What's in your pack

Inside this pack you will find everything you need for a great visit to Davy Down:

- **Site map and facilities**
- **Benefits of Outdoor Learning**
- **Woodland Habitat: 8 sheets**

  Woodland Factsheet
  Recording Sheet
  EYFS lessons (x2)
  Key Stage 1 (x2)
  Key Stage 2 (x2)
  Woodland (minibeast) Spotter Sheet (in colour and black and white)
  Tree Spotting Sheet (in colour and black and white))
  Woodland Doodle and Writing Sheet

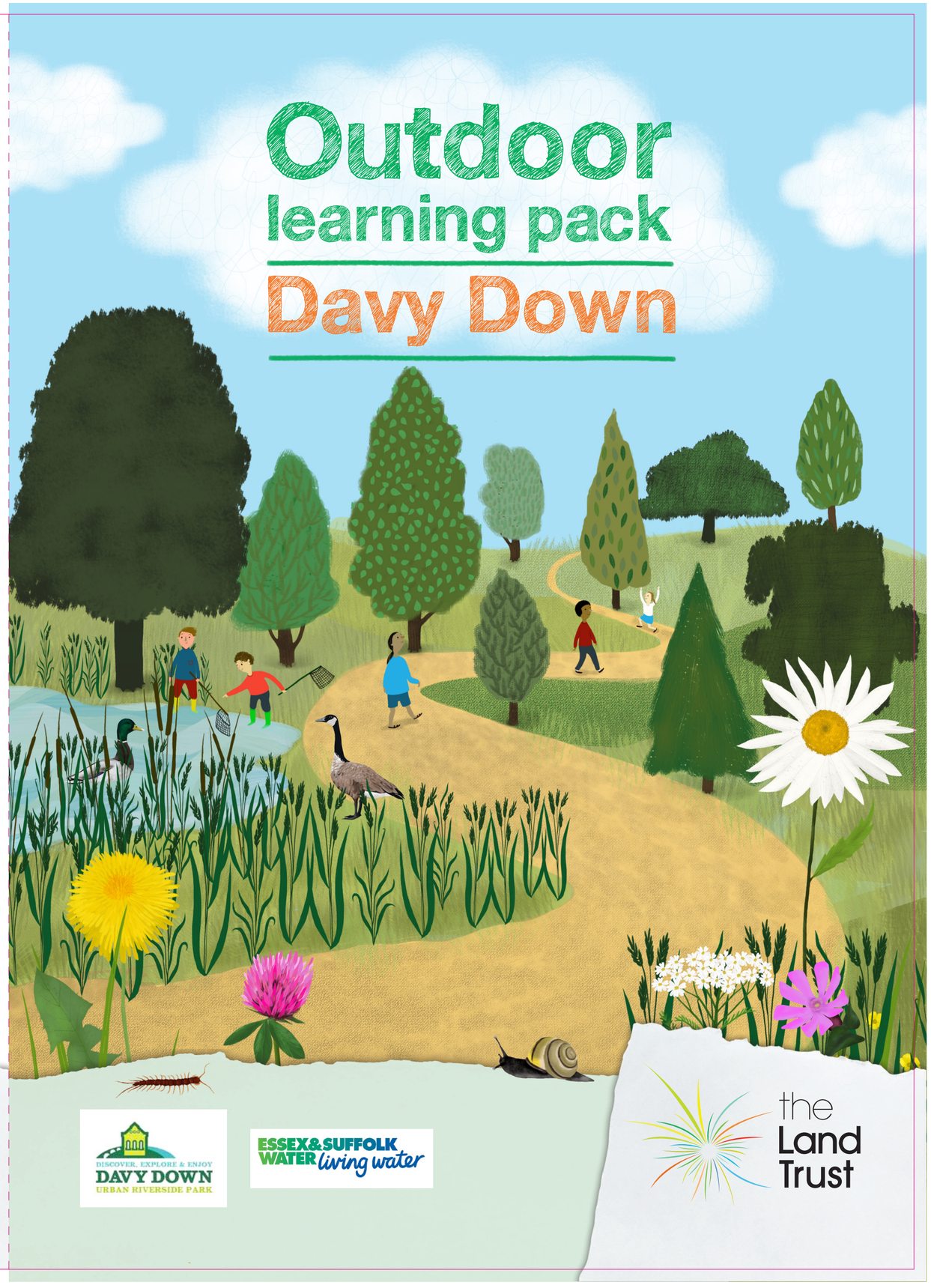
- **Grassland Habitat: 8 sheets**

  Grassland Factsheet
  Recording Sheet
  EYFS lessons (x2)
  Key Stage 1 (x2)
  Key Stage 2 (x2)
  Grassland Spotter Sheet (in colour and black and white)
  Grassland Doodle and Writing Sheet

- **Pond Habitat: 8 sheets**

  Pond Factsheet
  Recording Sheet
  EYFS lessons (x2)
  Key Stage 1 (x2)
  Key Stage 2 (x2)
  Water bird Spotter Sheet (in colour and black and white)
  Pond Doodle and Writing Sheet

- **Equipment List**
- **Risk Assessment Template**



the Land Trust

DISCOVER, EXPLORE & ENJOY DAVY DOWN URBAN RIVERSIDE PARK

ESSEX&SUFFOLK WATER living water

the Land Trust

Welcome to the Outdoor learning pack

This learning pack has been designed to make it easy for you to take learning outside the classroom. It is full of fun, curriculum linked activities that emphasise self-led learning and support health and wellbeing.

Davy Down Riverside Park has 32 acres of varied landscape and is home to an amazing variety of wildlife and habitats. The site is managed by The Land Trust and is free to visit all year round.

The Outdoor Learning Pack consists of three habitat themes; Grassland, Woodland and Pond and for each of these you will find Lesson Plans for Early Years, Key Stage 1 and Key Stage 2 along with Factsheets, Spotting, Doodling, Writing and Recording Sheets. These can be printed and taken with you or used for follow up activities in the classroom. Each Lesson Plan is tailored to meet the requirements of the National Curriculum. However, all of the lessons can be easily adapted to suit any age/year group. Similarly, whilst some activities are tailored to a specific habitat, many of them can also be used across different habitats too.

As well as the learning resources you will find:

- A Sample Risk Assessment that you may find helpful when writing your own.
- An Equipment List which outlines what you will need for each lesson. Note that your Land Trust Ranger team can lend you specialist equipment on site.
- Information and evidence about The Benefits of Outdoor Learning.

Before your visit

Please contact your local Land Trust Ranger to arrange your learning adventure. We recommend a site visit before your class trip, so that you can familiarise yourself with the habitat learning zones and facilities. Half a day is sufficient time for one lesson plan, so why not make a day of it and facilitate two lessons in the same or different habitats?

Contact your Davy Down Ranger:
Email: davydown@thelandtrust.org.uk Tel: 07966 879483
Davy Down Riverside Park, Back Lane (off Pilgrims Lane), North Stifford, RM16 5UL

Whilst visits to Land Trust sites are free, it is essential that you book ahead by contacting the onsite Ranger prior to your visit.

What should we all wear?

We recommend that you send a letter to all parents/carers of the children who will be coming on the visit reminding them to ensure children are suitably dressed. For example long sleeved tops and long trousers should be worn, even in the summer months. In hot weather sun cream and hats should be packed. During the colder winter months, it is good to wear lots of layers to help keep warm and of course, wear a good waterproof coat, stout footwear and waterproof trousers too, if they have them. Lots of schools find it really helpful to buy, or ask for donations of wellington boots and cagoules for those who may not have their own.

General information

Many of the activities in this pack involve getting really close to nature and collecting natural items. Part of the message we hope your class will take away is just how precious and important nature is. So please can you ensure you avoid picking wild flowers and instead collect fallen materials where possible as we want to leave each habitat as we found it.

When looking for minibeasts, please ensure they are treated with care and always returned to where they were found and that all pots and pond trays are properly emptied.

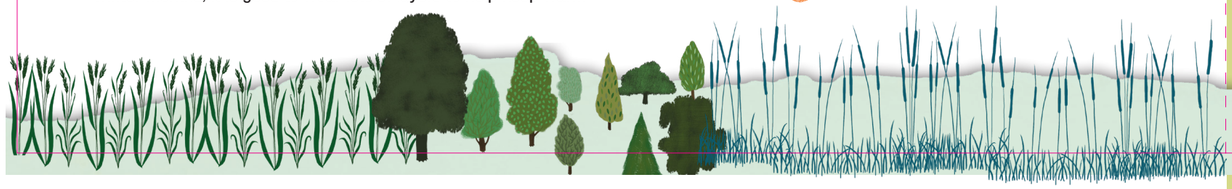
Ensure any open cuts are covered with a plaster; particularly when in contact with soil or water. It is very important that children wash their hands after an outdoor learning session and we recommend no eating or drinking during the activities.

Check your offsite child:adult ratio according to the year group of your class.

Quick Checklist:

- [ ] Have you booked your visit via the Ranger at Davy Down and ideally arranged a site visit?
- [ ] Have you sent out a letter to parents, telling them what to bring/ wear?
- [ ] Have you written and packed your Risk Assessment (using the template in the pack)?
- [ ] Have you read through the Factsheets of the habitats you will be exploring.?
- [ ] Have you checked the Equipment List for your lesson to see what resources you will require and checked with your Land Trust Ranger these are on site?
- [ ] Did you remember to photocopy the Recording Sheet (on the back of each Factsheet) and the Spotter Sheet(s) relevant to the habitat(s) you are visiting?
- [ ] Did you also photocopy the Doodle and Writing Sheet?
- [ ] Have you packed a First Aid Kit?

We wish you all the best with your Outdoor Learning Adventure!



Site information
Davy Down

Bus routes

22 Route covers - Aveley - South ockendon – Grays *(Monday - Friday mornings: Every 20 minutes)*
32 Route covers – Aveley – Belhus – Grays *(Monday - Friday: Peak hours only)*
370 Route covers - Romford – Hornchurch – Upminster – North Ockendon – South Ockendon – Chafford 100 – Lakeside *(Monday - Friday mornings: Every 20 minutes)*

Accessibility

All the footpaths are suitable for wheelchair users. Seasonal variations should be considered before visiting as flooding can affect the path along the River Mardyke in particular. Seating is located every 200 meters. All seating areas are surfaced and designed to enable wheelchair users to sit next to family and friends. Please phone or email for more detailed information.

the Land Trust

The Benefits of Outdoor Learning

The Land Trust offers learning outside the classroom opportunities at numerous locations across the UK, delivering an array of positive outcomes, from curriculum enrichment to supporting health and wellbeing.

The government supports programmes that encourage physical activity and learning in outdoor settings. The clear message from Ofsted is that inspectors are keen on learning outside the classroom initiatives, embedded into the curriculum. Sport England's 'Active Nation' strategy highlights the importance of green space activity, embracing outdoor recreation as well as traditional sports and Defra's 25 Year Environment Plan, 'Our Green Future', features a chapter on 'Connecting people with the environment to improve health and wellbeing'.

Learning outside the classroom can:

- Develop **reflective** and **inquisitive** thinking along with problem-solving approaches in 'real' situations
- Develop **resilience** and **adaptability**
- Develop a **love, appreciation** and **respect** for nature and all that is living
- Develop an **understanding** of how we can look after our environment
- Develop **self-awareness, confidence** and **self-esteem**
- Develop **collaborative-working** and **communication** skills

the Land Trust

The benefits...

