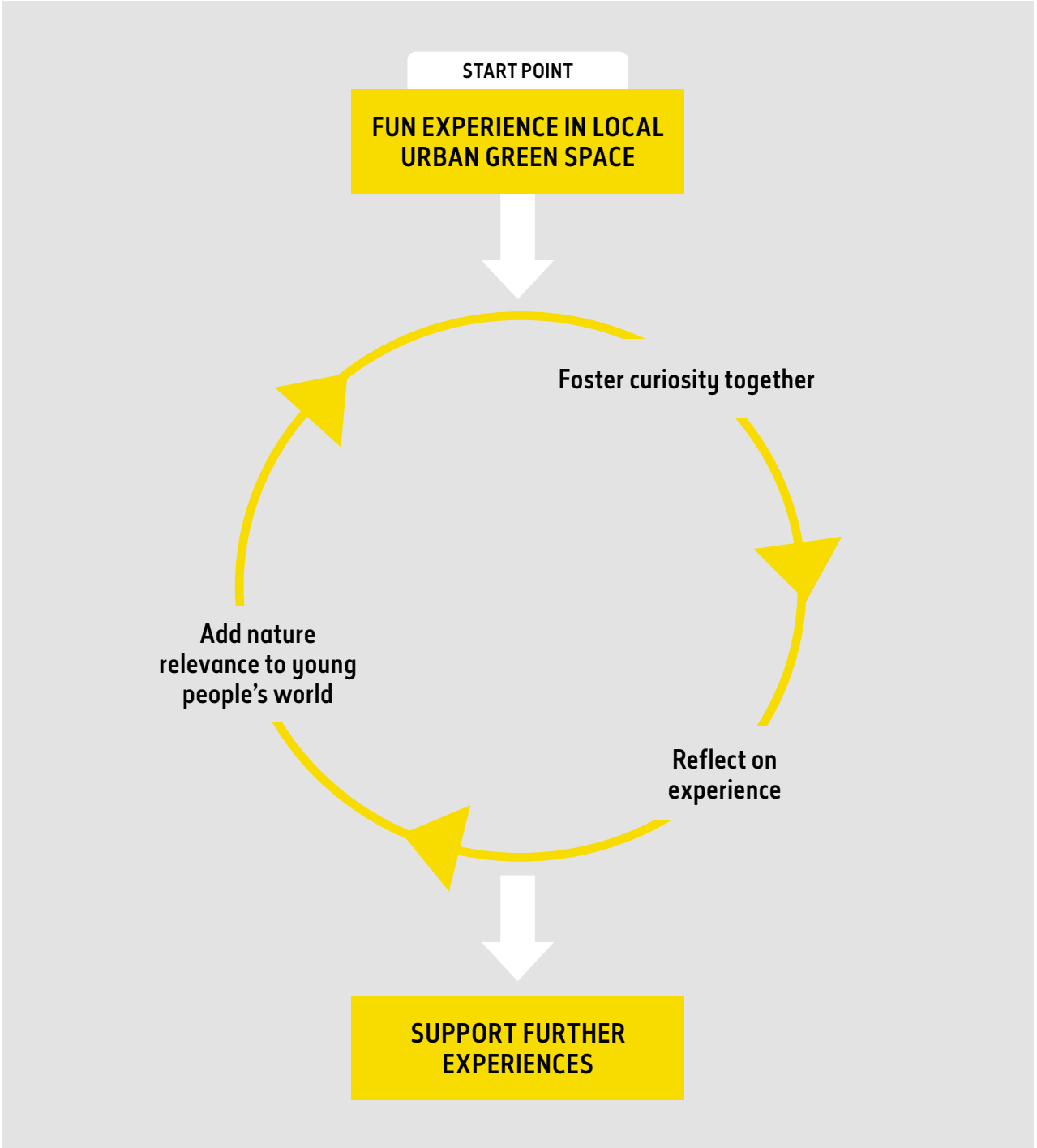
The reality is, a pair of pristine white trainers MUST stay white or the world ends. Why dirty them and make a nature-hater, when a different activity or shoe swap could positively change a young person's life?

We need to acknowledge the various starting points for young people, plan accordingly, be ready to adapt, and make sure we don't set them up to fail. This will instigate negative experiences or reinforce negative associations with nature.

# HOW TO GET YOUNG PEOPLE INTO URBAN NATURE

The start point is always finding an activity that allows young people to feel comfortable in the space you're using. Competitive, physical and creative activities are great ways to do this. Once the young people are at ease in the green space, you're winning. That might even be it – the win. Job done.

Or it might be a start point to learn more, to foster curiosity that arises, start conversations and run activities that explore the environment. Nature not noticed before, now starts to become more relevant to their world. Reflecting on this can reinforce new positive perceptions – before you know it, they'll be exploring nature independently!



# MAKING THE MOST OF URBAN SPACES

A space like this is great for playing games on the grass and seeing what lives on the trees, bushes and flowers.

Trees provide shelter, homes for animals, places to hide for games and inspiration for art.

Lakes, canals, ponds and reservoirs are great places to look for different birds.

Allotments, community gardens and churchyards are fantastic havens for wildlife.

In areas with long grass and flowers, you are likely to find many different types of insects.

Nature will find ways to survive in the most obscure locations. Make it a fun challenge to discover it!

# GREEN MAPPING

All cities will have their own unique selling points when it comes to nature: parks, canals, a woodland, the beach, a river. You and your young people may be aware of these, but do you actively try and spend time at them?

**01** Grab a pen and paper and write down all the nature opportunities, big and small, that you can think of within walking distance of where you work with young people.

**02** Bring up an online map of the area. Turn on the natural features view. What areas of green do you recognise? Which stand out as new or different? Print the map and make notes on it.

Features to look out for: parks, woodland, water, common land, churchyards and cemeteries.

**03** This is also a great activity you could do with your young people, sharing green nature spaces with each other.

# Q: WHAT IS IT?

## IT'S OK TO NOT KNOW!

Not knowing the answer to a question is totally fine and actually it's an opportunity for you to learn together, with your young people.

When exploring the natural world, if we ask the right questions, anyone can learn something new about the unknown and the familiar. Anyone can see, feel, hear or smell things in a new way. Lots of learning comes from asking questions.

Interestingly, this concept of using our senses to make observations is not only key to scientific investigation, but also fundamental to the wellbeing benefits of being mindful and present.

## WHAT ATTRACTED YOUR ATTENTION TO IT?

When you're asked, 'What is it?', you could answer 'I don't know' or, if you do know, 'It's a magpie'. Either way, that's a very short conversation.

You can use this opportunity to have longer and more enriched conversations, by asking questions back to the young people and trying to figure it out together.

Here are three levels of questioning you could use, where answers to one level of question often lead to questions at the next level:

**01** Asking questions to describe something, using as many senses as possible eg What patterns can you see? Close your eyes and tell me what you can feel.

**02** Asking questions to prompt reflection about something, eg What does it remind you of? Is it the same as that (another natural thing)? How are they different?

**03** Asking questions to stimulate speculation about something, eg Why do you think they are different?

Questions such as 'How do you feel?', 'What do you think?' and 'Do you like that?', all stimulate richer, emotive conversations.

# iNATURALIST

iNaturalist is a free species identification platform. Sometimes it's nice to know you can pull something out of your back pocket (literally, if you have it on your phone!) to help you identify something.

It is also a social network for naturalists and scientists (and youth workers!) to share their findings and learn what nature is nearby.

## HOW IT WORKS

**01** Record your observations.

**02** Share with fellow naturalists.

**03** Discuss your findings.

## GIVE IT A GO

Download the free app or log on at uk.inaturalist.org and have a play.

**Warning: it gets addictive!**

The Urban Nature Activities are grouped into the following:

- Warm Ups and Icebreakers
- Main Urban Nature Activities
- Unwind Your Mind
- Reflection

# URBAN NATURE ACTIVITIES

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# ACTIVITIES KEY

## ACTIVITY TYPE


Calming


Getting active


Getting science-y


Contributing to community


Energising


Getting creative


Working together


Communicating

## NATURE LEVEL


Nature light


Semi-green


Full Attenborough

## SUGGESTED AGE BRACKETS

**11–13**

**13–16**

**16–19**

**19–25**

Each activity can be used independently, or several used together to make a longer session, depending on your young people, time, space and available resources. See page 106 for more ideas on this.

# WARM UPS AND ICEBREAKERS

**Activities to help your young people feel more comfortable in urban green spaces, without being too nature-focused.**

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# CAPTURE THE FLAG

## OUTCOMES
Increased comfort in local green space.

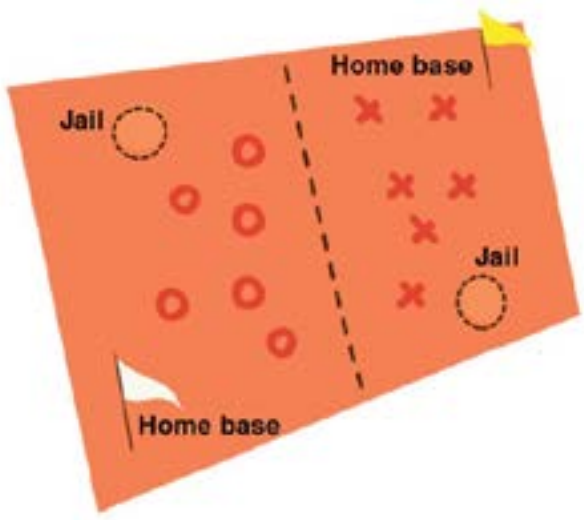
## SPACE
Any large outdoor green space.

## RESOURCES
Ten or more people. Two brightly-coloured 'flags'. Rope to divide the playing field. Hula-Hoop, cones, rope or some other markers for 'jail' areas. Bibs to identify teams if possible.

## TIME
20–30 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo.

## HOW IT WORKS
- Divide the field into two zones (like a football pitch), separating the sides with a centre line. Each side should also feature a 'jail' for players who are tagged. A Hula-Hoop, cones or rope can be used to designate these spots.
- Split into two teams with one team in bibs if you have them.
- Give each team a 'flag'. Any bright object (T-shirts, balls, bandannas) will work.
- Each team hides its flag somewhere on its side of the field.
- The goal of the game is for each team to capture the other team's flag and take it back to its zone.
- Pick positions for your team's players. Some players should try to capture the other team's flag. Other players should guard your team's flag.
- If members of the other team enter your team's zone, you can send them to 'jail' by tagging them. Players can be freed from jail when a teammate touches them.
- A team wins by capturing the other team's flag and taking it back to its zone.
- Have one person act as the judge to ensure everyone plays by the rules.



TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# 4040 IN

## OUTCOMES
Increased comfort in local green space.

## SPACE
Any outdoor green space that has obvious definable boundaries and hiding places. You need to do a recce of the space you are using and make sure you can supervise sufficiently, depending upon the ages and maturity of your young people.

## RESOURCES
None.

## TIME
10–30 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo.

## HOW IT WORKS
- It's a cross between hide and seek and tag.
- One person is 'it'.
- They stand at 'home' (somewhere in the middle of good hiding places).
- They count to 40 while everyone hides.
- When they finish counting, they go looking for the others ... so far so hide and seek ...
- But while they're looking, everyone else is trying to sneak back to touch home, and say '4040 in' without getting caught.
- If 'it' person is standing at home and correctly shouts '4040 I see Kwame hiding behind the bush', Kwame is out.
- First home without getting caught is 'it' next.
- An additional rule you can add if you wish: if someone makes it home, they can choose to free everyone before them who got caught, by saying '4040 in, I free all' as they touch the home base. And then the 'it' person, is 'it' again.
- There are many variations of games like Capture the Flag and 4040 In, often called wide games. Search for other variations online.

# iNOSE

## OUTCOMES
Increased knowledge of urban species.

## SPACE
Anywhere.

## RESOURCES
Species fact card (see next page for examples). Pen and paper if doing drawing option.

## TIME
Five minutes.

## MAIN THINGS TO CONSIDER
Public space, sharps/litter, dog poo if in a park.

## HOW IT WORKS
- Eight clues about an urban nature species are read out slowly.
- If and when the young people think they know the answer, they place their finger on their nose, signalling 'I nose'.
- If a subsequent clue makes them unsure, they take their finger off their nose.
- It's a good idea to start with more difficult, challenging clues first, and then make them gradually more obvious.
- You could use this as introduction activity into looking at a particular species or habitat where that species might live.

## ADAPTATION IDEAS
As the clues are read out, the young people create a drawing of the mystery species.

Why not challenge your young people to come up with some of their own clues for iNose?

# iNOSE
# STATEMENT

| | SLUG | PIGEON | SYCAMORE TREE |
|---|---|---|---|
| **Fact 1** | I move around on one large foot. | I have four limbs. | Bees love me. |
| **Fact 2** | I have no arms and four tentacle type things on my head. | I'm super smart. | Squirrels love me! |
| **Fact 3** | I can stretch to 20 times my typical length if I want to. | I feed my babies a special milk. | I can make my own food. |
| **Fact 4** | My science group name means 'stomach foot'. | I have had a special bond with, and have lived close to, humans for 1000s of years. | I get naked in the winter! |
| **Fact 5** | I have 27,000 teeth (more than a shark!). | I'm fast – I've been clocked at speeds of 92.5 mph. | I relocate via helicopter. |
| **Fact 6** | I breathe through a hole in my side. | I have exceptional navigation skills. | I can live to 400 years old. |
| **Fact 7** | My eyes are on two of my tentacles. | My kind have received medals for our bravery at war. | I gobble up carbon dioxide. |
| **Fact 8** | I use the other two tentacles to taste and sense what's going on around me. | I can fly. | I can be as big as a tree! |

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# HOW CLOSE?