Children with attention disorders benefit from leisure time outdoors. The greener the better. [1]

Efforts to get children outside and engaged in healthy behaviours should be promoted as a means to help combat childhood obesity. [3]

Exposure to nature is a stress reliever to highly stressed children. More exposure equals lower stress levels. [2]

For children, outdoor play in a natural setting can improve motor strength, balance and coordination. [4]

Children who enjoy time outdoors in nature are more likely to include it in their lifestyle and reap the benefits into their adult life. [5]

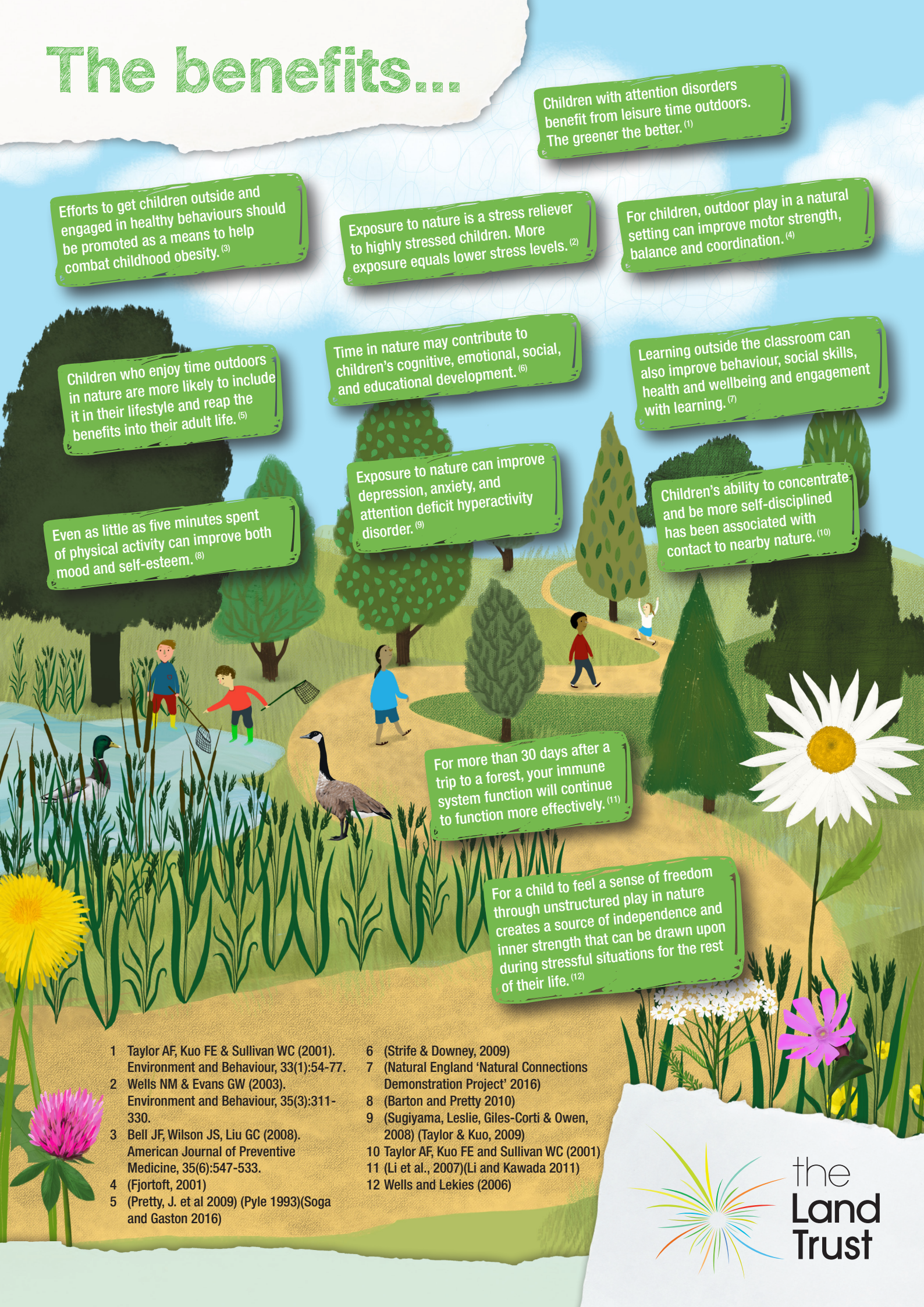
Time in nature may contribute to children's cognitive, emotional, social, and educational development. [6]

Learning outside the classroom can also improve behaviour, social skills, health and wellbeing and engagement with learning. [7]

Exposure to nature can improve depression, anxiety, and attention deficit hyperactivity disorder. [9]

Even as little as five minutes spent of physical activity can improve both mood and self-esteem. [8]

Children's ability to concentrate and be more self-disciplined has been associated with contact to nearby nature. [10]



For more than 30 days after a trip to a forest, your immune system function will continue to function more effectively. [11]

For a child to feel a sense of freedom through unstructured play in nature creates a source of independence and inner strength that can be drawn upon during stressful situations for the rest of their life. [12]

1 Taylor AF, Kuo FE & Sullivan WC (2001). Environment and Behaviour, 33(1):54-77.
2 Wells NM & Evans GW (2003). Environment and Behaviour, 35(3):311-330.
3 Bell JF, Wilson JS, Liu GC (2008). American Journal of Preventive Medicine, 35(6):547-533.
4 (Fjortoft, 2001)
5 (Pretty, J. et al 2009) (Pyle 1993)(Soga and Gaston 2016)
6 (Strife & Downey, 2009)
7 (Natural England 'Natural Connections Demonstration Project' 2016)
8 (Barton and Pretty 2010)
9 (Sugiyama, Leslie, Giles-Corti & Owen, 2008) (Taylor & Kuo, 2009)
10 Taylor AF, Kuo FE and Sullivan WC (2001)
11 (Li et al., 2007)(Li and Kawada 2011)
12 Wells and Lekies (2006)

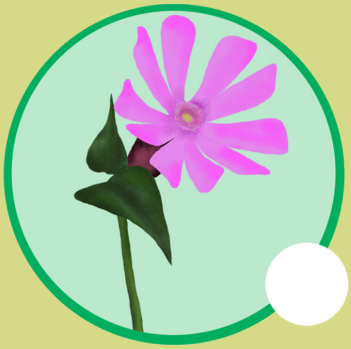
the Land Trust

Grassland Spotting sheet

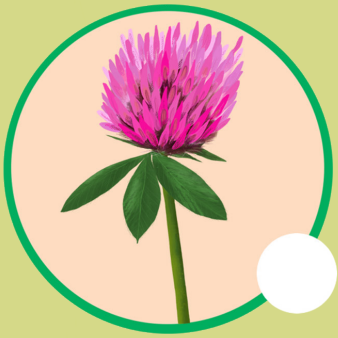
Oxeye daisy

Common knapweed

Meadow buttercup

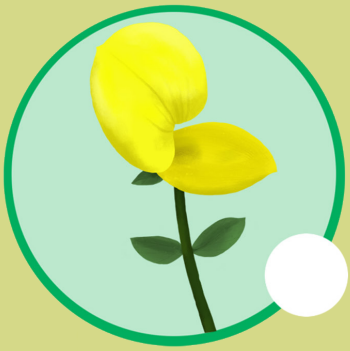


Red campion



Red clover

Yarrow



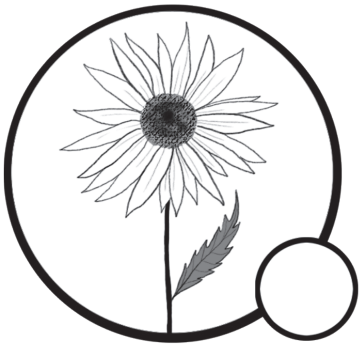
Common birds foot trefoil

Common dandelion

Can you find all the plants?

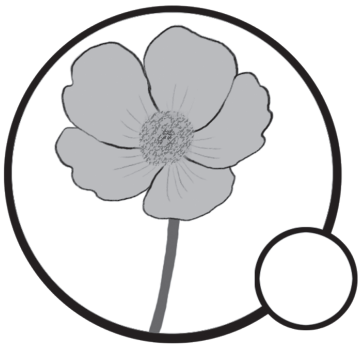
the Land Trust

Grassland Spotting sheet

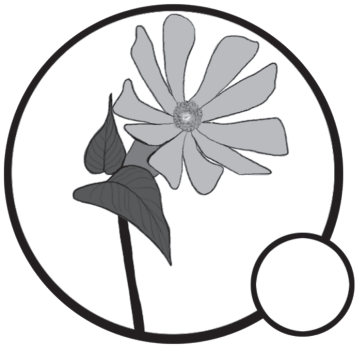


Oxeye daisy

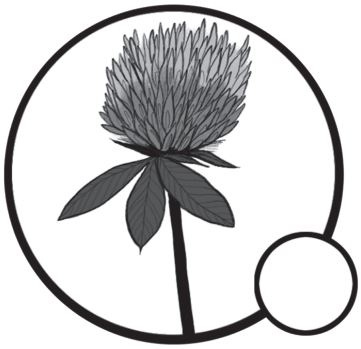
Common knapweed



Meadow buttercup

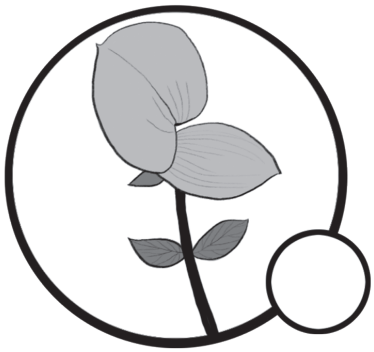


Red campion



Red clover

Yarrow



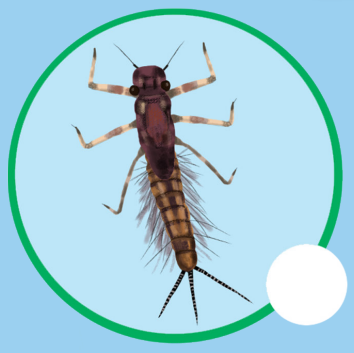
Common birds foot trefoil

Common dandelion

Can you find all the plants?

the Land Trust

Pond Spotting sheet



Mayfly nymph

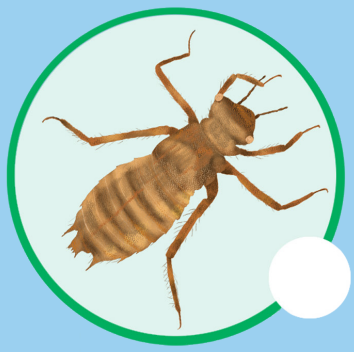
Water boatman

3 spined stickleback

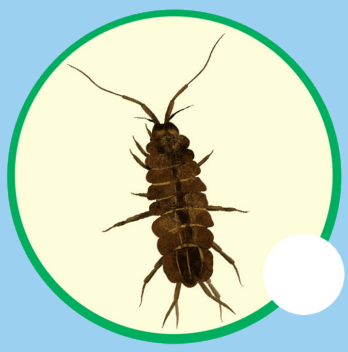
Damselfly nymph

Beetle larvae

Pond snail



Dragonfly nymph

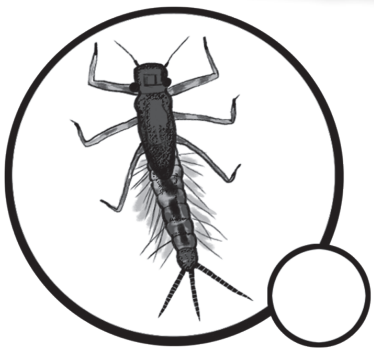


Water slater beetle

Can you find all the creatures?

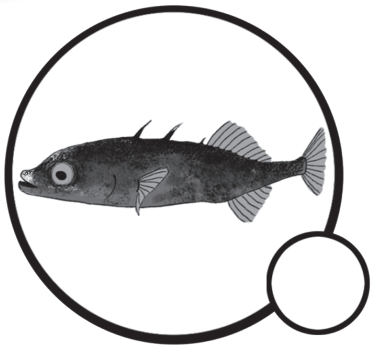
the Land Trust

Pond Spotting sheet

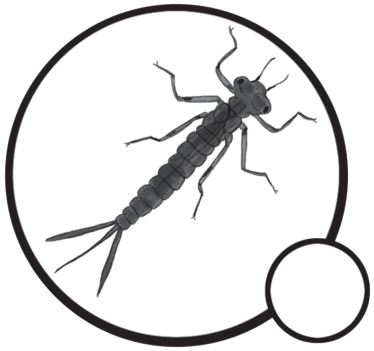


Mayfly nymph

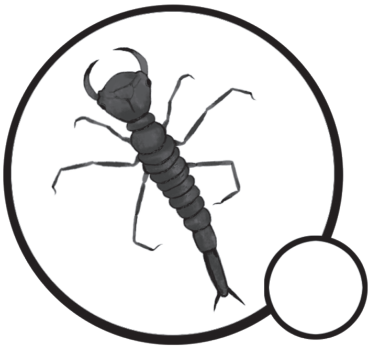
Water boatman



3 spined stickleback

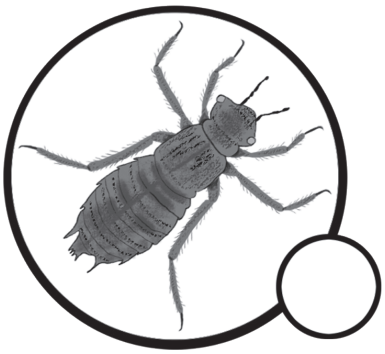


Damselfly nymph

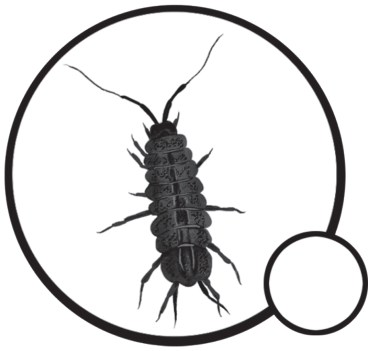


Beetle larvae

Pond snail



Dragonfly nymph



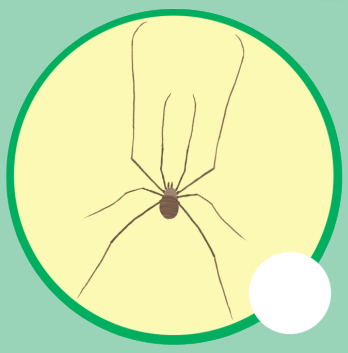
Water slater beetle

Can you find all the creatures?

the Land Trust

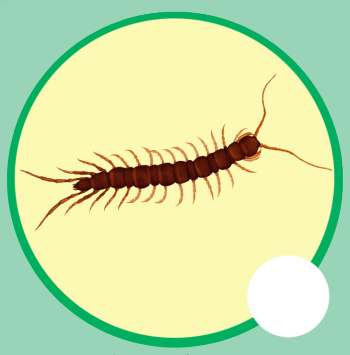
Woodland minibeast

Spotting sheet



Harvestman

Earwig



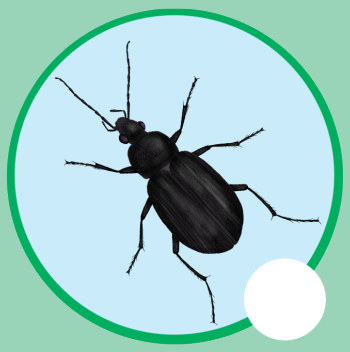
Centipede

Snail

Woodlouse

Slug

Millipede



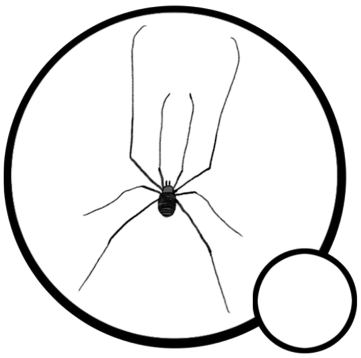
Ground beetle

Can you find all the creatures?

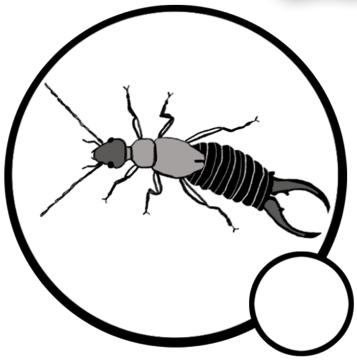
the Land Trust

Woodland minibeast

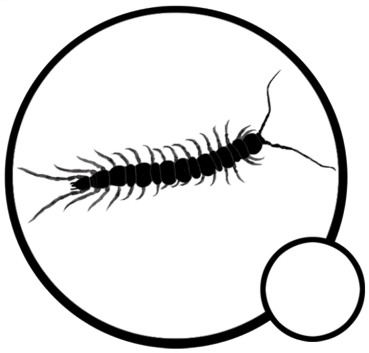
Spotting sheet



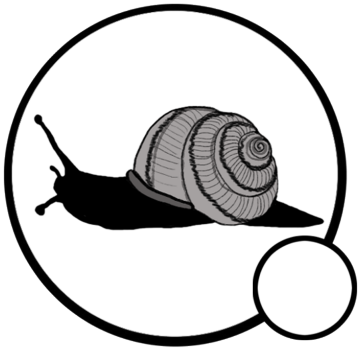
Harvestman



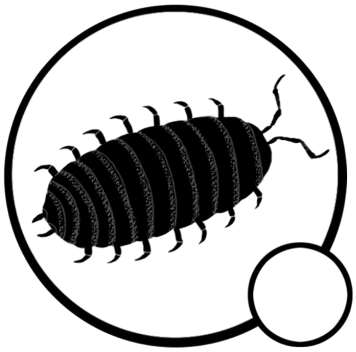
Earwig



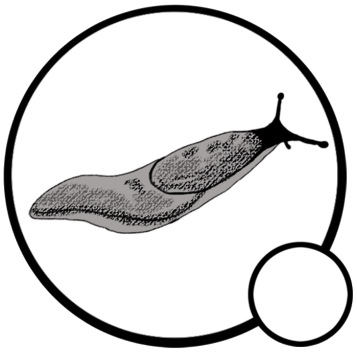
Centipede



Snail

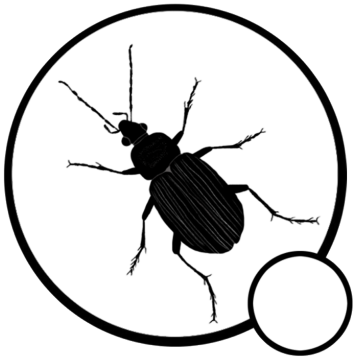


Woodlouse

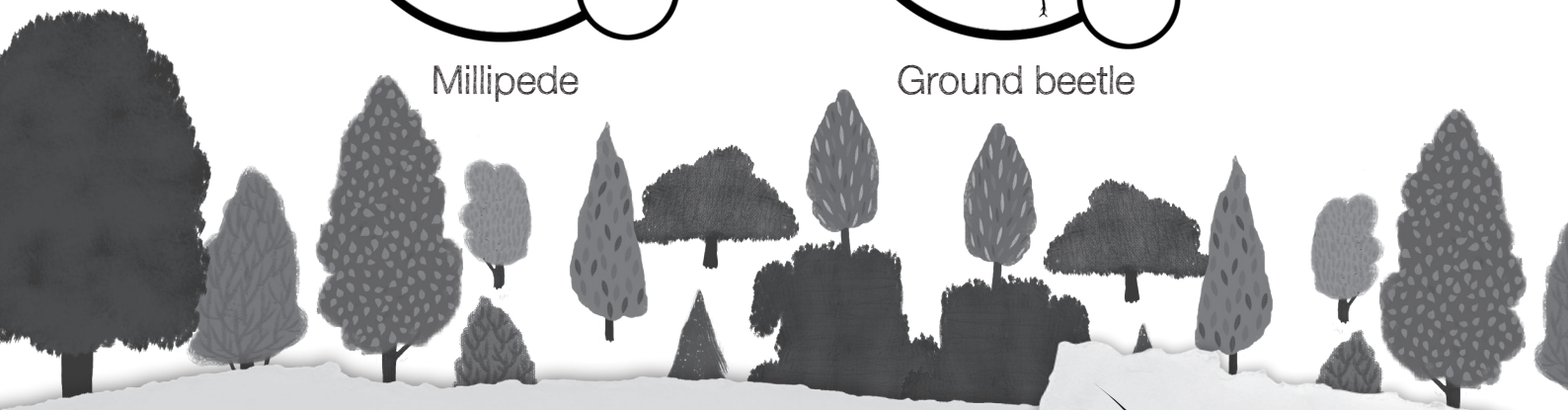


Slug

Millipede



Ground beetle



Can you find all the creatures?

the Land Trust

Woodland trees

Spotting sheet

Willow

Ash

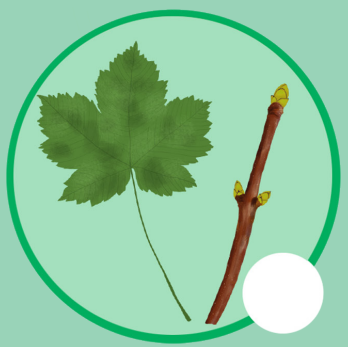
Silver birch

Hawthorn

Cherry

Hazel

Oak



Sycamore

Can you find all the trees?

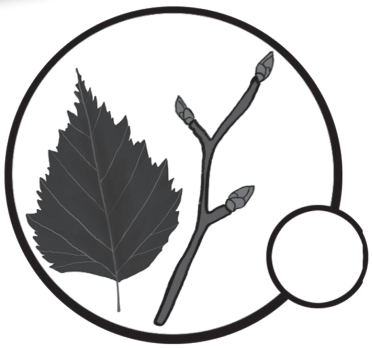
the Land Trust

Woodland trees

Spotting sheet

Willow

Ash



Silver birch

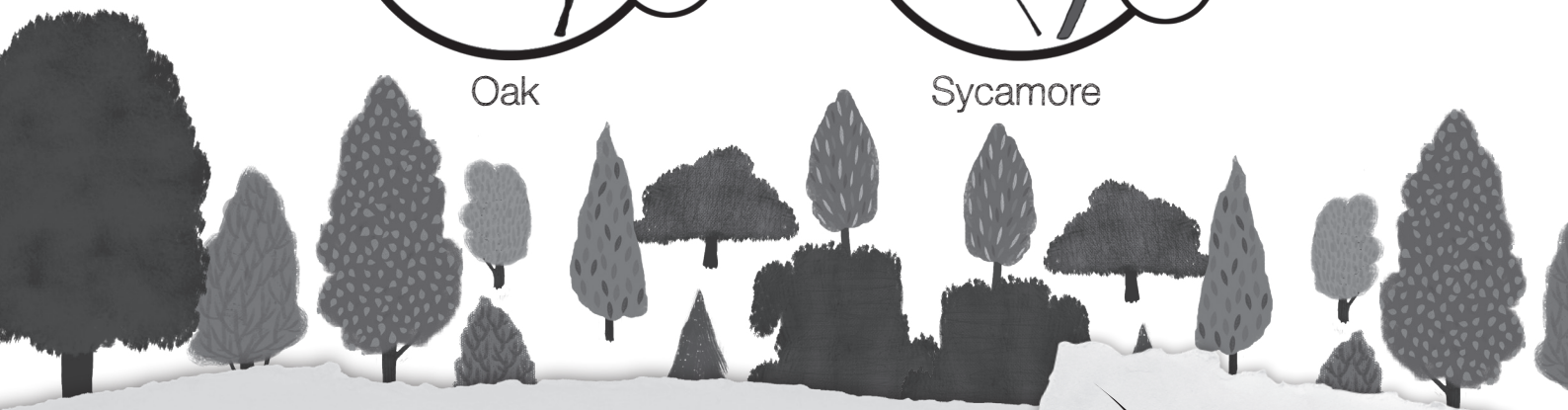
Hawthorn

Cherry

Hazel

Oak

Sycamore



Can you find all the trees?

the Land Trust

Early Years

Grassland - Lesson 1

Curriculum Links
Communication and language: Listening and attention, understanding, speaking.
Physical development: Movement and handling, health and self care.
Personal, social and emotional development: Self-confidence and self-awareness, managing feelings and behaviours, making relationships.
Literacy: Expanding vocabulary, storytelling, conversational skills.
Mathematics: Numbers, shapes, space.
Understanding the World: Observations of animals and plants, expressive arts and design, being imaginative.