## OUTCOMES
Increased comfort in local green space. Increased ability to use nature to be mindful.

## SPACE
Larger outdoor green space.

## RESOURCES
Blindfolds (or can close their eyes).

## TIME
30 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo.

## HOW IT WORKS
- Before you start, ask the young people, 'What natural things can you sense, that might help you walk a straight course if you couldn't see?'
- The youth worker walks a long distance away, to the other end of the field, but in view still.
- One young person, the walker, closes their eyes or has a blind fold and must try and walk in a straight line to the youth worker.
- The rest of the group safely guides the walker, but does not influence their direction or speed, unless there is a danger. They must also remain silent. When the walker comes level with the youth worker the youth worker says, 'Stop'.
- Every one has a go. You can see who gets the closest, the quickest.
- Ask them, 'What non-visual stimuli have you used to try and navigate?'

# URBAN ANIMAL SCRAMBLE

## OUTCOMES
Increased knowledge of urban species.

## SPACE
Larger outdoor green space.

## RESOURCES
Animal picture or animal name cards. Clothes pegs.

## TIME
5–10 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo.

## HOW IT WORKS
- Animal names or pictures are attached to the back of young people's shirts with clothes pegs.
- Young people ask each other questions about the animal's characteristics. Responses to the questions can only be, 'Yes', 'No' or 'Maybe'. Each young person only asks one question before moving on to ask a different young person another question.
- Once the young person has correctly guessed their animal, they can peg the picture or name of their animal on the front of their shirt.
- You can use this game as an introduction into looking for the same animals in the game or other types of animal who might live in the same habitat.

## ADAPTATION IDEAS
A cheat sheet with a list of questions could be provided.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE



# FOXES AND PIGEONS

## OUTCOMES
Increased comfort in local green space.

## SPACE
Any outdoor green space.

## RESOURCES
Rope or something to make a line. Two different coloured base symbols eg cones. List of urban nature statements (see next page for examples).

## TIME
10 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo.

## HOW IT WORKS
- Divide young people into two equal teams named 'foxes' and 'pigeons', who face each other along a line (rope or football pitch line or path).
- A blue marker/cone home base is placed 10 strides behind the pigeons, a red marker/cone home base is positioned 10 strides behind the foxes.
- The youth worker makes a statement about nature. If the statement is true, the foxes chase the pigeons to the blue pigeon base. If false, the pigeons chase the foxes to the red fox base.
- If a player is tagged before they cross the home base line, they join the opposite team.
- After several seconds of chasing and catching, reveal the answer as some of the young people may have been falsely chasing – and then they need to switch roles!
- Bring the young people back to the line ready for the next question.
- You can use this game as an introduction into looking for the same animals in the game or other types of animals who might live in the same habitat.

# FOXES AND PIGEONS
## STATEMENTS

| STATEMENT | TRUE | FALSE |
|---|---|---|
| **A male fox is called a dog fox while a female is called a vixen.** | × | |
| **Woodlice have pyramid-shaped poo.**<br>No, but it is cube-shaped! | | × |
| **A huge city like London is home to 14,000 different species.**<br>London and other UK cities actually have many habitats that allow nature to flourish! | × | |
| **Pigeons mate for life.** | × | |
| **There are an estimated 500,000 different species of fungi on Earth.**<br>No, it's actually 5.1 million! | | × |
| **The peregrine falcon dives at a maximum speed of 150mph.**<br>No, up to speeds of 200mph! It's the fastest animal in the world! | | × |
| **A fungus  is the largest living organism on Earth.** | × | |
| **The daisy flower opens to greet the morning and closes in the evening to go to sleep.**<br>That's why it's called 'day's eye'! True life. | × | |
| **Lichens live up to 1000 years.**<br>No, lichens are a cluster of fungi and algae. Some of these lichen colonies are claimed to be among the oldest living organisms on the planet. It's thought that some have lived for 8,000 years! | | × |
| **Under a football pitch, there can be as many as one million earthworms.** | × | |

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# SNEAKY SNEAKY

## OUTCOMES
Increased comfort in local green space.

## SPACE
Any outdoor green space but works particularly well in wooded areas where there are leaves on the ground.

## RESOURCES
A blindfold or just close eyes.

## TIME
10 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo.

## HOW IT WORKS
- Have one young person, blindfolded or eyes closed, in the middle of a space.
- The other young people spread out in a big circle around the blindfolded young person.
- Signal to three young people to try and sneak up (from quite far away) and tap the young person in the middle on the shoulders, without being heard.
- If the person in the middle hears a noise and points directly at one of the sneakers, they have to freeze and are out.
- Make sure everyone has a go closing their eyes in the middle.
- The closest to the middle of each round of three goes through to the next round, until you have a final, and the sneakiest of them is the winner!
- Prompt the young people to think about how to be super quiet, move with purpose, feel their body movements, slow their breath and thoughts (for both the sneakers and the person in the middle), and then try again and see if they are better at it.
- This game is great to play in autumn when there are lots of dry, rustly leaves on the ground! This would then link really nicely with a Nature's Art activity like on page 56.

## ADAPTATION IDEAS
If appropriate for your group, you could give a small water pistol to the person in the middle, so they can squirt the sneakers when they hear them.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# URBAN NATURE CHARADES

**OUTCOMES**
Increased knowledge of urban species.

**SPACE**
Anywhere.

**RESOURCES**
List of urban nature species names.

**TIME**
15 minutes.

**MAIN THINGS TO CONSIDER**
Public space, trip hazards, sharps/litter, dog poo.

**HOW IT WORKS**

- Divide the young people into two or more teams.
- Teams race against each other to be the first to name a list of urban nature species using charades (mimes) only.
- Have the groups spread out so that they can't overhear the other team's answers.
- Ask one member from each team to come to you. Show the word to the young person and release them to their groups at the same time.
- Once a member of the group guesses the word correctly, someone new runs to you for the next word.
- The team members must tell you what word their team just guessed. If correct, you tell the new young person the next word on the list.
- The object of the game is to complete the entire list without cheating.
- You can use this game as an introduction into looking for the same animals in the game or other types of animal who might live in the same habitat.

# WHO AM I?

**OUTCOMES**
Increased knowledge of urban species.

**SPACE**
Any outdoor green space.

**RESOURCES**
Blindfold.

**TIME**
Five minutes.

**MAIN THINGS TO CONSIDER**
Public space, trip hazards, sharps/litter, dog poo.

**HOW IT WORKS**

- The group forms a circle.
- One person is chosen to be the guesser and they go into the middle of the circle.
- The guesser is blindfolded or asked to keep their eyes closed. Note: Be sure to ask that the guesser is comfortable playing the game blindfolded. If they are not, let them know it's alright and choose another person to be the guesser.
- The game begins with an adult spinning the guesser around in a circle.
- The group is asked to spin around in a circle as well, but in the other direction.
- When the spinning stops, the guesser points in the direction of one of the people in the circle and says the name of an animal.
- That person must make the noise of that animal. The guesser will then try to work out who the person is by the sounds they make.
- You can use this game as an introduction into looking for the same animals in the game or other types of animal who might live in the same habitat.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# CLOUD LIFE

## OUTCOMES
Increased comfort in local green space.

## SPACE
Any outdoor green space with comfy grass.

## RESOURCES
One of those blue sky days with clouds that swirl and move around making different shapes. Mats if you want something to lie on.

## TIME
10 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo.

## HOW IT WORKS
- Find a nice patch of grass, and lie down.
- As a group, watch the clouds and tell the young people to point out what shapes they see. Simple.
- Alternatively, young people can call out the object they see in the clouds and then see who else can spot it and point it out.
- Seeing familiar objects or patterns in otherwise random or unrelated objects is called pareidolia.

## ADAPTATION IDEAS
You can do similar activities looking for faces in trees and in tree bark.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# STARGAZING

## OUTCOMES
Increased comfort in local green space.

## SPACE
Any outdoor green space at night-time, ideally away from artificial lights that cause light pollution.

## RESOURCES
A dark, clear night. Warm clothes. Mats if you want something to lie on. Torch to help you see where to go.

## TIME
Can be a brief activity or last as long as you wish.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo.

## HOW IT WORKS
- To stargaze, it is not necessary to have a telescope or any other equipment. All you need is to go outside on a reasonably clear night.
- As this is a late in the day or a night-time activity, it can often be a bit cooler. It is advisable to wrap up warm. Layers are best to trap the heat in and a hat will make a big difference.
- Stargazing is a wonderful activity and one that often gets forgotten when thinking about nature-based outdoor activities. This may be because it must be dark for it to work!
- There can be a nervousness of not knowing what you are looking at, not being able to understand the night sky or name what you see. However, this isn't necessary. What is important is to just go out and look.
- 'Gazing' allows us to simply spend some time looking up, taking it all in, letting our minds wander.

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# LEAF SNAP

**OUTCOMES**
Increased knowledge of urban species.

**SPACE**
Any outdoor area that has several trees.

**RESOURCES**
None.

**TIME**
10–15 minutes.

**MAIN THINGS TO CONSIDER**
Public space, trip hazards, sharps/litter, dog poo, trees in high winds.

**HOW IT WORKS**

- Divide your young people into small teams.
- Challenge them to go and find as many different leaf shapes as possible, but only leaves that have fallen off plants naturally – to avoid a deforestation episode!
- Once back together in a big group, the teams then play a game of snap with the leaf shapes. Each time a team correctly shouts 'Snap' first, they win a point.
- If a team has a leaf shape that no other team has, they get three bonus points.
- This activity can lead nicely into discussion about diversity of plant species or into an activity of Nature's Art, where you create a mural or sculpture from fallen leaves, twigs and stones (see page 56).

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# LEAF CATCHERS

## OUTCOMES
Increased knowledge of urban species. Increased comfort in local green space.

## SPACE
Any outdoor area that has several trees.

## RESOURCES
Autumn. Trees. This game requires one of those special autumn days where lots of leaves are falling from the trees – a strong breeze will help.

## TIME
5–10 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo, trees in high winds.

## HOW IT WORKS
- This can be done individually, or you can divide your young people into smaller teams.
- Challenge them to catch as many falling leaves from the trees as possible.
- Tell the young people to be careful not to bump into each other. If space is limited, you could limit each young person or their team, to just staying underneath and only catching leaves from one tree.
- It used to be thought that if you catch a falling leaf you won't get ill all winter!
- Once back together in a big group, which team caught the most leaves?
- This activity can lead nicely into discussion about diversity of plant species or into an activity of Nature's Art, where you create a mural or sculpture from fallen leaves, twigs and stones (see page 56).

# KICKING THE KERB CONVERSATIONS

**OUTCOMES**
Increased knowledge of local nature.

**SPACE**
Any road with a kerb.

**RESOURCES**
None.

**TIME**
5-10 minutes.

**MAIN THINGS TO CONSIDER**
Public space, roadside safety.

**HOW IT WORKS**

- Challenge your young people to look at the kerb stones when they are walking along the pavement.
- What do they notice that's different about them compared to the road or the pavement?
- Kerb stones are made from granite. It's really hard because it's an igneous type of rock, meaning it formed from cool volcanic lava.
- Kerb stones need to be super hard to stop cars from hitting pedestrians on the pavement.
- Granite has crystals in it. Big crystals mean the lava cooled slowly, whereas small crystals means it cooled quickly.
- Kerb stones with large crystals will have come from the centre of a volcano, where it cools slowly.
- The type of minerals the granite kerb is made from will affect its colour.
- Who can find the kerb stone with the largest crystals?

# MAIN URBAN NATURE ACTIVITIES

**Active, adventurous, competitive, creative and natural history science activities.**

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# SCAVENGER HUNT

## OUTCOMES
Increased comfort in local green space. Increased knowledge of local nature.

## SPACE
A park.

## RESOURCES
None.

## TIME
Dependent on how many items you ask them to find.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo, trees in high winds, insect phobias/allergies, toxic plants.

## HOW IT WORKS
- In advance, head to the park and find as many different natural objects and collect one of each. These will be the same objects the young people have to find. Examples include: different shapes/species of fallen leaves, twigs, feathers, seeds, nuts, pieces of bark, a sound recording of a bird, a photo or video of a squirrel. The more you have, the longer the activity will be.

- Divide your young people into teams. Show them the list of things they need to go and find. Let them loose!

- First team to collect all items or take all images, wins.

## ADAPTATION IDEAS
- Particular times of year might be good for different animals or plants. For example, spring would be great to collect photos of flowers; autumn would be best for different fallen leaves.

- Or search for evidence of animals eg footprints, shed feathers, poo, nibbled leaves etc.

- Search for evidence of the human impact on nature.

- Search for life in unusual or precarious places.

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE



# URBAN NATURE PHOTOGRAPHY

## OUTCOMES
Increased comfort in local green space. Increased appreciation of urban nature's beauty.

## SPACE
Any outdoor green space.

## RESOURCES
Camera or camera phone.

## TIME
20–60 minutes.

## MAIN THINGS TO CONSIDER
Public space, sharps/litter, dog poo, trees in high winds, insect phobias/allergies, toxic plants.

## HOW IT WORKS
- Photography is a great way to ease your mind, as well as bringing yourself into the present and being mindful.
- Any camera will do, those on smartphones are great!
- Think about capturing urban nature from different angles, types of composition and different times of the day for varied light.
- Have fun with it, enjoy it, capture beautiful moments to look back on and remember what it was like to be out exploring nature.
- You could create an urban nature photography competition among your young people.
- As well as being creative, photography can also be a great reflective activity, making visual memories for the young people.
- Here is a link to taking better photos with a smart phone.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# DEBATING
# ALLEY DEBATE

## OUTCOMES
Increased comfort in local green space. Increased understanding of environmental issues.

## SPACE
A park or woodland, somewhere quiet away from too many distractions.

## RESOURCES
Pens and paper. A list of topics for debates.
A watch/timer/phone to time the speeches.
Blankets to sit on.

## TIME
15–20 minutes per debate.

## MAIN THINGS TO CONSIDER
Public space, sharps/litter, dog poo.

## HOW IT WORKS
A debate gives young people a fun way to explore ideas and opinions, as well as developing their speaking skills, listening, critical thinking and confidence. Encourage 'because...' statements, we are making arguments here! Explain they will need to make a 'point' – a short sentence that explains why they support/oppose a topic and provide 'explanations' – how and why their point is true.

## AN ALLEY DEBATE
- It would be great if you can prepare your young people with some time to research the topics before you get started.
- Divide the group into two teams, the 'For' team and the 'Against' team.
- Give the young people a statement for the debate. Some ideas: People are separate from nature. Everyone should be vegetarian to save the planet. Capitalism is killing the planet. New technology is the solution to the environmental crisis.
- Explain they now have some time to work together as a team to think about short arguments in defence of their side of the debate. They should have a point and an explanation. Demonstrate with an example if needed.
- The two teams line up facing each other, with an 'alley' between them. Starting with the 'For' team, ask each young person in turn to give an argument, alternating between for and against until you reach the end of the alley.
- If you have time for another topic, this time, ask young people to reply to the person who spoke before them, before giving their argument. For example, 'They said... but I disagree because... My own argument is...'

## ADAPTATION IDEAS
You can provide some suggested points that they can provide explanations for. Young people can work in pairs to generate arguments before the debate.

# DEBATING
# WHERE DO YOU STAND?

## SPACE
A park or woodland, somewhere quiet away from too many distractions.

## RESOURCES
Pens and paper. A list of topics for debates.
A watch/timer/phone to time the speeches.
Blankets to sit on.

## TIME
20–30 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo.

## HOW IT WORKS
- It would be great if you can prepare your young people with some time to research the topics before you get started.
- Explain the need for justifying opinions. Use the 'Why? Because...' prompt to reinforce this. Introduce the vocabulary of 'Point + Explanation', linking them to 'Why? Because...'
- Ask the young people to form a line.
- Assign one tree as 'For' and another tree as 'Against'. The young people are currently standing 'on the fence', where you are neither for nor against.
- Give the students a topic. These could be: All cars should be banned in cities. David Attenborough should be Prime Minister. Technology will solve the climate crisis.
- If they agree, they should move towards the 'For' tree; if they disagree, they should move towards the 'Against' tree. The more strongly they feel, the more they should move.
- Give students 30 seconds to ask someone standing near them why they chose to stand there.
- Ask a few students to explain to the group why they are for or against, using a point and an explanation. After each student has spoken, ask the whole class to take one step towards the For or Against trees to show whether they were convinced. Make this accountable by following up, asking students why they moved one way or the other.
- Keep the discussion fresh by introducing new topics when needed.

# DEBATING
# DEVELOPMENT DILEMMAS

**SPACE**
Think of a local green space that is used by the local community – and run the activity there.

**RESOURCES**
Pens. Paper. Blankets to sit on.

**TIME**
20–30 minutes.

**MAIN THINGS TO CONSIDER**
Public space, trip hazards, sharps/litter, dog poo.

**HOW IT WORKS**

- Paint the picture to the group that a proposed new housing development is going to provide affordable housing, on top of the green space.

- Divide the group into three to five stakeholder groups, depending on how many young people you have. Choose which stakeholders you think would make the best debate:
  1. Local government
  2. Existing local residents
  3. Local wildlife interest group
  4. Local businesses
  5. Local hospital and GP doctors

- Tell each group to spend some time discussing among themselves what are the priorities for their stakeholders.

- Would their stakeholder be for or against the development? What different aspects would they consider?

- It would be great if you can prepare your young people with some time to research the topics before you get started.

- Explain the need for justifying opinions. Use the 'Why? Because...' prompt to reinforce this. Introduce the vocabulary of 'Point + Explanation', linking them to 'Why? Because...'

- Allow each stakeholder group five minutes to describe their position, and allow the other stakeholders to question them once they are finished.

- Hold a vote at the end among the young people. Now that they have heard various opinions, what do they personally think about the development idea? Has their opinion changed at all during the debate and why?

# URBAN NATURE
# ORIENTEERING

## OUTCOMES
Increased comfort in local green space. Increased knowledge of urban species.

## SPACE
Large outdoor green space.

## RESOURCES
Card. String. Pen. Maps. Compass.

## TIME
30–60 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo, trees in high winds, insect phobias/allergies, toxic plants.

## HOW IT WORKS
- Orienteering can be as complicated or as simple as you like. You basically need to get from point A to point B. And possibly C, D etc. if you wish.

- To navigate, you can use maps, compasses, clues, riddles, the weather or you could just use obvious landmarks. Making it competitive increases the fun for young people.

### Simple version
- Mark pieces of card with a letter, spelling out a word of your choice. In advance, go to your local park and using string, tie the cards to various landmarks.

- Get the young people into teams of three or four and head to the local park. Tell them the landmarks they have to find and that they must get all letters, figure out the anagram and come back to the starting point, as quickly as they can.

### Medium version
- Same objective as before, but don't tell the young people all of the landmarks, only tell them how many there are. Create riddles or clues on the back of each card to be found at the location so they have to work out what the landmarks are.

### Hard version
- Same objective as before but provide a map and compass to navigate from landmark to landmark. See the next page for map and compass navigation support.

### Mega hard (but fun!) version
- Same objective as before but challenge the young people to use natural navigation techniques, as introduced on page 42.

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# MAP AND COMPASS
# **NAVIGATION**

## RESOURCES

Mastering using a map and compass takes some time and practice. It's not something we recommend doing with young people who haven't shown an interest in giving it a go – or if you don't have sufficient time to support the young people in making a success of it. There are a lot of resources online to help, such as here.

## SETTING THE MAP

- Place the map as flat as possible in front of you.
- Put the compass anywhere on the map.
- Turn the map and compass until the needle on the compass aligns with the north-south gridlines on the map, with the red needle pointing to the top of the map.

## FOLLOWING A BEARING

- Find a distant feature on the map that you want to walk towards.
- Identify this feature on the ground.
- Put the compass on the map so that orienting lines on the compass point line up with your route towards that feature, as it is shown on the map.
- Without moving the map or compass, rotate the dial so that the orienting arrow points towards north on the map – the figure on the rim of the housing at the index line is the bearing you need to follow.
- Take the compass off the map and hold it with the direction of travel arrow pointing straight ahead away from you.
- Rotate your whole body, including the compass, until the red end of the needle lies parallel with the orienting arrow.
- The direction of travel arrow should now point towards your distant feature.
- Walk in the direction indicated by the direction of travel arrow until you reach your destination, checking your bearing along the way.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# NATURAL NAVIGATION
# **ORIENTEERING**

For millennia, people navigated without CityMapper or smartphone maps. I know, right? Shock!

It's a forgotten art to know where north, south, east and west is, what the time is, or if there will be a downpour in the next hour or not, just from observations of nature.

But with a little knowledge and some mindful observations using our senses, not only can we reclaim that art, but it can become second nature to us. In the process, we become more in tune with nature, improve our mindfulness AND stand a better chance of getting home if our phone dies.

**HOW TO USE NATURE TO NAVIGATE**
The following things, in the UK, can help us navigate:

- We are in the northern hemisphere, so the Sun arcs over the southern half of the sky. This means we can figure out roughly where south is.
- The Sun rises in the east, and it sets in the west, so we can figure those out. However, it is only two times a year that the Sun rises exactly in the east and sets exactly in the west, at the two equinoxes, around 21 March and 22 September.
- The Sun's arc is at its highest point in the sky at roughly midday, so we can gain an idea of what time it is.
- If a large mature tree is standing alone, and appears to be heavier on one side, that side is south. The southern side gets the most sunlight, so it naturally grows that way.
- Noticing landmarks – things that don't move – and recognising them again and placing them on a map in your head, is another way of building up navigation skills. We do this naturally but having maps at our fingertips has reduced the need to perfect the skill.
- If you hold a plant up in front of you, and peer through it at a church clock, you can tell exactly what time it is. Fool your friends into believing you are just using the plant to tell the time.

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# WHICH WAY IS NORTH?

## OUTCOMES
Increased awareness of different aspects of nature. Increased comfort in local green space.

## SPACE
Outdoor green space with some grass.

## RESOURCES
A stick. Couple of rocks or stones.

## TIME
20 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo.

## HOW IT WORKS
This is a fun way to figure out north, south, east and west.

- Find a long, straight stick, about 50 centimetres in length, and push it into the ground so that it stays upright.

- Mark the end of the stick's shadow with a stone or something similar that won't blow away. Because the Sun moves across the sky from east to west, it's casting a shadow on the opposite side. So, this first stone will be your western-most point.

- Wait roughly 20 minutes, and mark the new location of the end of the shadow. Since the Sun is moving west across the sky, the shadow's new location will be further east. Connecting these two rocks creates an east-west line.

- Put your left foot on the first rock 'W' ,and your right foot on the second, 'E' . When you're in this position, your front will be facing north and your back will be facing south.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# DEN MAKING

## OUTCOMES
Increased comfort in local green space.

## SPACE
Ideally somewhere that has several trees.

## RESOURCES
Lots of long sticks – these can be hard to find so make sure you have them available in advance. Some parks have stick piles collected for exactly this kind of activity. A tarpaulin or plastic sheet. A bottle of water.

## TIME
30–45 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo, trees in high winds, sticks being used as light sabres, only use light sticks for the roof, landowner permission.

## HOW IT WORKS
- Den building is a classic fun outdoor activity for young people.
- Divide the group into smaller teams, with three or four young people per group ideally. The number of groups will depend on the space and sticks available.
- Challenge each team to build a den that they can all fit in using only sticks already fallen, trees that are standing and a tarpaulin/plastic sheet. Give them 15–20 minutes or so.
- Once building time is up, take it in turns for each group to get into their den and then you pour water over the top to see if they have built it sufficiently to stay dry.
- With limited resources, the dens could be made much smaller so that only one member of each group needs to fit into the den.
- Driest team wins!
- Be mindful of not being destructive to the woodland habitat. Try and find somewhere that is dedicated to this kind of activity.

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# LIFE UNDER A LOG

## OUTCOMES
Increased knowledge of local nature. Increased comfort in local green space.

## SPACE
Any outdoor green space.

## RESOURCES
Hand sanitiser. Clean yoghurt pot. Soft bristle brush. ID sheet. Magnifying glass or USB microscope optional. ID guides optional.

## TIME
30–45 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo, trees in high winds, insect phobias/allergies, toxic plants, landowner permission.

## HOW IT WORKS
- A sure way to find urban nature is to look under logs that can be found in parks. You'll be amazed how many different types of animal live under these.

- Show young people how to safely turn over logs and stones to find the minibeasts living under them. Being gentle and careful not to squish any is very important. A clean yoghurt pot and a paint brush can be used to coerce creatures into the pot for a closer look.

- Use ID guides (books, online resources or apps) to help you identify what kind of invertebrates they are. You could record your findings, using iNaturalist.

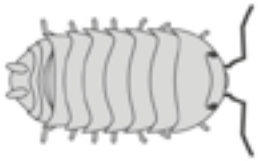
- Always put the log or stone back and place the animal to the side to let it crawl back under. Use hand sanitiser afterwards.

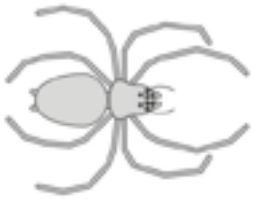
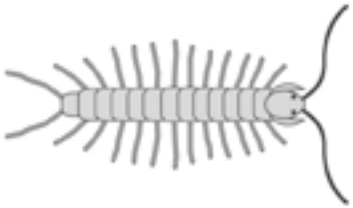
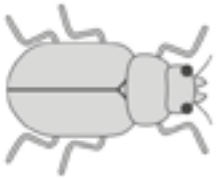
- You can add a competition element, where teams see how many different species they can find on a check list. See the score sheet on the next page.

- You can make this more of a scientific activity where you try and identify as many species as possible or compare different micro-habitats to see what lives where.

## ADAPTATION IDEAS
Use a magnifying glass or even a USB microscope that attaches to phones to get super close. You can record film and take photos. You can also buy little clip-on magnifiers for camera phones.

# LIFE UNDER A LOG SCORE SHEET

| ANIMAL TYPE | IMAGE | TALLY OF INDIVIDUALS FOUND | POWER NUMBER | TOTAL POINTS = TALLY X POWER NUMBER |
|---|---|---|---|---|
| Woodlouse |  | | 5 | |
| Slug |  | | 10 | |
| Worm |  | | 10 | |
| Snail |  | | 10 | |

| | | | | |
|---|---|---|---|---|
| Spider |  | | 15 | |
| Centipede |  | | 15 | |
| Millipede |  | | 20 | |
| Beetle |  | | 20 | |
| | | | **GRAND TOTAL** | |

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# MAKING A SWEEP NET

**OUTCOMES**
Increased knowledge of local nature. Increased comfort in local green space.

**SPACE**
Any outdoor green space.

**RESOURCES**
Old pillowcase. Wire coat hanger. Parcel/duct tape. Scissors.

**TIME**
30 minutes.

**MAIN THINGS TO CONSIDER**
Using scissors.

**HOW IT WORKS**

- Sweep nets are a fun way to catch insects, and you can make your own net.
- Bend the coat hanger into a diamond shape.
- Attach the top of your bag/pillowcase to the diamond with parcel tape.
- Use the hook of the coat hanger as a handle. Wrap parcel tape around any sharp bits.
- Here are some instructions on how to make a sweep net.
- On the next page, there are instructions on how to use your brand new piece of equipment.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# USING A SWEEP NET

## OUTCOMES
Increased knowledge of local nature. Increased comfort in local green space.

## SPACE
Any outdoor green space.

## RESOURCES
Sweep net. Jam jar, box or tray. A magnifying glass or USB microscope can be great with this task to get a closer look. ID guides (optional).

## TIME
20–30 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo, trees in high winds, insect phobias/allergies, toxic plants, landowner permission.

## HOW IT WORKS
- Find an area of long grass on a warm day and walk through it while moving the net quickly from side to side in an 'S' shape, making sure that the mouth of the net hits the grass first so that the insects go into your net.
- When you have moved the net back and forth 10 or so times, it's time to inspect your catch. Leave the net open for a few seconds before emptying to allow any bees or wasps you have caught to escape before you take a look. Empty the net into a shoe box or sweet jar (a white tray is best of all) by reversing it through the coat hanger frame.
- Use ID guides (books, online resources or apps) to help you identify what kind of invertebrates they are. You could record your findings, using iNaturalist.
- Once you're finished with what you have caught, you can gently return them by slowly tipping the container upside down back into the long grass.
- An activity like this can highlight why leaving long patches of grass is so important for insect life, which in turn is important for other animals that eat insects.
- You could set this up as a competition between groups of young people.
- Avoid sweeping near spiky plants, such as brambles.
- Don't use these kind of nets to catch butterflies, as it will damage their wings. It requires highly trained skills, with a special butterfly net, to do this safely.