See Equipment List in the pack.

Extension ideas:

- Can they draw the five special things they found in their mini adventure on their Grassland Doodle sheets?
- How did it feel to be an ant? What are the differences and similarities of humans compared to ants?
- Research how many types of ant are there in the UK.

Mini Hike in Ant World

It is now time for the whole class to go on a mini adventure. But first you will need to transform everyone in the class into little tiny ants! It helps to get them into character if you can draw two tiny dots on the nail of their index fingers and these will now become the ants' eyes!

Do they know that ants are insects, so they have six legs? You can draw the legs around the nail too; three on each side. How long do they think an ant is? That's right, they are on average around 0.5 cm long. Show on the ruler.

Do they know that ants live in large groups called colonies?

Divide your class into small colonies of ants and give each team one metre of string/ wool (or similar) which they can lay on the ground. This becomes the pathway for their mini adventure.

Alternatively, you can use a hula hoop or make a quadrat using four x one metre long sticks and ask them to explore the area inside the hoop or quadrat.

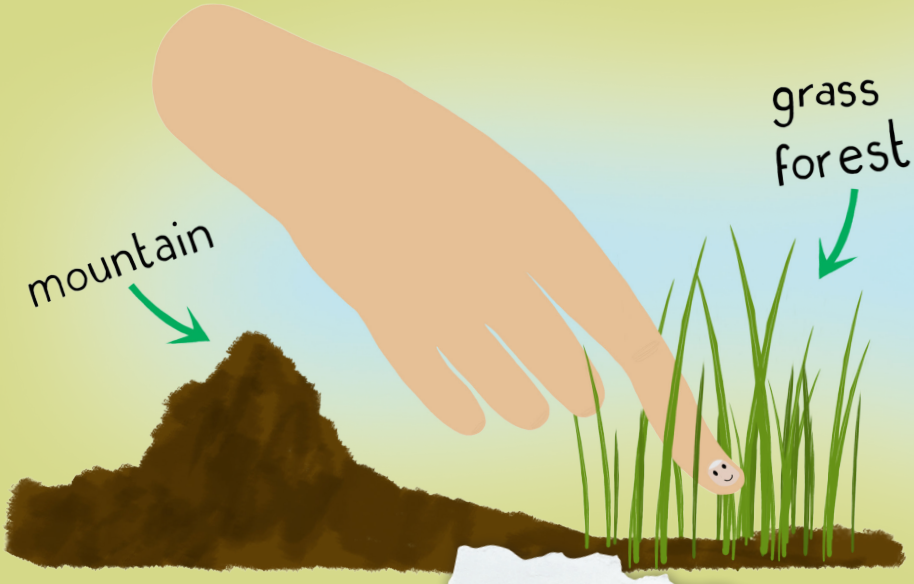
They now need to shrink to the size of an ant. They do this by kneeling and allowing the tips of their index fingers to start to explore along the pathway or wander around within the quadrat.

As they will see, the grass is now transformed into huge tall trees; any slight lumps on the ground have now become large mountains and any cracks deep scary valleys so be very careful!

What happens if they bump into any other minibeasts who may also be out for a stroll? Maybe they could hide under a big green magic carpet (which looks exactly the same as a leaf!) for a while until the danger has passed. What else can they see?

Once they have had a good explore around their new mini landscapes, ask them to choose five special things they have found in Ant World and to mark these features with an 'X' (made of grass or twigs, for example).

They can then team up with a neighbouring colony and give each other a guided tour of their Ant Worlds.



Always
after outdoor learning

the Land Trust

Early Years

Grassland - Lesson 2

Curriculum Links
Communication and language: Listening and attention, understanding, speaking.
Physical development: Movement and handling, health and self-care.
Personal, social and emotional development: Self-confidence and self-awareness, managing feelings and behaviours, making relationships.
Literacy: Describing words and reading a recipe, conversational skills.
Mathematics: Numbers, skills in counting.
Understanding the World: Making sense of your physical world.
Expressive arts and design: Exploring and using materials, being imaginative.

See Equipment List in the pack.

Magic Smelly Potions

How many senses do we have? Yes, we have five (touch, smell, sight, hearing and taste). We are now going to use our noses to smell things in nature.

Many things in nature smell lovely; can you think of anything? Maybe flowers or freshly cut grass? But not all things in nature smell so good! The flowers and leaves of some plants smell disgusting. Some even smell of rotting flesh... yuk!

Go and find a leaf (but beware of stinging nettles). If you crush it between your thumb and fingers it will release its smell. Do you like it? Children often say that leaves smell like cucumber! Do you think they do?

We are now going to make our own 'Smelly Potions' by collecting natural smelly things and putting them in a cup. Find a stick (or something similar) and give your smelly potion a really good stir and it will smell even stronger!

It is important that you give your potion a name. For example, if it smells nice and yummy, you may want to call it a 'A Delicious Delight', or if it is a nasty smelling potion you maywant to call it 'Stinky Smelly Socks' (but no rude words are allowed).

Once you have made and named your potion, find a talk partner and swap over your potions. Does your partner think it smells nice or nasty? Can they guess its name? Now find another partner and swap with them.

Next we need to make your potions magic....so all stand in a circle and take your stirring stick and pretend it is a magic wand. You now need to decide on a magic word; maybe Abracadabra or Alakazam?

Say the word out loud as you wave your magic wand over the top of your cup.

Now find somewhere special to empty your magic potion. This will now become a magic spot!

Extension ideas:

Back at school, ask the children to either write or draw a list of the ingredients they used to make their smelly potion recipe. For example; two pinches of mud, four leaves, etc.

These can then be compiled to make a class Recipe Book.

Could their smelly potions be put into a bottle and sold as perfume? Wow, imagine that! But of course, they will need to design an advertisement or label for the bottle if they want it to be a best seller! And don't forget to put a price on the advert.

the Land Trust

Key stage 1

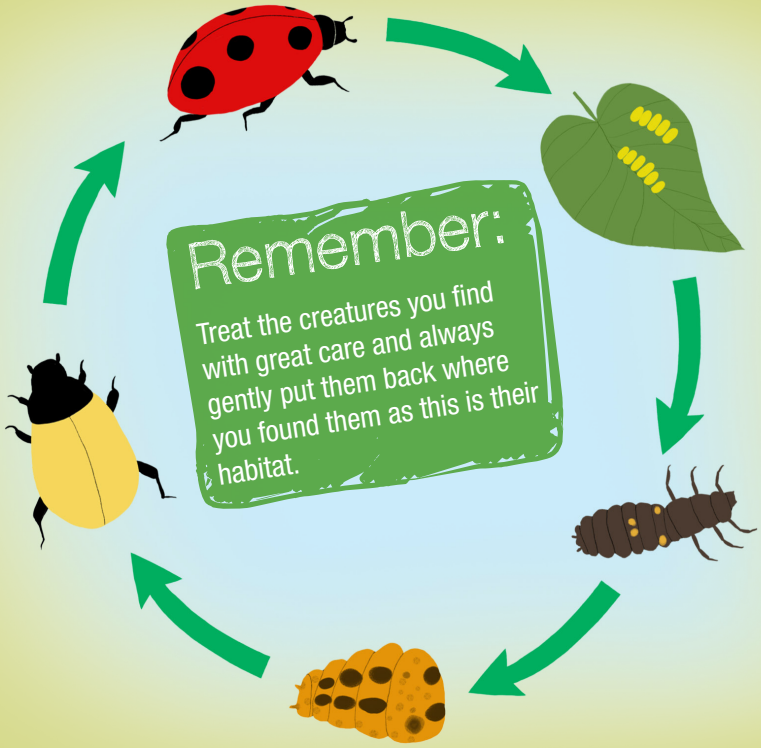
Grassland - Lesson 1

Curriculum Links
Maths: Number and place value, measurement, statistics.
English: Spoken language, reading, writing, spelling, vocabulary.
Science: Working scientifically, plants, animals including humans, living things and their habitats.

See Equipment List in the pack.

Minibeast Hunt

Find an area of long grass (ideally containing wild flowers) to do this activity.



What do we mean by the term *minibeast*? Yes, it means small creatures with no backbone; also called *invertebrates*.

What kind of minibeasts do you expect to find here in this grassland habitat? If you said: grasshoppers and crickets, ladybirds, butterflies, and bees, you are on the right track.

Can you see any creatures? Now have a good listen; can you hear any? What sounds are they making? Maybe a bee is buzzing? Maybe a cricket is chirping?

If you have sweep nets, in groups, take it in turns to gently sweep the net along the tops of the grass and flowers. Any creatures living on the plants will be caught in the net. Try not to catch butterflies or moths as their wings are VERY delicate and if you damage them they will not be able to fly properly.

Try and make it a fair test by making sure each person does the same number of sweeps (maybe five to six sweeps each). Empty the contents of the net onto a white sheet. We MUST use either a spoon or a paintbrush to GENTLY transfer any creatures we find into pots.

Do you know the name any of the creatures you have caught? It's also fun to make up your own name for your creature, for example: A Grisly Green Hopper.

Use the identification chart to find its proper name. Remember to count its legs; if it has six legs it is an insect. Note the number of creatures you find on your Recording Sheet.

You can also lay your white sheet under any trees or shrubs which you find around the outside of the grassland. Shake the branches and see what falls off. You might be lucky enough to find a caterpillar or a spider.

Extension ideas:

- Research the life cycle of the creatures you have found.
- What do your creatures eat? Are they carnivores or herbivores, predator or prey for other creatures in the grassland? Can you draw or act out a food chain found in a grassland?
- Why were some of the creatures you found camouflaged, yet others were brightly coloured; for example red (ladybirds) or yellow and black (bees and wasps)?

the Land Trust

Key stage 1

Grassland - Lesson 2

Curriculum Links
Maths: Measurement, geometry (position and direction).
English: Spoken language, reading, writing, spelling, vocabulary.
Science: Working scientifically, plants, seasonal changes, living things and their habitats, materials.
See Equipment List in the pack.

Journey Sticks (Story Sticks)

What could we use to help us to plan a journey and help us get from place to place without getting lost? Did you say we could use a map (either a hard copy or on a phone) a sat nav, a compass, or GPS?

Do you remember the story of Hansel and Gretel when they left a trail of breadcrumbs to find their way home? Did this plan work? If not, why not?

Another great way of recording a journey is to collect items along the route and to tie them in (chronological) order on a stick. This is called a Journey Stick. Although this can be done individually, it is best done in small groups.

Aborigines (in Australia) and Native Americans used Journey Sticks to tell stories of their travels and adventures.

You can collect sticks on route, remembering that we should not choose a stick that is wider than our thumb or longer than the length from our wrist to our elbow.

Let's begin by finding something that will remind us of where we started our journey.

For example; maybe there is a tree which has leaves that are bigger than your hand or conkers lying on the floor around its trunk. Now tie this on to your stick using wool, string or elastic bands. Remember to try and collect things that have fallen off the tree and just one of each.

As you continue your journey, add other things that will remind you of the route. Maybe a feather or a stone, or an unusual coloured or strange smelling leaf.

At the end of the journey, ask the children to swap their journey sticks with a partner or another group and recount their story of the walk to each other.

Are their Journey Sticks all the same or all different? They are more likely to be different; so even though they have all walked exactly the same route, they all saw different things. Their own sticks and stories are unique!

The Journey Sticks can also be themed; 'Signs of Autumn', for example. Or can be used to explore 'Our Senses' by using different coloured wool. For example, red wool for things that smell (either nice or nasty); blue wool for things that feel smooth or rough, etc.

Extension ideas:

Back in class, you can write up or voice record your journey using the sticks and present your stories to the rest of the class.