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# MAKING AND USING **A PITFALL TRAP**

## OUTCOMES
Increased knowledge of local nature. Increased comfort in local green space.

## SPACE
Any outdoor green space.

## RESOURCES
Trowel. Yoghurt pot. Tray. ID guides (optional).

## TIME
30 minutes set up. Leave set up over several days.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo, trees in high winds, insect phobias/allergies, toxic plants, landowner permission.

## HOW IT WORKS
- A pitfall trap is a simple device used to catch small animals – particularly insects and other invertebrates – that spend most of their time on the ground.
- In its most basic form, it consists of a container buried so that its top is level with the surface of the ground. Any creatures that wander nearby may fall in. Any that can't escape by climbing, jumping or flying out will remain trapped until you release them.
- Choose a location for your trap on flat ground near vegetation.
- Use a trowel to dig a small hole.
- Place a clean yoghurt pot in the hole. Fill in any empty space around the pot with soil. Make sure that the top of the pot is level with the ground, or you won't catch anything. Place a small square of wood over the top, raised by pebbles at each corner – this will stop any rain flooding in.
- Leave your trap overnight and check first thing in the morning. If you prefer to leave it during the day, put it in the shade and check it at least every few hours to stop creatures from overheating or eating each other.
- Empty the trap into a tray to see what creatures wandered in. Use ID guides (books, online resources or apps) to help you identify what kind of invertebrates they are.
- You could record your findings using iNaturalist. You could also draw the creatures or take photographs.
- Carefully release the animals, returning them to a safe, sheltered place.
- Return the area back to how you found it.
- If you don't catch much on your first try, don't give up. Try placing your pitfall trap in a different area near more vegetation. You could compare what and how much you catch in different locations.
- You could also try adding bait to your trap. A banana may entice some minibeasts. Be careful not to leave the banana in the trap too long, though – you don't want to return to find things encased in decaying banana goo. Bear in mind you're likely to have a stream of ants moving back and forth to the banana. You could compare the success of different types of bait. Apple, mango, wet dog or cat food can work well.
- You could set this up as a competition between groups of young people.
- You can try different locations and have discussions about why you might get different results.

**PLAY A VIDEO**

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# MAKING AND USING
# A FOOTPRINT TUNNEL

## OUTCOMES
Increased knowledge of local nature. Increased comfort in local green space.

## SPACE
Any outdoor green space.

## RESOURCES
Cardboard. Paper. Masking tape. Twine. A shallow tray. Carbon powder. Vegetable oil. Bait (such as wet cat or dog food).

## TIME
30–60 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo, trees in high winds, insect phobias/allergies, toxic plants, landowner permission.

## HOW IT WORKS
- A footprint tunnel is a structure placed outdoors that records the tracks of small animals, using animal-friendly ink and some bait.
- To make your tunnel, fold the cardboard into three even sections. Cut two pieces of paper to fit the width of the middle section of your cardboard. Use masking tape to secure them at both ends of the cardboard.
- Secure a shallow tray to the centre of the cardboard with masking tape. Place a small amount of bait on the tray.
- Fill the spaces between the paper and bait tray with masking tape strips – these will serve as the ink pads.
- In a bowl, combine one part carbon powder with one part vegetable oil and mix well. Paint the mixture liberally onto the masking tape between the bait tray and the sheets of paper.
- Fold up the sides of the cardboard to create a triangular structure. Make holes at the top of the cardboard flaps and use the twine to tie the tunnel together.
- Put the tunnel in a sheltered spot outdoors and leave it in place for up to one week, checking for ink tracks on the paper every day.
- Next, identify what made the tracks on the paper. Photograph the footprints alongside a ruler to show their size, then use books or online resources to narrow down which animals the tracks belong to.
- Reset your tunnel in a new location, replacing the paper and topping up the ink and bait tray.
- It is best to place it in a sheltered and flat location. You should avoid areas close to roads or on pavements and pathways where it could be disturbed.
- Footprint tunnels don't always show signs of animals. So for some it could be a disappointment if they don't find anything. Be mindful of this, if having a go at the activity. But it's fun when you do find animal footprints!
- Young people could compare different types of bait, like apple, mango, dog or cat food. You could even run a competition between groups. The most footprints win!
- View further information and instructions on how to make a footprint tunnel here.

**PLAY A VIDEO**

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# MAKING AND USING **A BIRD FEEDER**

## OUTCOMES
Increased knowledge of local nature. Increased comfort in local green space.

## SPACE
Any outdoor green space.

## RESOURCES
A plastic bottle (with cap). Two sticks. A pin. Scissors. String. Bird seed.

## TIME
30–40 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo, trees in high winds, using scissors, landowner permission.

## HOW IT WORKS
- Making a bird feeder is pretty simple and cheap. And it provides a great opportunity to entice birds that you normally might not see.
- Remove the cap from a clean plastic bottle. Use the pin to puncture several small drainage holes in the base of the bottle.
- Use the pin to make two level holes on opposite sides of the bottle, near to the base. Use the scissors to widen them slightly.
- Push a stick through the holes. There should be around five centimetres of stick left outside the bottle on each side for birds to perch on.
- Slightly above each perch, use the scissors to cut a feeding hole the size of a 5p coin.
- Create a second set of perches and feeding holes, using the same method, further up the sides of the bottle and offset by 90° from the original.
- Use the pin to make two holes in the neck of the bottle, on opposite sides and level with each other. Widen these with scissors.
- Thread the string through the holes, then fill the bottle with bird food and replace the bottle cap. You can make a funnel with a sheet of paper to make filling the bottle easier.
- Find a sheltered location outside to hang your feeder and tie it onto a tree branch.
- Watch from a distance or indoors for birds to begin landing on your feeder. It may take a few days before this starts to happen.
- Identify the birds that come to feed. You can use books, mobile apps and the internet to help you.
- Remove uneaten food every few days so it doesn't get mouldy. Washing the bird feeder once a week is important to avoid spreading diseases to birds using it.

## ADAPTATION IDEAS:
Another option, particularly if you'd rather not use scissors, is to poke unshelled sunflower seeds into apples. Add sticks for the birds to perch on and to hang your feeder from.

PLAY A VIDEO

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# GROUP LITTER PICKING

## OUTCOMES
Increased ownership of local nature. Increased sense of empowerment to make a difference.

## SPACE
Any outdoor green space.

## RESOURCES
Gloves. Litter pickers. Rubbish bags. Hand sanitiser.

## TIME
30–60 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo, trees in high winds, insect phobias/allergies, toxic plants.

## HOW IT WORKS
- Organising a local litter pick is a great way to get young people engaged in something where they feel like they can actually make a difference. It also builds pride and a sense of responsibility to look after their local area and the environment.

- Health and safety guidance for the young people is crucial. Use gloves. Use litter pickers. Wash hands.

- Any broken glass and needles – leave and report to park officials to clear up.

- You can make a litter pick competitive by putting the young people into small teams. The group with the most litter after a set period of time, wins.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# WRITING A LETTER TO YOUR MP

**OUTCOMES**
Increased ownership of local nature. Increased sense of empowerment to make a difference.

**SPACE**
Somewhere where it's easy to concentrate and write.

**RESOURCES**
Email account and computer, or go old school with pen, paper, envelope and stamp!

**TIME**
30–40 minutes.

**MAIN THINGS TO CONSIDER**
None.

**HOW IT WORKS**

- Politicians have the power to change things. Ask your young people what change they would like to see and go to the top with it!

- It's your MP's job to make your voice heard in Parliament whether you voted for them or not. They represent their local area and can raise concerns on behalf of local people.

- MPs can: vote on issues in Parliament, write to the government minister responsible for the issue or make an appointment to see them, ask questions in Parliament ('Parliamentary Questions' or PQs) about issues you raise and ask for a debate in Parliament. A relevant minister will always attend this debate to respond to your MP on behalf of the government.

- You can find your MP's email address here.

- Encourage your young people to write from their own experience about what they care about. Why do they feel like this? Encourage them to search for evidence to support their opinion and ideas.

- You could set up a debate about the topic to stimulate ideas before writing the letters.

- There are more ideas and support for contacting politicians here.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# HAPA ZOME

## OUTCOMES
Increased comfort in local green space. Increased knowledge of urban species. Increased appreciation of urban nature's beauty.

## SPACE
Pretty much anywhere.

## RESOURCES
Cotton cloth or an old pillowcase - you can also use paper. A basher of some kind: mallet, hammer, large smooth stone, or rolling pin. A hard surface, like a chopping board. Leaves (choose fresh ones that have moisture in them). Scissors.

## TIME
30 minutes.

## MAIN THINGS TO CONSIDER
Using the basher safely, public space, trip hazards, sharps/litter, dog poo, trees in high winds.

## HOW IT WORKS
- Hapa Zome is an ancient Japanese art form, based on leaf printing.
- Cut your cloth to the size you want, and place it on a hard surface.
- Place the leaf flat on the cloth.
- Fold over the cloth in the centre to cover the leaf and hold in position.
- Gently tap the cloth with your bashing tool, in the area where the leaf is, and you will start to see the colour coming through the fabric.
- Safety Tip! Don't get distracted and always watch what you are hammering, keeping fingers as far away as possible. The best idea is to keep one arm behind your back while bashing.
- Continue tapping until you have covered the whole area of the leaf, then unfold the cloth and remove any leaf material.
- Repeat this process with as many leaves as you want. You will find that some leaves work better than others, so experiment with different types to create different effects.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# NATURE'S ART

## OUTCOMES
Increased comfort in local green space. Increased knowledge of urban species. Increased appreciation of urban nature's beauty.

## SPACE
Any outdoor green space.

## RESOURCES
Fallen leaves, sticks, stones, anything natural that you can find that doesn't involve picking it from something living. Autumn is perfect for this because there are so many leaves of different colours. Hand sanitiser.

## TIME
30 minutes.

## MAIN THINGS TO CONSIDER
Public space, trip hazards, sharps/litter, dog poo, trees in high winds, toxic plants, landowner permission.

## HOW IT WORKS
- Get young people in pairs, or small groups.
- Challenge them to come up with a sculpture, 2D or 3D, of something in nature that inspires them – and they are to use only natural materials that they can find around them.
- Once everyone has finished, after a set amount of time, go round as a big group to look at each other's piece of work.
- Prompt conversations about the pieces, asking people what they like about them and why.
- At the end, the group can vote for their favourite – but they can't vote for their own!
- Make sure you wash hands well afterwards.

## ADAPTATION IDEAS
Give the young people a set box of things they can use. You could ask them to make a pattern rather than an image.

# UNWIND YOUR MIND

**Activities that encourage young people to slow down, notice urban nature, and feel calm.**

# BASICS OF MINDFULNESS

Mindfulness is our ability to be fully present, aware of where we are and what we're doing, and not overly reactive or overwhelmed by what's going on around us. While mindfulness is something we all naturally have, it's more readily available to us when we practice on a daily basis.

Tuning into our senses is a key way to be mindful. This is where making the most of green spaces and 'noticing nature' can be so beneficial to our wellbeing.

The following activities encourage us to use different senses to notice and experience the nature all around us. And the beauty is, once we notice it, we can't un–notice it.

Judging how your young people will respond to this kind of activity is key. Some young people will be willing to try these activities, others may be more reserved. But with the trust of the young people, you may find they are prepared to get out there further than you thought.

Ease them in slowly. You can use different energising or calming warm up games to prepare the young people. These activities can come across as all 'deep and meaningful', but you can have fun with them, they are meant to be joyful.

Focusing on breathing, meditation and body scans are other really useful mindfulness practices that you may like to explore with your young people. There are lots of resources out there, such as here.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# 4, 3, 2, 1 IN NATURE

## OUTCOMES
Increased knowledge of local nature. Increased ability to use nature to be mindful.

## SPACE
Any outdoor green space.

## RESOURCES
None.

## TIME
5–10 minutes.

## MAIN THINGS TO CONSIDER
Preparing young people for mindfulness activities, public space.

## HOW IT WORKS
- This activity encourages young people to be mindful and present by using their senses in a focused way.
- Get the young people to sit in a large circle with plenty of room between each other, facing out from the middle so they can't catch each other's eyes easily.
- Ask them to look for four urban nature things they can see. What does each look like? What colour? Pattern? Shape?
- Then three they can touch. How do they feel? Texture? Weight? Temperature?
- Ask them to close their eyes. What two things can they hear? In what direction are the sounds? How far away? What is the sound for?
- Then name one thing that they can smell. Is it a familiar smell? A new smell? Pleasant or unpleasant?

## ADAPTATION IDEAS
You can try a similar activity in pairs with the I Can
See mindfulness activity on page 60.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# I CAN SEE

## OUTCOMES
Increased knowledge of local nature. Increased ability to use nature to be mindful.

## SPACE
Any outdoor green space.

## RESOURCES
None.

## TIME
5–10 minutes.

## MAIN THINGS TO CONSIDER
Preparing young people for mindfulness activities, public space, trip hazards, sharps/litter, dog poo, trees in high winds.

## HOW IT WORKS
- Get young people in pairs.
- One young person, the 'coach', sits behind the other, the 'responder'.
- The coach says 'I can see...' the responder says what they can see.
- Then 'I can hear...', 'I can smell...', 'I can feel...' and the responder answers accordingly.
- The coach can repeat phrases and create personal phrases.
- Switch roles after three minutes or so.

## ADAPTATION IDEAS
This and 4,3,2,1 in Nature activity can build on each other. Or you could switch from one to the other depending on which suits the energy of the group and if pairs or an individual activity would be better.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# MEET A TREE

## OUTCOMES
Increased knowledge of local nature. Increased ability to use nature to be mindful.

## SPACE
Any outdoor green space with trees in it.

## RESOURCES
Blindfolds or can close their eyes.

## TIME
30 minutes.

## MAIN THINGS TO CONSIDER
Preparing young people for mindfulness activities, public space, trip hazards, sharps/litter, dog poo, trees in high winds.