Explore maps or aerial photographs of the area and look for prominent features in the landscape that would help you navigate.

the Land Trust

Key Stage 2

Grassland - Lesson 1

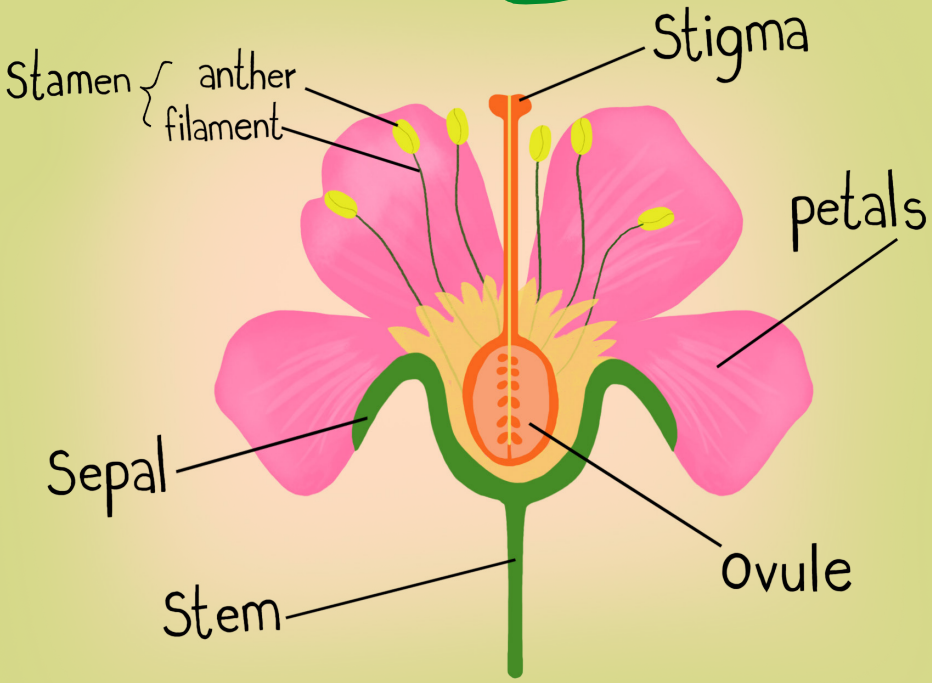
Curriculum Links
Maths: Number, geometry (shapes), statistics.
English: Spoken language, reading, writing (spelling, vocabulary).
Science: Working scientifically, living things and their habitats, plants, seasonal changes.

See Equipment List in the pack.

Handy tip:
This activity is designed to be used during the spring and summer months.

Flower Power

Search for a wild flower. What shape is its stem? What shape are its leaves? Are the stem and leaf hairy or smooth? Does it have any sepals? How many petals does it have? What colour are the petals?



Use the hand lenses to look inside a flower. Can you see the sta**men** and stig**ma**? Can you guess which of these two are the male and female parts? (I have given you a clue!)

Use the Grassland Spotting Sheet to see how many different flowers you can find. Try and find a flower that is not on the sheet and do a field sketch using the Grassland Doodle Sheet. Remember to include its shape, colour, number of petals etc. so you can look up its name when you get back to school.

Can you find a Buttercup? To check that it is a Meadow buttercup and not a Bulbous buttercup, use your lenses to look at its sepals. If they point backwards (towards the stem) then it is a Bulbous buttercup.

You may find White clover as well as Red clover. Both plants are in the pea family (legume) and are very clever as they make their own nitrogen, an important plant nutrient which helps growth. Clover is also used in herbal medicine to treat respiratory and skin disorders.

Can you find a dandelion? Dandelions are in the Daisy family. There are many similar flowers in the same family, many of which are much taller than the Common dandelion. If you have a good look at its petals (called florets) you can see that each one contains a stamen.

If you find the Bird's-foot trefoil plant (which is also in the pea family), have a close look at its petals. Can you think why it is sometimes called grannies toenails, eggs and bacon or rhubarb and custard plant? The flowers eventually turn into seed pods that look like birds feet or claws, which is how it aquired its common name!

Extension ideas:

Find out which families all the flowers you have found belong to. What is the folklore associated with them? Do any of them have medicinal properties and uses? Are any of them important food sources for other creatures? For example, Common bird's-foot trefoil is an important food plant for the caterpillars of the Common blue, Silver-studded blue and Wood white butterflies; all of which are increasingly rare in the UK.

Always
after outdoor learning

the Land Trust

Key Stage 2

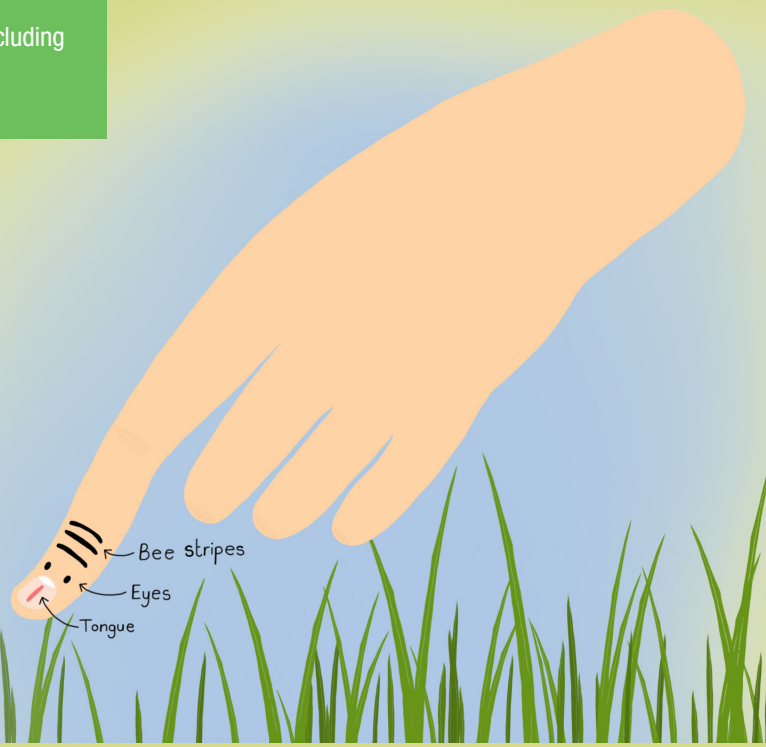
Grassland - Lesson 2

Curriculum Links
Maths: Number, statistics.
English: Spoken language, reading, writing (spelling, vocabulary).
Science: Working scientifically, living things and their habitats, animals including humans, plants, seasonal changes.

See Equipment List in the pack.

Waggle Dance (Pollination Game)

Why do you think flowers look and smell nice? Yes, to attract minibeasts such as bees and butterflies to help pollinate them.



However, some flowers smell horrible in order to attract the flies which are their pollinators. Some even smell like rotting flesh...yuk!

Can you now transform your class into buzzy bees? They will need practice using their (pretend) wings to fly around whilst making loud buzzing sounds too! Bees also have a tube-like tongue called a proboscis which is a bit like a straw. Put your index finger in front of your mouth and pretend this is your proboscis and make sucking noises as if you are sucking a yummy thick milkshake through a thin straw.

Bumblebees also have pollen sacks on their hind legs to collect pollen. So now ask the group to all tap the outside of their thighs to mimic this.

To help get the group into character, try drawing three black stripes and two dots for eyes on their index fingers.

Now they can all buzz off and fly to five different flowers where they will pretend to suck up nectar and collect pollen.

Can you now see where the phrase 'busy as a bee' comes from? To save energy, bees have developed a way of communicating the whereabouts of good nectar sources. We humans have named this the Waggle Dance.

The first part of the dance is to move around on the ground in the shape of a number eight. The bees then point to the flower. As they have no fingers, they use their bottom (abdomen) which they waggle in the direction of the flower. Have a practice!

Get into pairs. One of the pair is going to hide their eyes whilst their partner flies to a flower, sucks up nectar and collects pollen. On their return, they will perform the waggle dance to their partner who will try to find the flower. Swap over and repeat.

Extension ideas:

- Create a wildflower area (meadow) at school. You can do this in pots or window boxes if you don't have much space. Research and make 'bee hotels' too.
- Watch a video of a bee doing its waggle dance.
- Honey bees have an amazing life cycle; see how much you can find out then decide what role and gender you would like to be if you were a bee! To bee or not to bee? That is the question!

the Land Trust

Early Years

Ponds - Lesson 1

Curriculum Links
Communication and language: Listening and attention, understanding, speaking.
Physical development: Movement and handling, health and self-care.
Personal, social and emotional development: Self-confidence and self-awareness, managing feelings and behaviours, making relationships.
Literacy: Describing words, creative language.
Mathematics: Numbers, space.
Understanding the World: Making sense of physical world through sounds, observations of animals and plants.
Expressive arts and design: Being imaginative.

See Equipment List in the pack

Extension ideas:

Back at school, can you make a CD of the sounds you heard in nature? To do this you need to draw a circle and draw on symbols of the sounds you heard and/or sketch the animals, birds or plants you heard around you.

Listening Ears

We have five senses: touch, smell, sight, hearing and taste. Can you mime the actions for each of these senses? For example, take a big sniff of the air for smell, lick your lips to show taste, and cup your ears to listen.

Lots of creatures live in and around the pond and they all make different sounds. The sense of hearing is very important for lots of animals, so they can listen out for enemies and also find their food. What creatures do you think might live in a pond? Remember some live under the water, some live on top of the water and some live around its edges or come to the pond for a drink.

Let's see if we can hear any of them, shall we? Ask the group to stand in a circle and cup their hands to their ears. Like magic, everything should sound a little bit louder! Now the important bit; everyone needs to close their eyes and stop speaking or making any noises until the teacher says, 'twit twoo' (which means they can relax again).

Can you point to any noises you hear? Is the sound behind you, above you, near you or a long way off in the distance?

That was the practice run. We are now going to do the same thing, but this time we are going to spread out a bit more and do it for a bit longer. So, get comfortable. Maybe lean against a tree or sit on some soft grass.

This time try and count how many different sounds you can hear. You can use your 10 fingers to help you count.

The teacher will now find their Magic Outdoor Microphone (in the form of a stick/ twig). The microphone is then passed around the circle so anyone who wants to can tell the rest of the group what they heard. ONLY the person who is holding the magic microphone can speak!

Try and think of really exciting words to describe what you heard. For example, was your creature whizzing busily above the pond, or was it splishing and splashing through the water? Maybe you heard the croak of a frog, the flutter of dragonfly wings, the rustle of the wind through the leaves of any plants and trees surrounding the pond, or the plop of a creature entering the water.

Always
after outdoor learning

the Land Trust

Early Years

Ponds - Lesson 2

Curriculum Links
Communication and language: Listening and attention, understanding, speaking.
Physical development: Movement and handling, health and self-care.
Personal, social and emotional development: Self-confidence and self-awareness, managing feelings and behaviours, making relationships.
Mathematics: Numbers, measures, shapes.
Understanding the World: Making sense of their physical world, observation, materials and living things.
Expressive arts and design: Exploring using materials, being imaginative.

See Equipment List in the pack

Natural Art

We are going to create a picture. But how could we possibly do this, as we have not brought any pens or paper with us?

Yes, we could use the natural, found materials that we see all around us! Remember, we should not pick lots of things that are alive (such as flowers) but should try and find things that have fallen to the ground.

First, let's get into small groups and then make a border or a frame for our picture. You could use sticks, grass or dead leaves to do this.

Do you want your frame to be a circle, a square or a rectangle, or even a triangle? Take a vote if you need to!

Whatever shape you use, it should not be longer or wider than the length from your wrist to your elbow. Point to both parts of your arm.

Can you see any plants around you? Can you name the parts of the plant? For example, where are its roots, its stem, and its leaves? Does it have any flowers? If so, can you count the petals?

We are now going to make a picture of this plant. How about using twigs for the stem, or can you see something else that is strong and straight like a plant stem? What could we use for the roots? Maybe grass?

How about making the shape of the leaf using stones? Now let's look around for something to make into the petals of the flower. Maybe you could use lots of different leaves; what do you think? Any ideas?

If you have time, you could also make a bee or a butterfly to sit on or next to your flower.

When you have all finished, go and visit another group and see their works of art. Have they used the same or different materials to those you used?

Wow; you have all just created a big outdoor art gallery. What creatures do you think will visit your art gallery once you leave?

Remember to wash your hands after this activity.