## HOW IT WORKS
- Get young people in pairs and ask them to number themselves one and two within each pair.
- Young person one closes their eyes or is blindfolded.
- Young person one is then safely guided by young person two, among the trees, to a particular tree of two's choice.
- Young person one spends five minutes getting to know the tree as well as they can using their senses of touch, smell and hearing.
- After five minutes, young person two guides young person one back to where they started, before the blindfold can come off.
- Young person one then has to try and find their tree with their eyes open.
- Five slow disorientating spins could be added before young person one takes off the blindfold to make it a bit harder.
- Switch up the roles, so everyone gets a go.

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# HUMAN CAMERA

## OUTCOMES
Increased knowledge of local nature. Increased ability to use nature to be mindful.

## SPACE
Any outdoor green space.

## RESOURCES
None.

## TIME
30 minutes.

## MAIN THINGS TO CONSIDER
Preparing young people for mindfulness activities, public space, trip hazards, sharps/litter, dog poo.

## HOW IT WORKS
- Ask young people to close their eyes, spin round twice on the spot and stand for 10 seconds.
- On your command, prompt them to open their eyes for just one second before closing them again. What did they see? What 'picture' did they take in that second?
- Get young people in pairs. One, the 'camera', closes their eyes. The other, the 'photographer', standing from behind, places their hands on the shoulders of the camera. The photographer moves the camera around, positioning them to take a picture.
- A tap on the shoulder and the camera opens their eyes for one second 'exposure'. Encourage them to walk in silence.
- Trade roles after four to five pictures.
- Suggest interesting angles and perspectives. The photographer can prime the camera for the next picture with a lens, 'close up' or 'wide angle' or 'movie panoramic', where the photographer rotates the camera while their eyes are open for slightly longer.
- Later, the young people can sketch their favourite pictures from memory if they like.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# TREE EXPLORER

## OUTCOMES
Increased knowledge of local nature. Increased ability to use nature to be mindful.

## SPACE
Any outdoor green space with a large mature tree.

## RESOURCES
Said largish mature tree. A handheld mirror.

## TIME
5–10 minutes.

## MAIN THINGS TO CONSIDER
Preparing young people for mindfulness activities, public space, trip hazards, sharps/litter, dog poo, trees in high winds.

## HOW IT WORKS
- Find a large mature tree.
- Tell the young person to hold the mirror close to their face, pointing it upwards so they can see the tree.
- Tell them to choose a twig high up and use the mirror to follow until it joins the branch, then follow the branch until it joins the trunk, then follow the trunk to the ground.
- Then tell them to lower the mirror and see if they can retrace the path they took from the ground, back up the tree to the very twig they began with.
- This is great for really focusing on the details of the tree and appreciating it in a new way.

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# PAIR, STARE AND SHARE

## OUTCOMES
Increased knowledge of local nature. Increased ability to use nature to be mindful.

## RESOURCES
Hand sanitiser.

## TIME
30 minutes.

## MAIN THINGS TO CONSIDER
Preparing young people for mindfulness activities, public space, trip hazards, sharps/litter, dog poo, trees in high winds.

## HOW IT WORKS
- Get young people in pairs, labelled 'One' and 'Two'.
- Ones go and find a natural object (eg leaf, seed etc). Encourage them to study it using as many senses as safely possible (not taste!).
- Leaving the object where they found it, they come back and describe it to twos, who then go to find the object that was described to them.
- Switch over roles.
- Encourage them to ask questions about the object. For example, why is it that pattern, shape or colour? Does it remind you of anything?
- Pairs can also present back to the group, and then the whole group has to try and find the same object.
- Remember to wash hands thoroughly afterwards. Suggest to the young people they choose something that intrigues them.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# THE BLACKBERRY

## OUTCOMES
Increased knowledge of local nature. Increased ability to use nature to be mindful.

## SPACE
Parks with blackberry bushes (brambles).

## RESOURCES
A blackberry. A blindfold or just close eyes.

## TIME
5–10 minutes.

## MAIN THINGS TO CONSIDER
Food allergies, confirming it is a blackberry, choking.

## HOW IT WORKS
- During late summer to early autumn, find a blackberry bush and pick some blackberries. It's really important you only pick berries that you know are safe. Some can be poisonous. Check out page 98 for identification help.
- When you get them back to your youth centre, wash them thoroughly. You could freeze some or buy frozen ones at a shop to use any other time of the year.
- Blindfold young people or ask them to close their eyes before giving them a blackberry.
- Ask the young people to pay close attention to how it feels, smells and tastes, and how their bodies reacts to all these things. Take a full five minutes to experience and eat the blackberry.
- If you pick enough blackberries, you could make a blackberry crumble! Here's a tasty recipe to try.

## ADAPTATION IDEAS
If blindfolding or closing their eyes is not an option, suggest they pretend they have never seen a blackberry before. They could also do this in pairs and share and describe the experience with each other.

# REFLECTION

**Activities that encourage young people to reflect, contemplate upon and share their experiences.**

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# YOUR URBAN GREEN SPACE

**OUTCOMES**
Increased knowledge of local nature.

**SPACE**
At a bench in the park.

**RESOURCES**
Paper. Pen. Something to lean on.

**TIME**
5–10 minutes.

**MAIN THINGS TO CONSIDER**
Preparing young people for mindfulness activities, public space, sharps/litter, dog poo.

**HOW IT WORKS**

- Suggest to the young people that they draw a map of the park they are in or have been spending time in.
- Highlight the different areas, what are they used for and by who – both nature and people.
- Re-imagine it with improvements/things they would add to make it better.
- How could the community use this park differently or better?
- What features could be added that would benefit nature or be sustainable?

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# FOLDING POEM

## OUTCOMES
Increased knowledge of local nature. Increased appreciation for urban nature.

## SPACE
Anywhere.

## RESOURCES
Paper. Pen. Something to lean on.

## TIME
15 minutes.

## MAIN THINGS TO CONSIDER
None.

## HOW IT WORKS
- This activity is an opportunity for young people to share their experiences of exploring urban nature.

- In groups of three, young person A writes the first line of a poem and passes the paper to young person B, who responds by writing the next two lines. Young person B then folds the paper over to hide lines one and two. Young person C then responds to the third line of the poem with lines four and five.

- This can all be repeated several times depending on the time you have and how long you want the poems to be.

- As each young person has partial knowledge of the poem as it is written, it should hopefully portray the group's experience of their interaction with nature that day. If not, it'll be a funny gobbledygook poem!

- Ask the young people to read out loud and share poems with the rest of the group.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# A LETTER TO MYSELF

## OUTCOMES
Increased knowledge of local nature. Increased appreciation for urban nature.

## SPACE
Anywhere.

## RESOURCES
Pen. Paper. Envelope. Stamp.

## TIME
30 minutes.

## MAIN THINGS TO CONSIDER
None.

## HOW IT WORKS
- This activity is an opportunity for the young people to have more of a personal reflection of their experience with nature.
- Ask the young person to write a letter to themselves about a moment they experienced with nature.
- Prompt them to describe in the letter what they are feeling now and what they want to remember from this time of connection and calm with nature.
- Reassure them that no one will read the letters, but they will be posted back to themselves in a month's time, so they can be reminded of how they felt.

## ADAPTATION IDEAS
You can write the letters as an email to be sent in a month's time.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# SPOKEN WORD

## OUTCOMES
Increased appreciation for urban nature. Increased ownership of local nature. Increased appreciation of urban nature's beauty.

## SPACE
Any space anywhere.

## RESOURCES
Pen. Paper.

## TIME
30–60 minutes.

## MAIN THINGS TO CONSIDER
None.

## HOW IT WORKS
- Writing lyrics, poetry and spoken word are great ways to express ourselves creatively – we just need to make time to do it. Nature, as well as our experiences in nature and how it makes us feel, can be brilliant inspiration.
- Turn off all electronic devices! If the young people are writing on their phone or laptop that is fine, just suggest they switch off their notifications to cause less distractions.
- Get the young people to go for a walk. A simple 10–30 minute walk will help clear their mind, enhancing their ability to write effectively.

## TOP TIPS TO SUGGEST
- Don't be critical of yourself.
- Trust whatever thoughts come into your head and roll with them. Trust the process, just write and you will improve.
- Speak your words through in your head while you write and, if possible, out loud. This allows you to gauge the rhythm and tempo of the words and create flow that you will enjoy.
- Understand that not every line, has to rhyme (... ha that rhymes!).
- Check out these tips for different types of poem that can be written.

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# NATURE JOURNALLING

## OUTCOMES
Increased appreciation for urban nature. Increased ownership of local nature. Increased appreciation of urban nature's beauty. Increased ability to use nature to be mindful.

## SPACE
Any space anywhere.

## RESOURCES
Pen or pencil. Paper or notebook..

## TIME
10–20 minutes.

## MAIN THINGS TO CONSIDER
None.

## HOW IT WORKS
- Journalling is one of the most recommended tools for a clearer mind and happier life. It helps to release mental blockades and be more precise with your thoughts. Nature journalling can give the benefits of both journalling and nature – a super combo!

- Regardless if your young people already journal or not, spending 10 minutes writing down and even sketching out what they have seen can have huge benefits.

- The young people get to decide what they are going to record. Drawing, or writing down what they see and feel are both great.

- With either option, be as descriptive as possible. Pay attention to all senses. What can you see? What's the weather like? What do you smell?

- Journals can be used as scientific records if you make sure you record the following: What was observed? Where? When? Who made the observation?

## HERE'S A FEW IDEAS:
- Lists of birds, insects, leaves or flowers you have observed.

- Measurements/charts – look for patterns.

- Leaf or tree rubbings.

- Record sit spot seasons – sit in the same spot at least once during each season. Record how it is different.

- Ask yourself: What does this remind me of? Why? Let yourself wonder and come up with answers on your own without the help of a field guide or your phone. Write them down and check later to see if you were close.

- Check out this link here for suggestions for a digital nature journal.

TYPE

AGE

**11–13**

**13–16**

**16–19**

**19–25**

NATURE

# NATURE DRAWING OR PAINTING

## OUTCOMES
Increased appreciation for urban nature. Increased appreciation of urban nature's beauty. Increased ability to use nature to be mindful.

## SPACE
Any outdoor green space or at your youth centre.

## RESOURCES
Art materials, including rubbish. Paper. Pencils. Paints. Brushes.

## TIME
30–60 minutes.

## MAIN THINGS TO CONSIDER
None.

## HOW IT WORKS
- Using the natural world as inspiration for arts and crafts is a great way for young people to reflect on experiences they have had with nature during your sessions.
- An activity like this could also be the start of a session, by taking young people out to find inspiration in a local green space, and by using one of the other activities in this toolkit.
- You could provide a theme or you could let them have complete free rein on their topic.
- You could create an art gallery of all the pieces – share on social media – or create an art competition.

TYPE

AGE

11–13

13–16

16–19

19–25

NATURE

# SOCIAL MEDIA POST

## OUTCOMES
Increased appreciation for urban nature. Increased appreciation of urban nature's beauty.

## SPACE
Any outdoor green space.

## RESOURCES
A smartphone.

## TIME
30–60 minutes.

## MAIN THINGS TO CONSIDER
Revealing locations through online posts, making sure material created is suitable.

## HOW IT WORKS
- We're all aware of how smartphones have changed the landscape of communications and sharing information for everyone.

- Sometimes, we want to actively encourage young people to put down their phones, use their senses to see, hear, feel, touch and smell the natural world. But a phone/social media activity encouraging creativity and curiosity can be a great way of encouraging young people by giving them a focus to create content.

- Suggest some themes to explore through urban nature, such as:
  – Discover your local area.
  – Who lives here?
  – What does nature mean to you?
  – What's the good, the bad, the ugly?

- If the young people aren't keen to create content and posts for themselves, then why not challenge them to create content for your organisation?

- The options are endless, different platforms, different mediums, different messages – just find the right time to put down the phones and the right time to pick them up and embrace them.

Useful and interesting information on common, easy-ish to find urban nature species.

# TOP URBAN NATURE SPECIES

# TOP URBAN SPECIES CONTENTS

# FOX

**BARE JOKES**
Why did the fox cross the road?  It was chasing the chicken. Classic.

**BRAG FACTS**
Heard any screaming foxes? It has been suggested that the screams are sounds of pain when foxes are locked together during mating, but this is an urban myth. The screams are actually the females trying to summon a mate!

The idea that foxes are dangerous to humans is not true at all. A fox may bite to defend itself, but only if cornered and can't escape.

**COLLECTIVE NOUNS**
A sulk or troop of foxes.

**BABY NAME**
Pup, cub or kit.

**WHAT DO THEY EAT?**
With a strong stomach and immune system, foxes will eat pretty much anything. They will search bins for waste food (and nappies!) if we don't secure it away properly.

**WHAT EATS THEM?**
They are the top of the food chain! But pet cats can kill fox pups and foxes are often killed by cars.

**WHERE TO FIND THEM**
Late evening and early morning, take a walk around the streets and you might come across a scavenging fox. Pups can be seen playing in late spring and summer.

*Vulpes vulpes*

# BROWN RAT

**BARE JOKES**
Why are rats such good friends? 'Cause they can keep a squeakret. It's all in the delivery.

**BRAG FACTS**
Rats communicate by weeing on things. It marks their territory and can also signal to other rats in their group where food is.

Their wee also shows up under UV lights.
The downside of this is that some birds of prey that hunt rats can detect UV light. This means they can see the rats' wee trails, giving away the rats' location.

**COLLECTIVE NOUNS**
A mischief of rats.

**BABY NAME**
Pup.

**WHAT DO THEY EAT?**
Pretty much anything!

**WHAT EATS THEM?**
Larger predators such as foxes, birds of prey and pet cats.

**WHERE TO FIND THEM**
Excellent at hide and seek, not easy to spot. Look out for a brown flash dashing across the path towards some bins and around bird feeders.