Extension ideas:

When you get back to school, measure the length from your wrist to your elbow.

Tell a partner about your picture; can you remember how many natural items you used? How did you decide which materials you would use?

the Land Trust

Key stage 1

Ponds - Lesson 1

Curriculum Links
Maths: Number and place value, geometry (direction), statistics.
English: Spoken language, reading, writing, spelling, vocabulary.
Science: Working scientifically, plants, animals including humans, living things and their habitats.

See Equipment List in the pack

Pond dipping

What plants and creatures can you see above and around the side of the pond? Green plants are very important in a pond as they supply it with oxygen so the creatures that live under the water can breathe.

Can you hear any creatures? Some ponds have marsh frogs (which have been introduced in to the UK) which can be very noisy and sound a bit like a mobile phone ringing!

What creatures do you think may live in this pond? Shall we now explore and find out for sure?

Before we start we MUST cover any open cuts with a waterproof plaster. We must ALWAYS kneel when using the nets and be aware of who is around us.

Our first job is to put pond water into our white trays as all the creatures we catch need to go into this water, so they can breathe.

Put your nets into the water and use a scooping action to catch the creatures, then transfer the contents of your net into the water in the tray. Try not to get too much mud in your net as this will make the water in your tray cloudy.

Take it in turns to use the nets. The rest of the group can use spoons to transfer the creatures from the tray into small pots, which will also need to contain pond water.

Look at how the different creatures move and swim. Describe this and/or act it out to a partner. Can they guess which creature you are looking at? Use the Pond Spotting Sheet to find out the names of the creatures you have caught and note what you find on your Pond Recording Sheet.

Extension ideas:

Different pond creatures have developed different ways (adaptations) of breathing underwater, for example gills, or a tube to breathe oxygen above the pond surface. Research how the creatures you found breathe underwater and what they eat. Are they the food (prey) of any other creatures in the pond?

Can you draw a food chain using some of the creatures you found? (i.e. pond weed, tadpole, fish, heron)

the Land Trust

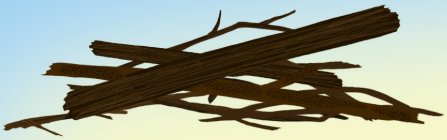
Key stage 1

Ponds - Lesson 2

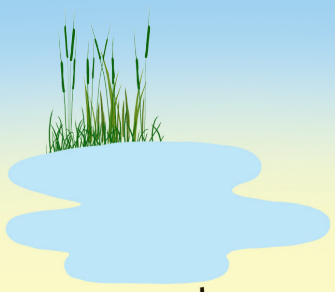
Curriculum Links
Maths: Number and place value, geometry (direction), statistics.
English: Spoken language, reading, writing, spelling, vocabulary.
Science: Working scientifically, plants, animals including humans, living things and their habitats, seasonal changes.
See Equipment List in the pack

Habitat Detectives

What is a *habitat*? Yes, it's the place where animals (including humans) live. Can you think of any examples?



Dead Wood



Pond

Tree

grassland

As I am sure you know, a habitat can be as small as the space under a log or stone, or as large as an ocean.

Split into teams and give yourselves a team name which is related to habitats; for example, 'The Terrific Trees'.

Each team will now become Habitat Detectives. To make this fair, we will walk the same route and each team will make a list of all the habitats they spot on the route. But 'shh'. Don't let the other teams hear your ideas.

Can you name the creatures that are likely to live in the habitats you spot? For example, grass snakes, toads, stag beetle larvae and woodlice live in a log pile, whereas grasshoppers, crickets and butterflies would be found in a grassland habitat.

Have you spotted a pond or lake yet? Some creatures live in different parts of a pond. For example, dragonfly nymphs and water fleas live under the water and pond skaters live on top of the water.

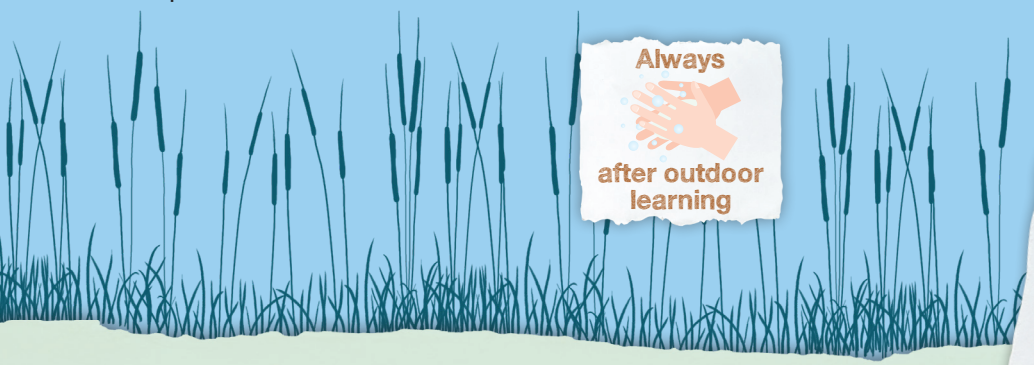
Some pond creatures live in various parts of the pond at different stages of their lifecycle. Let's use a frog as an example. The eggs (frogspawn) are laid in water where the tadpoles feed and grow. The adult frog can leave the water and live on land and they particularly like dark damp places such as under logs or big stones.

When you are thinking about which creatures live in trees and woodlands, don't forget there are lots of habitats within one tree. For example, on and under the bark (i.e. ants, ladybirds), on the branches and leaves (i.e. caterpillars and spiders), in holes in trees (i.e. owls and bats) and nests on branches built by birds and squirrels. A squirrel's nest is called a drey.

Well done! You are now a fully qualified Habitat Detective.

Extension ideas:

- Can you repeat this activity in your own school grounds or local open space? How does it compare to the Land Trust site you visited?
- Research what the term micro habitat means.
- Discuss what five things creatures (including humans) need in their habitats - food, water, oxygen, shelter, a mate of the same species.



the Land Trust

Key Stage 2

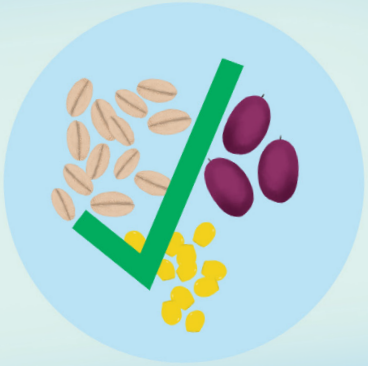
Pond - Lesson 1

Curriculum Links
Maths: Number, statistics.
English: Spoken language, reading, writing (spelling, vocabulary).
Science: Working scientifically, living things and their habitats, animals including humans, evolution and inheritance, seasonal changes.

See Equipment List in the pack

Water Bird Bingo

How many types of freshwater habitat can your group name? Have a look at the site map and see if any of these wetland habitats can be found at this site.



Visit as many of these habitats as you can and use your Water Bird Spotting Sheet to identify and name any of the water birds you see.

As you can see, the birds on the sheet vary in terms of colour, shape and size. Each one is perfectly suited (adapted) to their particular habitat.

For example, Mallards have long, broad, flat bills which enable them to scoop up their food. There are also small, comb-like structures (which look a bit like tiny teeth) along the inside of the bill which act like sieves so that non-food items such as mud and water can be filtered out from the food items (which include plant matter and small water creatures).

They also have webbed feet and their legs are positioned towards the rear of their bodies which help to propel them through water.

Did you notice that male and female Mallards are different in colour? Why do you think the female has dull colours? Did you use the word *camouflage*? How might this help protect her and her eggs from predators?

Mallards are known as dabblers as they find their food close to the surface. They can also upend to find food a bit further down. Other ducks (such as the Tufted duck) are referred to as divers as they dive under the water to find their food.

Coots and Moorhens belong to the same family and have similar features such as a narrow body so they can slip easily through the plants on the edge of the water. Compare their bills to those of the Mallard and Tufted duck.

Canada geese and Swans have much longer necks than ducks which means they can find food further down in the water.

Look at the bill of the Great crested grebe - what do you think they eat?

All these species have developed their own niche and can live together in the same wetland habitat without too much competition for food.

Did you know?

Feeding waterfowl bread (particularly white bread) is NOT good for them as it fills them up and stops them eating a healthy and balanced diet? Foods such as oats, grains, defrosted peas or sweetcorn, rice, salad and vegetable trimmings, are much better for them!

Extension ideas:

- Sketch or take photos of any other birds you see and find out more about them back at school.
- Even if you don't manage to see all the birds on the sheet, can you find out which family they belong to and if they are carnivores, herbivores or omnivores?
- Start an Awareness Campaign, highlighting what people should and should not feed water birds.

the Land Trust

Key Stage 2

Pond - Lesson 2

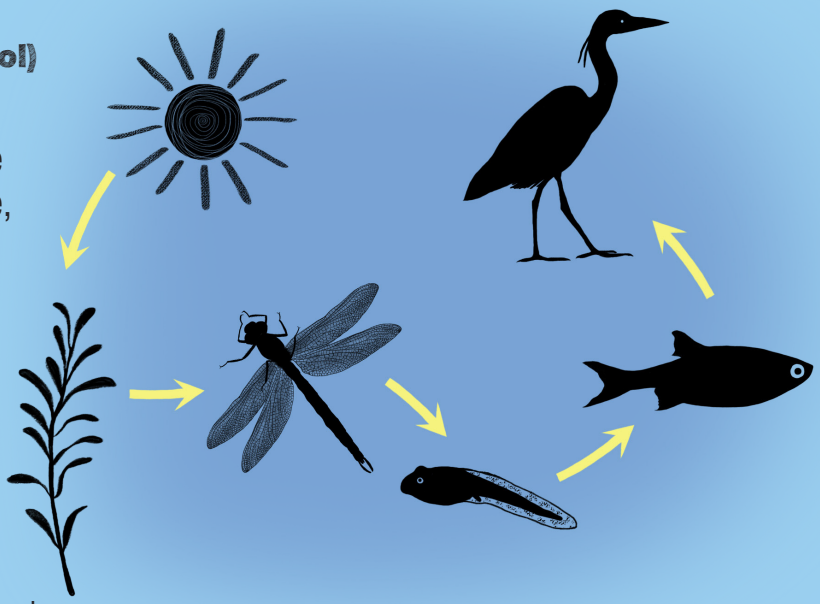
Curriculum Links
Maths: Number, geometry (properties of shapes).
English: Spoken language, reading, writing (vocabulary).
Science: Working scientifically, living things and their habitats, plants.

See Equipment List in the pack

Food Chain Games

(You will need a big ball of string or wool)

Unlike humans and other animals, plants can make their own food using the energy from the sun via a process called *photosynthesis*. Hence, plants are called *primary producers*.



Creatures that eat these green plants are called *herbivores* and are *primary consumers.* Other creatures that eat these creatures are called *carnivores* and we call these *secondary consumers*. This gives us what is called a *food chain*.

Here is an example of a food chain in a pond habitat:

As you can see, the top predator (or tertiary consumer) is the heron, which is a large bird that often visits ponds and other wetlands.

Divide the class into four groups and place each group slightly out of earshot of each other. Visit each group and transform some of them into plants, some into tadpoles, fish and herons. They will need to practise their sounds and movements. When you shout 'GO', they need to move around in character and team up with others who are the same. The only word they can use is 'SNAP' when they match.

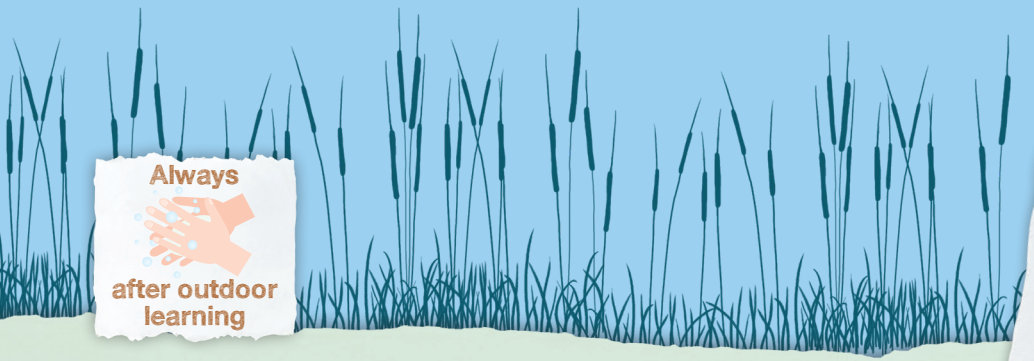
Can the four teams now organise themselves into a food chain? Discuss which of them are predators and which of them are prey. Now they can move around again and find and tag their prey.