*Rattus norvegicus*

# GREY SQUIRREL

**BARE JOKES**
I was trying to come up with a few squirrel puns to make you laugh, but they were all too nutty.

**BRAG FACTS**
If other squirrels are watching them, they pretend to bury food to trick them.

**COLLECTIVE NOUNS**
A scurry or dray of squirrels.

**BABY NAME**
Kit.

**WHAT DO THEY EAT?**
Nuts, seeds, fruits and insects mainly. But they will raid bird nests for eggs and young birds – and search bins for food if we don't secure it away properly.

**WHAT EATS THEM?**
Larger predators such as foxes, birds of prey and pet cats.

**WHERE TO FIND THEM**
Parks! These guys LOVE an urban park.

*Sciurus carolinensis*

# COMMON PIGEON

**BARE JOKES**
That pigeon must be wealthy, look at the deposit it's put down on that car!

**BRAG FACTS**
Pigeons mate for life (with the odd affair)! Flirting can be seen in urban parks at any time of the year. The males puffs up the feathers on his neck to appear larger and impress or attract attention. He struts towards the female at a rapid walking pace, making repetitive, quiet notes, often bowing and turning as he comes closer.

Pigeon milk? What?! A few birds, including pigeons, actually produce a kind of 'milk' for their young. But it's produced in some cells in the throat of both males and females, called a crop.

They sick up the crop milk and feed it to the babies! Not even making this up. It's one reason why pigeons do well in cities, as there aren't many insects to feed the babies – which is a problem for other birds.

**COLLECTIVE NOUNS**
A band or school of pigeons.

**BABY NAME**
Squab.

**WHAT DO THEY EAT?**
Seeds, berries, little invertebrate animals.

**WHAT EATS THEM?**
Predators including foxes and birds of prey, such as the peregrine falcon.

**WHERE TO FIND THEM**
Look up! Pigeons are often found on roof tops or searching for food on the floor. Listen out for their'coo coo' call.

*Columba livia domestica*

# MALLARD

**BARE JOKES**
Why was the mallard put into the basketball game? To make a fowl shot. Personal favourite.

**BRAG FACTS**
Male and female mallards look so different that they were originally thought to be different species. They look a lot more alike in the summer, when they moult their feathers – this is called eclipse plumage. Females usually have duller colours than the males as it's important for them to be camouflaged while sitting on the nest.

Bread is not a natural food for ducks. It fills them up meaning they don't get all the nutrients they need from a varied diet. Try feeding them peas, sweetcorn or bird seed instead.

**COLLECTIVE NOUNS**
A raft or twack of ducks.

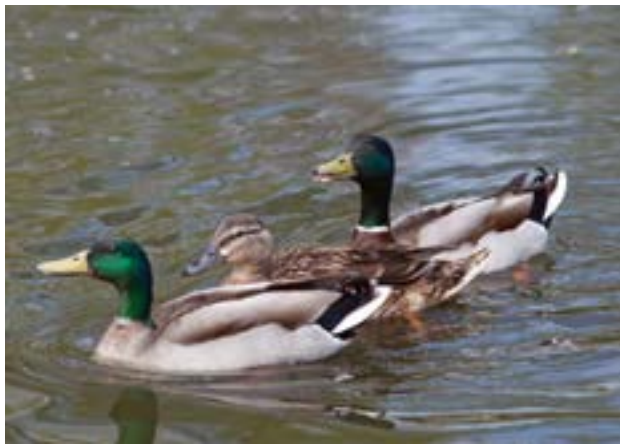
**BABY NAME**
Duckling.

**WHAT DO THEY EAT?**
Seeds, berries, plants, small invertebrate animals including shellfish.

**WHAT EATS THEM?**
Predators such as foxes and birds of prey.

**WHAT DOES THEY LOOK LIKE?**
Males: green head, yellow bill, mainly purple–brown on the breast and grey on the body.
Females: mainly brown with an orange bill and blue bar on the wing.

**WHERE TO FIND THEM**
Close to water.



*Anas platyrhynchos*

# BLACKBIRD

**BARE JOKES**
Why did the blackbird get a detention? Because she was tweeting in class. I'm not even sorry.

**BRAG FACTS**
Blackbirds are adapting to the urban environment; their song has changed, their hours of activity increased, and they live shorter lives – live fast, die young!

**COLLECTIVE NOUNS**
A cloud or merl of blackbirds.

**BABY NAME**
Chick.

**WHAT DO THEY EAT?**
Small invertebrate animals, seeds, berries, fruit.

**WHAT EATS THEM?**
Predators such as pet cats, foxes and birds of prey.

**WHAT DOES THEY LOOK LIKE?**
Adult males are black with a bright yellow bill and eye ring. Females are dark brown with a duller, yellow–brown beak.

**WHERE TO FIND THEM**
Look out for them in parks hopping along the grass searching for worms.

*Turdus merula*

# MAGPIE

**BARE JOKES**
Why do you never see a dead magpie on the road? ‘Cause its mates sit in the tree shouting ‘car car’.

**BRAG FACTS**
Magpies are super smart. They can recognise their own reflection in mirrors, which only some apes (including us), elephants and bottlenose dolphins can do.

**COLLECTIVE NOUNS**
A parliament or charm of magpies.

**BABY NAME**
Chick.

**WHAT DO THEY EAT?**
A lot! Dead things, small invertebrate animals, seeds, berries, fruit and waste food from bins.

**WHAT EATS THEM?**
Predators such as foxes and birds of prey.

**WHAT DOES THEY LOOK LIKE?**
Mainly black, with a white belly and white patches on the shoulders and wings. Long tail.

**WHERE TO FIND THEM**
Often in parks, hopping around.

*Pica pica*

# RING - NECKED PARAKEET

**BARE JOKES**
What do you get if you cross a parrot with a pigeon? Voicemail.

**BRAG FACTS**
Parakeets can learn to talk; some have been reported to speak up to one thousand words.

**COLLECTIVE NOUNS**
A chattering of parakeets.

**BABY NAME**
Chick.

**WHAT DO THEY EAT?**
Seeds, berries, fruit, small invertebrate animals.

**WHAT EATS THEM?**
Predators such as birds of prey.

**WHAT DOES THEY LOOK LIKE?**
Long–tailed and green with a red beak. Adult males have a pink and black ring around their face and neck.

**WHERE TO FIND THEM**
Listen out for their noisy squawks, then look out for green flashes across the park sky!

*Psittacula krameri*

# EARTHWORMS

**BARE JOKES**
What did the earthworm say to the other when it was late home? Where in earth have you been?!

**BRAG FACTS**
There are around 29 species of earthworm in the UK, and under one football pitch there can be more than a million individuals! In Australia there are earthworms that grow two metres long!

**COLLECTIVE NOUNS**
A clat or clew of earthworms.

**BABY NAME**
Wormlet!

**WHAT DO THEY EAT?**
Earthworms eat rotting plants and animals , which becomes compost as it passes through their bodies. Useful. Thanks worms.

**WHAT EATS THEM?**
Some birds, mammals, beetles and amphibians.

**WHAT DOES THEY LOOK LIKE?**
Typically pink with segmented bodies. Slight differences with each species.

**WHERE TO FIND THEM**
Carefully turn over an old log or stone and you might spot one.


Lumbricina

# LADYBIRDS

**BARE JOKES**
Why did the ladybird get kicked out of the park? Because it was a litterbug.

**BRAG FACTS**
When threatened, they secrete an oily, yucky, yellow fluid from joints in their legs. Their colouring acts as a warning to predators that they taste disgusting!

**COLLECTIVE NOUNS**
A loveliness or bloom of ladybirds.

**BABY NAME**
Larva.

**WHAT DO THEY EAT?**
Different ladybird species eat different things. Some eat plants, some eat aphids and other invertebrates, some eat mildew and pollen.

**WHAT EATS THEM?**
Birds, spiders and parasitic wasps.

**WHAT DOES THEY LOOK LIKE?**
Six legs, domed oval body. Often have spots, some have stripes, some are plain colours. Short, clubbed antennae. There are 53 species in the UK.

**WHERE TO FIND THEM**
Look out for them flying and crawling around in the summer.


Coccinellidae

# SLUGS

**BARE JOKES**
What did the slug say to the other slug? I'll get you next slime!

**BRAG FACTS**
Slugs have 27,000 teeth - that's more than a shark! Their teeth are called denticles.

Slugs are hermaphrodites, having both female and male reproductive organs.

**COLLECTIVE NOUNS**
A cornucopia, phlegm or slime of slugs.

**BABY NAME**
Baby slug.

**WHAT DO THEY EAT?**
Different slugs eat different things. Some only eat plants, some eat fungi, some eat poo, and some eat other slugs and earthworms.

**WHAT EATS THEM?**
Birds, foxes, and other slugs.

**WHAT DOES THEY LOOK LIKE?**
Soft, moist bodies, no arms or legs and no easily visible shell, although some have tiny shells. They have four tentacles, two of which have eyes at the end.

**WHERE TO FIND THEM**
In damp areas. Carefully turn over a rotten log or stone and you might spot one.

Gastropoda

# SNAILS

**BARE JOKES**
What was the snail doing on the highway?
About one mile a week!

**BRAG FACTS**
The speed of snails is around 0.5 – 1 millimeters per second. If they moved without stopping, it would take more than a week to complete one kilometre.

**COLLECTIVE NOUNS**
A rout, walk or escargatoire of snails.

**BABY NAME**
Baby snail.

**WHAT DO THEY EAT?**
Different snails eat different things. Some only eat plants, some eat fungi, some eat poo and some eat other snails.

**WHAT EATS THEM?**
Birds, foxes, rats and parasitic flies. Birds called thrushes use stones to crack into snails' shells.

**WHAT DOES THEY LOOK LIKE?**
Soft, moist bodies, no arms or legs and a shell. They have four tentacles, two of which have eyes at the end.

**WHERE TO FIND THEM**
In damp areas.

Gastropoda

# WOODLICE

**BARE JOKES**
What did the vertebrate say to the invertebrate in the boxing ring? 'C'mon! Or are you spineless?' Ahhh, science jokes.

**BRAG FACTS**
They have square poo. They're crustaceans and so are closely related to crabs and lobsters. They carry their babies around in pouches.

There are amazing regional names for woodlice, including cheeselogs, monkey peas, woodpigs and billy buttons! What is it in your area?

**COLLECTIVE NOUNS**
A flock or colony of woodlice.

**BABY NAME**
Baby woodlouse.

**WHAT DO THEY EAT?**
Decaying wood – they live in the dead log that they eat. That's like us living in a gingerbread house!

**WHAT EATS THEM?**
Birds, parasitic flies, and other invertebrate animals such as spiders with extra big jaws (woodlice exo-skeletons are tough!).

**WHAT DOES THEY LOOK LIKE?**
They have armoured exoskeletons. Adults have 14 legs and a pair of antennae. There are 35 different types of woodlice in the UK.

**WHERE TO FIND THEM**
Carefully turn over a rotten log or stone and you might spot one.


Oniscidea

# BEES

**BARE JOKES**
Who's a bee's favourite singer?
Queen Bee-yonce!

**BRAG FACTS**
Some bees lay their eggs inside empty snail shells and then build a thatched roof on top of the shell with bits of grass. Other bees (called leafcutter bees) carry leaves through the air. And some act like tiny stone masons, digging holes in walls.

**COLLECTIVE NOUNS**
A swarm of bees, although most bee species are actually solitary.

**BABY NAME**
Larva.

**WHAT DO THEY EAT?**
Pollen and nectar from flowers.

**WHAT EATS THEM?**
Birds, spiders and parasitic flies.

**WHAT DOES THEY LOOK LIKE?**
Six legs. Four translucent, veined wings. Often they are yellow and orange and black, but some are just one colour. Many have a furry appearance. There are around 270 different species of bee in the UK.

**WHERE TO FIND THEM**
Buzzing around flowers.


Anthophila

# SPIDERS

**BARE JOKES**
How do spiders communicate? Through the World Wide Web.

**BRAG FACTS**
Some baby spiders leave the nest by 'ballooning'. They make threads of spider silk, which catch electric fields and wind currents, carrying them away.

**COLLECTIVE NOUNS**
A cluster of spiders.

**BABY NAME**
Spiderling.

**WHAT DO THEY EAT?**
Spiders are carnivores, eating all kinds of different invertebrates, including other spiders!

**WHAT EATS THEM?**
Birds, other invertebrates, small mammals, parasitic wasps and flies.

**WHAT DOES THEY LOOK LIKE?**
They have eight legs. There are over 600 different species of spider in the UK that come in all sorts of colours.

**WHERE TO FIND THEM**
Look in nooks and crannies, under logs, and definitely look out for spiders' webs, a sure sign there is a spider nearby.

Araneae

# COMMON WASP

**BARE JOKES**
What did the wasp say during an identity crisis?
'To bee or not to bee, that is the question.'

**BRAG FACTS**
When a wasp stings or is killed, it releases a scent that smells of bananas, via its venom. This causes other wasps to become more aggressive and ready to defend the colony. Wasps are important pollinators and feed on insects, which benefits humans by keeping pest numbers down.

**COLLECTIVE NOUNS**
If flying in an organised, defensive or social pattern, a swarm. If not, a nest or colony of wasps.

**BABY NAME**
Larva.

**WHAT DO THEY EAT?**
Adult wasps feed on sugars from flowers and fruit, but they catch other invertebrates to feed to their larvae. The larvae even produce a sugary liquid that the adult wasps eat. A family meal!

**WHAT EATS THEM?**
Birds and spiders.

**WHAT DOES THEY LOOK LIKE?**
Six legs. Yellow and black. Black antennae. Four translucent veined wings.

**WHERE TO FIND THEM**
Flying around fruit and sweet things in the autumn.

*Vespula vulgaris*

# BUDDLEIA

**BARE JOKES**
What did the big flower say to the little flower? Hi, bud!

**BRAG FACTS**
They need very little soil to grow because they're adapted to living on rock faces, so to them, cities are like one big craggy mountain.

**AKA**
Butterfly bush.

**BABY NAME**
Seed.

**WHAT DO THEY EAT?**
Plants make their own food using carbon dioxide, water, nutrients from the soil and energy from the Sun.

**WHAT EATS THEM?**
Butterflies love, love, LOVE the nectar and pollen from the flowers of buddleia.

**WHAT DOES THEY LOOK LIKE?**
Grows up to three metres high. Lance-shaped, pointed, green or grey–green leaves up to 25 centimetres long. From summer to autumn, they have dense sausage-shaped, groups of small, fragrant flowers in various shades of purple and white. These clusters of flowers can be over 30 centimetres long.

**WHERE TO FIND THEM**
They're not native but have spread out from people's gardens. Look out for it in parks with looked- after gardens and on railway tracks.

*Buddleja davidii*

# DANDELIONS

**BARE JOKES**
What do you call a well-dressed cat? A dandy lion.

**BRAG FACTS**
People use the leaves, stem, flowers and roots of dandelions for medicinal purposes. In World War Two, dandelions were farmed to make rubber. Researchers are working out if dandelion rubber can be put to use today, as it is more environmentally sustainable than fossil fuels or rubber tree plantations.

**BABY NAME**
Seed.

**WHAT DO THEY EAT?**
Plants make their own food using carbon dioxide, water, nutrients from the soil and energy from the Sun.

**WHAT EATS THEM?**
Dandelion seeds are an important source of food for some birds. Insects like their nectar and pollen. Some butterfly and moth caterpillars feed on them too.

**WHAT DOES THEY LOOK LIKE?**
Yellow flowers. Jagged green leaves. Flowers turn into white seed 'clocks' before being blown away. There are over 230 species of dandelion in the UK, see if you can spot any different ones!

**WHERE TO FIND THEM**
Open grassy spaces on lawn and in parks.

*Taraxacum* spp.

# STINGING NETTLE

**BARE JOKES**
What did the nettle say to the gardener?
Take me to your weeder.

**BRAG FACTS**
Nettles will grow just about anywhere, but they prefer rich soils and benefit from the waste that humans produce. Because of this, the presence of large collections of nettles can sometimes indicate where human settlements once existed way back in the day.

The stings are tiny needles made of silica (which the plant gets from the soil) that inject mild toxins.

**BABY NAME**
Seed.

**WHAT DO THEY EAT?**
Plants make their own food using carbon dioxide, water, nutrients from the soil and energy from the Sun.

**WHAT EATS THEM?**
The caterpillars of lots of different butterflies and moths eat nettles.

**WHAT DOES THEY LOOK LIKE?**
Green spiky leaves. If you look closely, you can see tiny hairs on the leaves and stalks.

*Urtica dioica*

# LONDON PLANE

**BARE JOKES**
How do you get down from a tree? You don't. Down comes from a duck.

**BRAG FACTS**
These trees are hybrids of American sycamores and Oriental plane trees. They were first discovered in the 17th century, then widely planted in the 18th. Their peeling bark makes them tolerant of pollution so they were one of the few trees that could survive in London during the industrial revolution.

**COLLECTIVE NOUNS**
There aren't really any London plane forests since they are a planted hybrid. Perhaps 'an avenue' would be more appropriate!

**BABY NAME**
Seed.

**WHAT DO THEY EAT?**
Plants make their own food using carbon dioxide, water, nutrients from the soil and energy from the Sun.

**WHAT EATS THEM?**
Their seeds are eaten by grey squirrels and birds.

**WHAT DOES THEY LOOK LIKE?**
Five triangular lobed leaves. Multi-coloured bark, which has a camouflage–style pattern. Spiky balls on the tree are full of seeds.

*Platanus x hispanica*

# SYCAMORE

**BARE JOKES**
Why do sycamore trees have private health care? Because they are sick more.

**BRAG FACTS**
Sycamore trees can live for 400 years! They are one of the best trees for supporting colonies of lichen.

**COLLECTIVE NOUNS**
A forest.

**BABY NAME**
Helicopter.

**WHAT DO THEY EAT?**
Plants make their own food using carbon dioxide, water, nutrients from the soil and energy from the Sun.

**WHAT EATS THEM?**
The leaves are eaten by the caterpillars of a number of moths. Bees like the pollen and nectar of the flowers. The seeds are eaten by birds and small mammals.

**WHAT DOES THEY LOOK LIKE?**
Hand-shaped leaves. The bark is dark pink–grey, and smooth when young, but becomes cracked and develops small plates with age. Female flowers develop into winged fruits known as helicopters.

*Acer pseudoplatanus*

# HORSE CHESTNUT

**BARE JOKES**
As a kid I had a fear of climbing horse chestnut trees but I've conkered it now.

**BRAG FACTS**
Chemicals extracted from conkers can be used to treat strains, bruises and make soap. The World Conker Championships take place every year in October in Northamptonshire.

**COLLECTIVE NOUNS**
A forest.

**BABY NAME**
Conker.

**WHAT DO THEY EAT?**
Plants make their own food using carbon dioxide, water, nutrients from the soil and energy from the Sun.

**WHAT EATS THEM?**
Insects, especially bees, like the pollen and nectar in the flowers. A moth called the horse chestnut leaf miner loves the leaves. Caterpillars also eat the leaves. Deer and squirrels eat the conkers.

**WHAT DOES THEY LOOK LIKE?**
Hand-shaped leaves with five to seven 'fingers'. Large, pinky-white flowers, and spiny-shelled fruits containing the seeds, or 'conkers'.

*Aesculus hippocastanum*

# BRAMBLE

**BARE JOKES**
What did DJ BlackBerry say to MC Big Daddy Kane? 'Wanna jam?'

**BRAG FACTS**
Blackberries are high in vitamin C, making them a superfood! There are over 300 species of bramble in the UK. Bramble experts are called batologists.

**AKA**
Blackberry bush.

**BABY NAME**
Seed.

**WHAT DO THEY EAT?**
Plants make their own food using carbon dioxide, water, nutrients from the soil and energy from the Sun.

**WHAT EATS THEM?**
Insects, especially bees, like the pollen and nectar of bramble flowers. All kinds of animals, including humans, love eating juicy, ripe blackberries.

**WHAT DOES THEY LOOK LIKE?**
Spiky leaves that are dark green on the top, and light green underneath. Thorny stems. White and pink flowers in the summer and red and then black berries in the autumn.

**WHERE TO LOOK FOR THEM**
Look out for blackberries in hedgerows and parks.

Only pick berries if you're sure they are safe. Wash them first if you are going to eat them and don't pick from the roadside.


Rusbus spp.

# GOLDEN SHIELD LICHEN

**BARE JOKES**
You must be a botanist, because I lichen you.

**BRAG FACTS**
Lichens are fungi and algae that live together. The algae create food using sunlight and feed the fungi, which in return get moisture and protection from drying out from the fungi.

Some lichens are sensitive to air quality, and this makes them perfect indicators for monitoring air pollution.

**BABY NAME**
Spore.

**WHAT DO THEY EAT?**
Algae are plants, and so make their own food using carbon dioxide, water, nutrients from the soil and energy from the Sun. In lichens, they also provide food for the fungi.

**WHAT DOES THEY LOOK LIKE?**
Yellow, flaky scales growing on walls or trees.

**WHERE TO LOOK FOR THEM**
Found on sun-exposed bark, but also rocks and walls, roofs and paving.

The yellow colour acts as a sunscreen, so the lichen is often greenish in shady areas.

*Xanthoria parietina*

# FUNGI (IN GENERAL)

**BARE JOKES**
Why did the fungi leave the party?
There wasn't mushroom.

**BRAG FACTS**
Fungi are a whole 'kingdom' of living things, just like animals and plants are. They can live on land, in the water, in the air, and even on and in plants and animals. They vary widely in size and form, from the microscopically small to the largest organisms on Earth (at several square kilometres in size).

**COLLECTIVE NOUNS**
A troop or cluster of fungi.

**BABY NAME**
Spore.

**WHAT DO THEY EAT?**
Fungi absorb nutrients from living or dead plants and animals.

**WHAT EATS THEM?**
Lots of animals eats fungi, although some can be deadly poisonous.

**WHAT DOES THEY LOOK LIKE?**
There are around 15,000 species of fungi in the UK of many shapes, sizes and colours. Try iNaturalist.org to help identify some.

**WHERE TO LOOK FOR THEM**
Under trees in parks in autumn is a great time and place to find fungi.


Fungi

# SHAGGY INKCAP

**BARE JOKES**
What goes best with jacket potatoes?
Button mushrooms.

**BRAG FACTS**
It is often just the fruiting bodies, or mushrooms, that we see. Below the ground, there is a network of tiny filaments called 'hyphae'. The fruiting bodies produce spores for reproduction, although fungi can also reproduce by fragmentation.

**AKA**
Lawyer's wig or shaggy mane.

**BABY NAME**
Spore.

**WHAT DO THEY EAT?**
Decaying wood. They love woodchip in parks and gardens.

**WHAT EATS THEM?**
Slugs, snails and deer.

**WHAT DOES THEY LOOK LIKE?**
Bell-shaped toadstool with a woolly, scaly look to them.

**WHERE TO LOOK FOR THEM**
Common in parks and on roadsides, from May through to November.

*Coprinus comatus*

# FURTHER INFORMATION

# TOP NATURE CONVERSATION PIECES

**– Nice nails!**

– Thanks! Did you know that shellac is made from resin secretions produced by the lac bug? The resin is collected from trees in India and Thailand and then processed to make high gloss nail varnish.

**– Shut the front door!**

**– Love your lipstick shade, what is it?**

– Oh it's Natural Red 4. The colouring comes from smashed up cochineal scale bugs, which live on cacti in Mexico. It's also why some marshmallow is pink!

**– Oh my dayz!**

**– What's this sticky plant thing stuck on my clothes?**

– You know that's how they came up with the idea of the tiny hooks for Velcro? They're seeds from plants, and if they stick to animals, the animals move them accidently to a new location where the plant can go grow.

**– That's so smart!**

**– How is that plant growing, it can't eat food?**

– They make their own food. Plant leaves use sunlight to turn water and carbon dioxide from the air into carbs! Plants use this to make their structure and for energy. We only get our carbs because we eat plants!

**– Noooo!**

**– Never noticed those trees before...**

– Not only do trees absorb carbon dioxide and emit oxygen that we breath, but some clean the air too. They filter pollutants out of the air through their leaves.

**– Wow, they do everything!**

**– Why are those bees always buzzin' around?**

– Bees and so many other insects put food on your plate. As well as pollinating the fruit and veg that you eat, they also pollinate the crops needed to feed meat-producing animals. Pollinated plants provide us with around one in every three bites of food!

**– That's mad!**

# TOP NATURE CONVERSATION PIECES

**– People do anything else with fungi then?**

– You know, Stella McCartney has made luxury handbags using leather created from mushrooms?!

**– Is it!**

**- Why are different rocks used on pavements, roads and kerbs?**

- Do you think you want hard or soft rock for a kerb stone? Different types of rocks have different properties, depending on how they were formed. So, super hard rocks like granite came from the middle of a volcano. That makes it an igneous rock. Look closely and you'll see crystals in it that were formed as the volcano lava cooled to form rock.

**- Huh, yeah I guess I'd want hard rock for a kerb stone if a car is coming straight at me!**

**- What is all the fuss about gold!?**

- Great question!
Can you eat gold? No.
Is gold super hard like steel, to make useful things out of it? No.
So, what's the point of it? Why is it so sought after?
Gold is so valuable because it's so boring! Nothing ever happens to it, it doesn't change over time, it doesn't rust.
If you want something to represent 'wealth', you don't want LOADS of it because it becomes too common, and you want it to be dependable ie. not change/rust.
Ever noticed how gold on old buildings is still bright and shiny?
Ever noticed how cheap jewellery goes green if it's not real gold?

**- No way! So that's what 'gold standard' means?**

**– Planes have got jets but birds can fly without flapping?!**

– You know, the only reason we can fly in planes is because the Wright brothers studied large birds in flight to learn how the shape of the wing keeps them in the air!

**– Huh, never thought about that before!**

**– I've got a banging headache!**

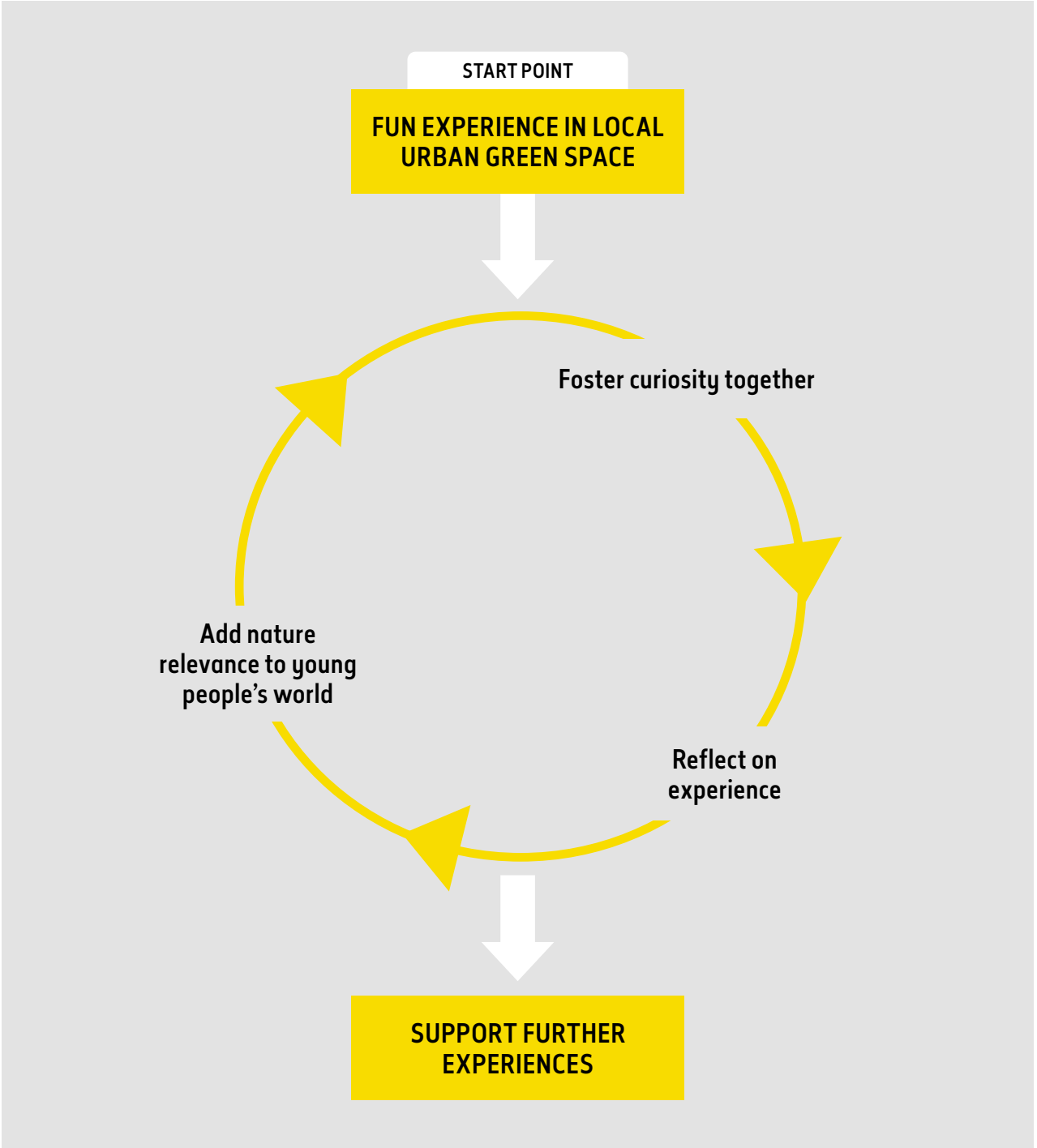
– Got any aspirin? Aspirin comes from willow trees you know! In fact 70% of new medicines and drugs that we use come from the natural world.