Oh dear! We forgot to include the sun in our food chain! The teacher now becomes the sun and gives energy (the ball of string) to one of the plants. This plant then hands the ball of string to all the other plants so they all become connected. The last plant then passes their energy (the string) on to a tadpole, until all the tadpoles become connected, who then pass it on to the fish and then the herons. By now you should all be in one big tangle. This is called a *food web*.

What happens if the water becomes polluted and all the plants die? Ask the plants to kneel and we will see!

Extension ideas:

- Are there any plants living around the edges of the pond? If so, do you know the name of any of them?
- Can you see any plants on top of the water; a White Water-lily for example? Some pond plants live under the water, like Pondweed. Can you spot any?
- Sketch or take photographs of these plants (noting their colour, shape, size, etc.) so you can find out their names back at school.



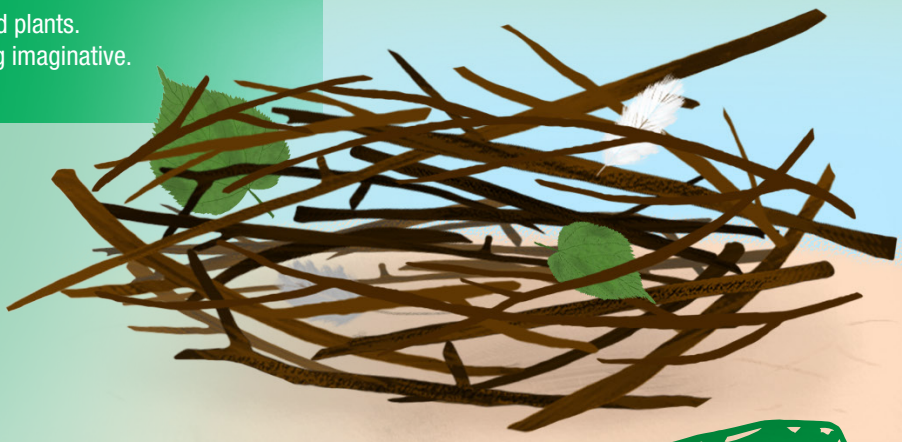
the Land Trust

Early Years

Woodland - Lesson 1

Curriculum Links
Communication and language: Listening and attention, understanding, speaking.
Physical development: Movement and handling, health and self-care.
Personal, social and emotional development: Self-confidence and self-awareness, managing feelings and behaviours, making relationships.
Literacy: Reading.
Mathematics: Numbers, shape.
Understanding the World: Observations of animals and plants.
Expressive arts and design: Exploring materials, being imaginative.

See Equipment List in the pack



Making bird nests – 'Home, Tweet Home!'

Can you think of the names of any of the birds that live in a British woodland? Did you remember blackbird, blue tit, great tit, robins, wren, song thrush, woodpecker? There are many more too!

Look around and see if you can spot any nests? The easiest ones to see are up in the branches of trees.

Do you know why birds build nests? Yes, that's right; to lay their eggs in. Birds use their beaks to build their nests; how amazing is that?

We are now going to make a nest, so let's think about what shape it should be. Would it be good to be flat like a dinner plate or more rounded like a cup or a bowl?

What materials around us could we use to make our nest? How about small twigs to make the outside nice and strong? How about using soft feathers, leaves or grass to make the inside nice and cosy? See if you can find any moss as this will help to disguise (camouflage) your nest from any enemies. What do you think birds enemies are?

According to old-fashioned stories, a bird called a magpie liked to collect shiny things to decorate their nests. What could you use to decorate your nest and make it pretty?

Some birds can lay up to fifteen eggs and others only lay one. They must sit on their eggs to keep them warm. It's a bit like baking a cake! The warmth from the parent bird makes sure that the chicks inside grow properly. This is called incubation.

When the time is right, the egg cracks open and out comes the baby bird which is called a chick. This chick will grow and learn to fly. When the time is right it will fly away and make its own nest to lay its eggs in.

Did you know that squirrels also build a nest called a *drey*, usually about the size of a football?

Handy tip:

When carrying sticks, hold one end in your hand and the other end pointing towards the ground. If you need to snap sticks to make them smaller, always snap down towards the ground (and not towards you) as pieces may fly off!

Extension ideas:

Back at school, make a sketch of your nest.

Have a walk around your school grounds and see if you can spot any birds or any nests. Find out the names of any birds you do spot and see what kind of nest they make and what colour their eggs are.

the Land Trust

Early Years

Woodland - Lesson 2

Curriculum Links
Communication and language: Listening and attention, understanding, speaking.
Physical development: Movement and handling, health and self-care.
Personal, social and emotional development: Self-confidence and self-awareness, managing feelings and behaviours, making relationships.
Literacy: Reading.
Mathematics: Numbers, shape.
Understanding the World: Making sense of their physical world, exploration, observation.
Expressive arts and design: Exploring materials, being imaginative.

See Equipment List in the pack

Top tip:

When collecting natural materials, encourage children to select items from the woodland floor rather than picking living plants.

Touch Treasure Hunt

We have five senses. Can you name them all?

Did you say our eyes to see, our ears to listen, our mouths to taste, our nose to smell and our hands to touch?

Can you think of any touch or feel words? Let's all touch our hair. What words would you use to describe how it feels? Soft, bouncy, spiky, hairy?

We are now going to work in groups on our Touch Treasure Hunt. Each team will collect an item to match all six of the touch words on the right. These things should be natural items and not man-made. You could tie the items onto a stick to make them easier to carry.

Once you have collected all six items, find another team and swap what you have found. Have a good feel of all their treasures and match them up with the words on the list you have just used.

Can you think of another two touch words to add to the list? Go and find examples of these two, as you did before. But 'shhh', don't tell the other teams what your two touch or feel words are as you are going to swap your items over again, but this time the other team have to guess what your words are.

Extension ideas:

- Do this activity again in the classroom.
- Are the items you find inside different to those you found outside in nature (natural versus man-made)?
- Set up a short route with a rope, approximately at your chest height. Using blindfolds, follow the rope so you are using touch rather than sight to navigate. You MUST keep both hands on the rope until you reach its end.

the Land Trust

Key stage 1

Woodland - Lesson 1

Curriculum Links
Maths: Number and place value, measurement, geometry (properties of shapes, position and direction), statistics.
English: Spoken language, reading, writing, spelling, vocabulary.
Science: Working scientifically, plants, animals including humans, living things and their habitats, materials, seasonal changes.

See Equipment List in the pack

Mini Dens

Creatures such as foxes, hedgehogs, toads, badgers, tawny owls and deer live in a British woodland habitat. Can you think of any other woodland animals?

What are the basic needs of animals (including humans)? Yes, water, food, air, shelter and a mate of the same species (to reproduce).

Split your class into small groups. Each team is given the task of making a 'des res' (mini den) for one of these creatures. The dens should not be more than 1 metre in height.

Look around and discuss what natural materials could be used and why, according to their properties? For example, sticks are good for the structure and will make it nice and strong. Dry grass or dry leaves will make it nice and warm and cosy. Maybe a feather or two as a pillow? Your mini den also needs to be waterproof and if you use leaves to keep the rain out, be mindful not to pick too many. How about using prickly things for protection? Have you thought about camouflaging your den to deter enemies (predators)? Also, add anything else to make your mini den the most attractive on the block!

Don't forget that some woodland creatures hibernate (i.e. hedgehogs) so the dens you create really do need to be fit for purpose!

Each team will then transform themselves into ***'Woodland Estate Agents'*** and take it in turns to give other teams a guided tour of their 'new build'; pointing out all of its unique features and specific selling points. For example: "This den is situated in a delightful woodland setting, offering super views. Lots of room to extend. It is quite near to a river and there are plenty of trees to climb and play hide and seek."

Is your creature a herbivore or carnivore? Why not make it a Woodland Pizza using a leaf as its base. If it is a carnivore, don't use real creatures as toppings; find something that looks like a creature instead.

Handy tips:

ALWAYS drag sticks along behind you; as if you are taking your stick for a dog walk!

Extension ideas:

Draw an annotated picture of your mini den. What were the properties of the materials you used?

If you could have used 1 extra item of man-made material when building your mini den, what would that have been, and why?

the Land Trust

Key stage 1

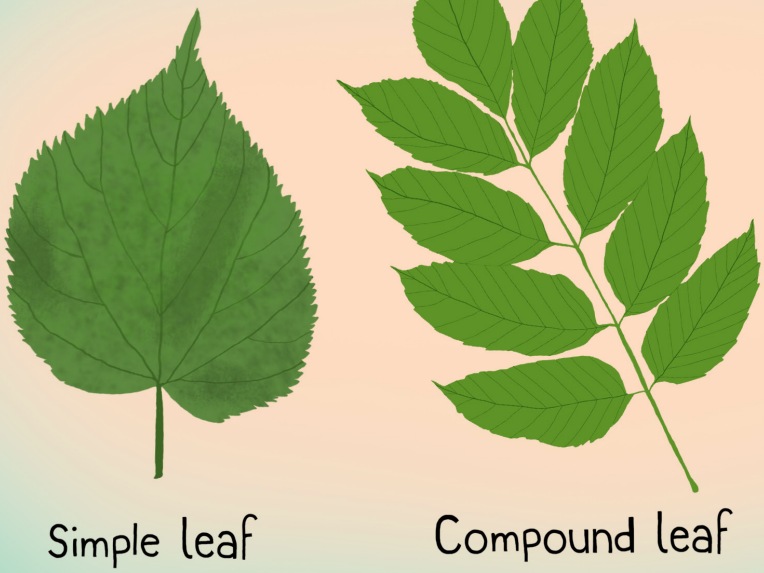
Woodland - Lesson 2

Curriculum Links
Maths: Number and place value, geometry (properties of shapes), statistics.
English: Spoken language, reading, vocabulary.
Science: Working scientifically, plants, animals including humans, living things and their habitats, seasonal changes.

See Equipment List in the pack

Tree identification

Do you know the name of any trees that grow in British woodlands? Did you remember oak, ash, cherry, horse chestnut, sycamore? Can you think of any more?



Simple leaf

Compound leaf

Can you see the roots of the tree? As you know, they suck up water and nutrients (food) from the soil and keep the tree stable.

Trees are fantastic habitats for a whole host of creatures. Can you see the signs of any of these creatures? Maybe you can spot a nest up in the branches, a hole made by a woodpecker or maybe an ant running up the trunk of a tree.

During the summer months you can tell trees apart by their leaves. During the winter you can usually find leaves which have fallen off the tree, if it is deciduous.

Find yourself a super special leaf. Now hold it up to the sky. Can you see the pattern of its veins? Is it the same colour and texture on both sides? Is it symmetrical? Can you see any nibbles (holes) in it and if so what do you think made the holes? See if you can find someone else who has the same leaf as you. If you can, shout, 'SNAP'.

Now use your Woodland Tree Spotting Sheet to see how many different trees you can find.

At different times of the year you can also identify trees by their fruit, buds and the look and feel of the bark.

Go and feel the bark of 3 different trees. Can you use alliteration to describe how each tree feels? Really rough, or beautifully bumpy, for example.

What is the job of a leaf? To make this easier, make yourself into the shape of a leaf! Do you feel silly? Well it gets even sillier! Now pretend to grab some sunlight and gases; i.e. carbon dioxide. The inside of the leaf is like a big food factory, which turns these ingredients into foods (simple sugars) that help the tree grow. Now make the sounds you would hear in a busy kitchen (whizz, whoo). It helps if you have watched Master Chef! Now blow out a bubble of oxygen. As I am sure you know, you have just acted out the process called *photosynthesis*.