**– You serious?**

# BUILDING AN ACTIVITY **FLOW NARRATIVE**

You'll recognise this diagram from page 10. It provides a framework for how we can structure experiences to support young people to develop their connection with nature.

The following page gives examples of activities that can fit into the framework, with different narratives.



# EXAMPLES OF ACTIVITY FLOW NARRATIVE

| FUN ACTIVITY IN LOCAL URBAN GREEN SPACE | ADD NATURE RELEVANCE TO YOUNG PEOPLE'S WORLD | FOSTER CURIOSITY TOGETHER | REFLECT ON EXPERIENCE | SUPPORT FURTHER EXPERIENCES |
|---|---|---|---|---|
| *Animal Scramble* icebreaker | Question young people about which species they were drawn to and why<br>Which species appear in fashion or music and why? | *Urban Nature Photography challenge*<br>*Spoken Word challenge* inspired by photos | Ask how the images fed into their spoken word | Direct to examples of nature photography<br>Direct to examples of lyrics, spoken word using nature |
| Have lunch/a picnic in the park<br>*Cloud Life*<br>*Urban Nature Charades* icebreaker | Question young people on how many animals and plants they can name that they see all the time | iNaturalist competition<br>*Life Under a Log* | Present result to rest of the group<br>Discuss what they found. Any surprises? | Suggest making a pitfall trap<br>Suggest making and using a sweep net |
| *How Close?* icebreaker<br>Urban Nature Orienteering Competition with natural navigation | Question young people about how experience of tapping into senses made them feel | *Meet a Tree*<br>Discuss wellbeing and nature | Discuss with young people previous experiences with nature | Suggest 4,3,2,1 in Nature<br>Suggest *Nature Journalling* |

# CREATE AN URBAN NATURE DISCOVERY WALK

If you have time for a longer session with your young people, a really nice thing to do is select several of the activities in this toolkit and build your very own urban nature discovery walk.

Start with an active game in your local park. Then walk on to another park and have a go at an Unwind Your Mind activity. Have a spot of lunch in the woods. Do an energising activity before walking along your local river or canal where you try and spot as many different types of bird as possible. Perhaps set a photography or iNaturalist challenge along the way. Lead the group up to an elevated vantage point overlooking a part of your city, for a final awe and wonder moment!

Really utilise the hidden gems that can be found in your city. Finish off the session or day with a reflective activity where the young people can recollect what they have done and felt during the day – contemplate, remember and share their experiences with nature.

# H&S FAQS

**Q: HOW DO I AVOID HAZARDS AND ACCIDENTS LIKE SLIPS AND FALLS?**
A: It's all in the preparation. Research the best areas, do your own risk assessment. Check the area for rocks, tree roots and any dangerous litter (eg glass and needles), or eye level branches.
A quick activity could be to ask the young people to start the session by putting little flags by anything they think are hazards.

**Q: IT'S RAINING! AND COLD!**
A: To quote Billy Connolly, 'there's no such thing as bad weather, only the wrong clothes. 'Appropriate clothing and footwear keep us warm and safe. Layers of clothing is important for feeling comfortable at the right temperatureso help the young people to come prepared. But recognise when weather gets dangerous. Do not do activities near trees in high winds, in case of falling branches. Keep activities short. Having something like hot chocolate ready for the group when you get back inside, can build a really positive experience from being outside on a cold day.

**Q: IT'S TOO HOT!**
Make your mind up! Is it too hot or too cold? ;–) Heatstroke can be serious. Factor in breaks and sit–down chillouts between activities, in the shade of a tree – and then thank the tree for the shade! Have sunscreen for everyone to use. Remind the young people in advance to bring hats and water bottles.

**Q: HOW DO I DEAL WITH UNEXPECTED DISTURBANCES, SUCH AS DOGS?**
A: Before heading out, talk to your young people about how to deal with such situations. Cross your arms and turn your back on a bouncy, excited dog and it will quickly get bored and run off.

**Q: THINGS ARE BITING ME!?**
A: Not the other young people, right? There are very few things in the UK that can give a serious bite or sting. Be aware of young people's allergies. Have your first aid kit. Bring some insect repellent. And make sure any young people with serious allergies have the appropriate medication with them, just in case.

**TICKS**
Are you in a park that has animals such as deer? Awesome! But if you walk in long grass then there is a risk of ticks, so wear long trousers and tuck the bottoms into your socks.

**WASPS**
If going off pathways, check and be mindful of possible wasp nests, both at ground level and above. You will likely hear them. Just stay clear and observe their amazing nests from a distance. Support your young people and suggest its best not to scream and flap arms around, as this is only alarming the wasps and possibly aggravating them.

**ANTS**
Some ants will bite and you might find yourself standing next to their nests. If so, calmly walk away, and dust your feet and legs down to get rid of any hangers on.

# H&S FAQS

**Q: SOME OF MY YOUNG PEOPLE HAVE BEEN IN GANGS AND I'M WORRIED ABOUT TAKING THEM TO PUBLIC PARKS.**
A: More often than not, young people know which areas they feel safe or uncomfortable in and you can form a risk assessment based on this. It is important to ask young people if there are any areas they cannot go/feel unsafe in, and then ensure that these areas are avoided. Like any risk, it is impossible to completely eliminate hazards, but it's about making informed decisions to minimise them. If there are a large number of young people in the group that feel unsafe in all the local parks, perhaps consider a more private location for that specific group.

**Q: WHERE ARE THE TOILETS!?!?**
A: This can be a big barrier for young people. Do a recce before heading out and know where your nearest public toilets will be. Also explain this to the young people before leaving, so that they can be fully prepared. You could contact cafe/leisure facilities ahead of time to ask if the group can use their toilets.

**Q: DO I NEED PERMISSION TO DO THESE ACTIVITIES?**
A: If you are going to collect any creatures (even if you put them back), build dens, dig holes or leave anything (eg bird feeder, pitfall or footprint trap), then you will need landowner permission. If you are taking a group to a space regularly, it is always good to seek permission and be clear about what activities are and are not permitted. Always make sure you clear up from any of your activities after you've finished.

**Q: I'M WORRIED THEY'LL RUN OFF!**
A: A great way to set boundaries with young people is to get them to identify the boundaries themselves. Explain what the activity is, and then ask them to suggest where is on limits and where is off limits. Don't start the activity until you have agreed.

**Q: CAN I GET THE YOUNG PEOPLE TO TAKE MORE OWNERSHIP OF THEIR OWN H&S?**
A: Sure, you can do a quick team brainstorming session of possible hazards and how to deal with them. This is a really useful activity to do.

You could explain to the young people that you're going to be doing a dynamic risk assessment with them. You'll have to point out the kinds of risks they need to be mindful of. This allows the young people to identify the risks and make decisions in regards to their own safety. Let them know to inform you or another supervisor if they come across any risks they can't manage themselves.

# RISK ASSESSMENTS

**This is not a complete list but some examples to be mindful of when writing a risk assessment. Risk assessments must be signed off by managers.**

| HAZARD | RISK MANAGEMENT STRATEGY |
|---|---|
| **WEAK TREES FALLING** | Don't go into wooded areas on very windy days. |
| **POISONOUS PLANTS** | Ensure they don't pick or eat plants unless activity led by a foraging expert. Explain dangers of eating berries or bulbs. |
| **SEVERE WEATHER HOT OR COLD** | Young people and staff supplied/take appropriate clothing, water, sunscreen for weather conditions. Weather to be checked by staff before session. |
| **FIRST AID PROVISION** | Ensure a first aid kit is carried at all times. Identify where the local medical centre and hospital is. |
| **WASP AND BEE STINGS** | Identify anyone with allergies and plan accordingly. Be aware of possible nests and avoid. If stung, stay calm to avoid panic response. |

| HAZARD | RISK MANAGEMENT STRATEGY |
|---|---|
| **TRIPS AND FALLS** | Check the areas for trip hazards. Point out anything non-moveable. Move to a different location if too dangerous. |
| **NEEDLES AND BROKEN GLASS** | Check the area in advance. Warn the young people, that if they see anything like broken glass or needles, to inform you, so you can report it and move to a different location. |
| **STRANGER DANGER** | Pre-visit locations to gauge if any additional risk. Brief young people about being conscious of being in public space/keeping with the group rather than interacting with other members of the public. |
| **ANTI-SOCIAL BEHAVIOURS** | Be aware of parks or areas where people typically go to smoke or drink. Avoid these locations. Set clear rules to your young people about what behaviours are not acceptable and explain the consequences in advance. |
| **DOG POO** | Check area in advance. Be prepared to move to new location. Take dog poo bags with you to clear up any mess. |

# BIG GREEN SPACES ON YOUR DOORSTEP

While this toolkit is celebrating the urban nature we have right on our doorsteps, every city will have even bigger green spaces to explore, not too far away. A short bus or train ride and you can take young people to places they never would have known existed or thought accessible to them.

**THINGS TO BEAR IN MIND:**

- Prepare schedule ahead of the day – timings/ places etc.
- Cost and duration of travel – keep it short and cheap!
- Note any special needs – allergies/medication etc.
- Have all contact details on hand in case of emergency.
- Prepare for the weather. Many layers if it's cold. Hats and sunscreen if it's hot.
- It's worth having some spare biodegradable ponchos in case of a sudden downpour.
- Take a packed lunch, snacks and drink. Keeps costs down.
- Go as a group. It can be intimidating to go to new places. Especially if other people you see in those spaces don't look like you.
- Take a read of the countryside code before you go. These guidelines are there for your safety and the continued protection of nature.

# EQUIPMENT YOU COULD INVEST IN

### APPROPRIATE CLOTHING AND FOOTWEAR

It would be great to invest in waterproof jackets and boots for young people to borrow. These could come from second-hand shops to make it cheaper, or you could approach a shop or company for sponsorship. Having a stash of biodegradable ponchos is always useful.

### MICROSCOPES

Portable but high-resolution microscopes are very affordable these days. You can get ones that connect to phones, tablets and laptops via USB and WiFi/Bluetooth. Being able to see something in such close detail really opens up many opportunities for creativity and scientific study. You can also get good but cheap clip-on magnifying lenses for smartphone cameras.

### BINOCULARS

These can be very expensive, but they don't need to be. Binoculars allow us to see animals from a long distance that would normally be easily scared off. The BTO have an Equipment Donation Scheme, which supports young people by supplying equipment.

### HAND LENSES OR BUG JARS

Hand magnifying lenses or bug jars with magnifying lids can be really useful – but you can also make do without.

### IDENTIFICATION GUIDES

If you are wanting to try and figure out the names of species that you are looking at, ID guides and keys can be useful and fun. For some young people with neurodiverse needs, having a visual guide like this might be a real benefit. There are many out there, check out the Field Studies Council, and the Natural History Museum has great sources here too.

# FIND OUT MORE

There are so many places to seek further information about the wonders of urban nature close to where you live.

One way is going old school by finding out what local amateur naturalist clubs or societies there are nearby – and meet up with real people! You'll meet individuals from all walks of life, who themselves are at completely different stages in their journey of getting to know urban nature. The bonus of this is you'll certainly meet local experts and have hands-on experiences that you can share with your young people. Also, I've never been to a get together that doesn't have tea, biscuits and often cake; just saying. Google 'local naturalist group' to see what's about. (NB: google naturalist not naturist – that's different).

Or, go digital. So many organisations provide amazing digital resources. The Extra Resources section on the right gives some useful examples. At the Natural History Museum, the Angela Marmont Centre specialises in UK biodiversity, and you can use their Facebook page to share observations and get help with identification. Search for 'NHM UK Biodiversity' on Facebook.

# EXTRA RESOURCES

**Natural History Museum**
nhm.ac.uk

**Woodland Trust**
woodlandtrust.org.uk

**British Trust for Ornithology**
bto.org

**RSPB Wild Challenge**
rspb.org.uk/wildchallenge

**The Wildlife Trusts**
wildlifetrusts.org

**Wild London**
wildlondon.org.uk

**Field Studies Council**
field-studies-council.org

**iNaturalistUK**
uk.inaturalist.org/

**Climate Action**
climate.friendsoftheearth.uk/near-you

**Investigate at School – Primary**
nhm.ac.uk/schools/teaching-resources/investigate-at-school-primary/investigate.html

**The Countryside Code**
nidirect.gov.uk/articles/countryside-code

**Sensory Trust**
www.sensorytrust.org.uk

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