Extension ideas:

Collect some of the leaves you found and make a simple (dichotomous) key. For example, does your leaf have a point on the end, or does it have smooth edges? Swap with another team to make sure your key works.

REMEMBER: Only take a few leaves from any one tree or collect fallen leaves to lessen your impact on the woodland habitat.

the Land Trust

Key Stage 2

Woodland - Lesson 1

Curriculum Links
Maths: Number, statistics.
English: Spoken language, reading, writing (spelling, vocabulary).
Science: Working scientifically, living things and their habitats, animals including humans, evolution and inheritance, plants.

See Equipment List in the pack

Woodland Minibeast Hunt

Unlike humans (*vertebrates*), minibeasts are *invertebrates* which means they don't have a backbone.

Some invertebrates, such as worms and slugs, have soft bodies. Others, such as insects and spiders, have a hard outer casing called an exoskeleton to protect their body; a bit like a suit of armour.

Minibeasts that live in a woodland habitat are perfectly suited (adapted) to live in dark, damp places. What minibeasts would you expect to find in a British woodland?

We are going to try and find some of these minibeasts now; where shall we look? It is helpful to liken a woodland habitat to a block of flats. Some creatures (such as worms) live in the basement. Use a stick to dig and see if you can find any. Other creatures live on the ground floor, in the leaf litter and under logs and big stones etc. Go and have a look!

Other minibeasts (including caterpillars and spiders) live on the first and second floor; that is the branches and leaves of the smaller trees (shrubs or understory) and the larger trees above them. If you place a white sheet on the floor beneath the lower tree branches and give them a good shake, all of the minibeasts living on them will fall onto the sheet.

Some minibeasts live on the top floor, which is called the canopy. For example, a Purple emperor butterfly lives at the top of an oak tree. But as we can't climb trees today, you will have to take my word for it!

To identify and name the creatures we find, we will have to put them in a pot and count their legs. Some minibeasts have no legs (i.e. slugs, snails and worms), some have six legs and are called insects (i.e. beetles, ants, earwigs), some have 8 legs and are known as arachnids (i.e. spiders, harvestmen), and some have more than eight legs (i.e. centipedes, millipedes, woodlice).

Use your Woodland Minibeast Spotting Sheet to find out the name of your minibeasts and record your findings on the Woodland Recording Sheet.

Remember:

Use a spoon or paintbrush to carefully pick up your creatures as they are very delicate. Also, some bite.

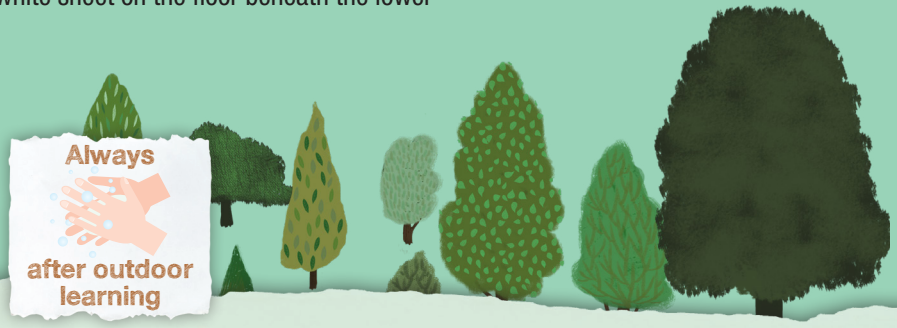
ALWAYS put the creatures back where you found them as we don't want these lovely minibeasts to become homeless!

Be careful when lifting things and remember to bend your legs and/or ask an adult to help. And do be careful not to squash or injure any minibeasts.

Extension ideas:

Some minibeasts have a 3-stage life cycle (such as woodlice) and some have a 4-stage life cycle (such as ladybirds and butterflies). Find out about the life cycle of the minibeasts that you have found.

Can you design a Super Woodland Creature with as many adaptations as you can think of? This could include large jaws, a sting, camouflage, long legs, wings, gills, etc. Don't forget to give your Super Creature a name too.



the Land Trust

Key Stage 2

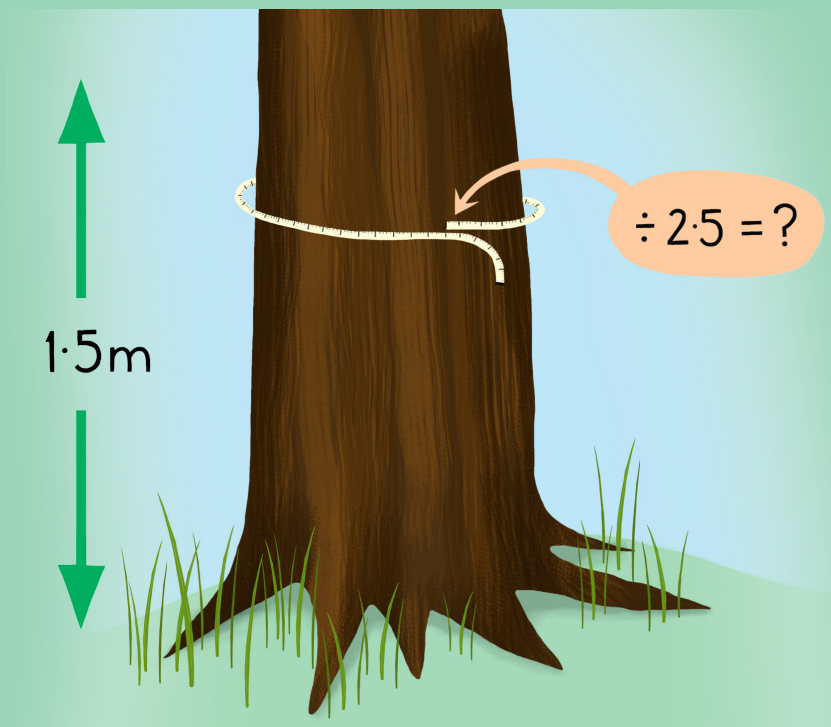
Woodland - Lesson 2

Curriculum Links
Maths: Number, measurement, geometry (properties of shapes), statistics.
English: Spoken language, reading, writing (spelling, vocabulary).
Science: Working scientifically, living things and their habitats, plants.

See Equipment List in the pack

Measuring Trees

Have a good look at the trees around you. How can you tell them apart? I hope you remembered to include: by their shape, their leaves, and the texture of the bark, their colour and their size.



Find your favourite deciduous tree. Can you name the parts of the tree and the job they do? Start at the roots and then the trunk and bark, then its branches, twigs and leaves.

Estimate how old your tree is. You probably know that if we chopped the tree down and counted its rings we could tell its actual age.

Like humans, different types of trees grow at slightly different rates. On average, most deciduous trees add 2.5cm to their girth (circumference) every year. So let's measure the girth of our tree at 1.5m above the ground (try and avoid any lumps or bumps on the trunk).

Now divide the girth of the tree by 2.5 and this will give us a rough idea of its age in years.

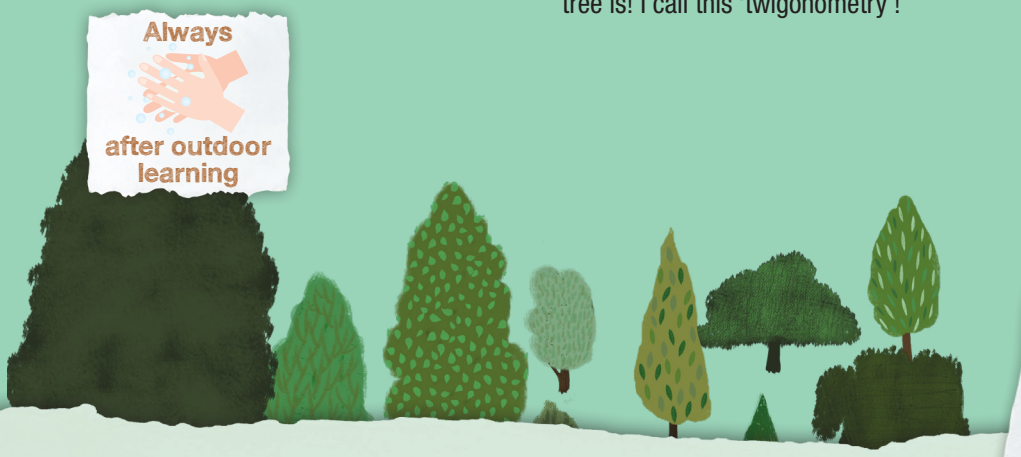
What was the difference between this calculation and your original estimate?

Using this method, can you now calculate the age of the youngest and oldest tree around you?

Now estimate the height of your tree. Walk away from the tree and look upside down between your legs until you can see the top of the tree. You may need to keep moving backwards and forwards until you can see it. When you get the right spot, put a stick in the ground. Measure the distance between the stick and the tree. This is how tall your tree is! I call this 'twigonometry'!

Extension ideas:

Back at school, draw a timeline for one of the trees you looked at. What has it witnessed during its life cycle? For example; it is over 100 years old and started life as an acorn and when it germinated the First World War was just about to end. It still hopes to live for 'X' amount of years. It is home to over 300 species, including owls and caterpillars, and every year bats hibernate inside its trunk.



the Land Trust

Factsheet

Grassland

Grasslands are not just full of grass, they are brilliant for flowers too, especially in the summer. Grasslands rich in wild flowers are called ‘meadows’ and they must be looked after and managed in a very special way.

Factoid:

In 2012, HRH The Prince of Wales called for the creation of new wild flower meadows to celebrate the 60th anniversary of the Coronation of his mother, The Queen!

This project is called ‘Coronation Meadows’ and one of its aims is to create new meadows in every county in the UK. Well done Charles!

A well-managed meadow can contain over 400 different species of plant including some of our rarest flowers. For example, a meadow in a secret location in Yorkshire is home to the last single remaining Lady’s slipper orchid.

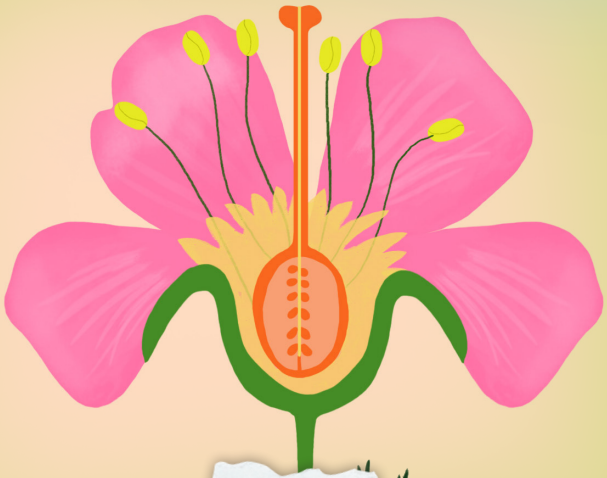
Many meadow flowers have fantastic names, such as Yellow rattle, Devil’s-bit scabious and Lady’s bedstraw. And don’t forget the grasses, including Crested Dog’s-tail, Meadow foxtail and Wavy Hair-grass.

During the summer, meadows are literally alive with bees, butterflies and other minibeasts, all searching for flowers which have sugary nectar inside. Both bees and butterflies have long tongues, a bit like a straw (and called a proboscis) which they use to suck up the yummy nectar. If you listen, you may hear the chirp of a grasshopper or cricket and the buzzing of bees. Can you think of any other minibeasts you may find in a meadow habitat?

Sadly, we have lost over 97 percent of flower-rich meadows here in the UK over the past 70 years. How might this affect the butterflies and bees and the birds and bats that eat these minibeasts?

Maybe you could help this decline by creating a small meadow back at school.

Even planting wild flowers in small pots or window boxes can make a difference and provide much-needed food for bees and other invertebrates.



the Land Trust

Recording sheet

Grassland

Name: _____ **Land Trust site:** _____ **Date:** _____

Describe the weather today:

_____

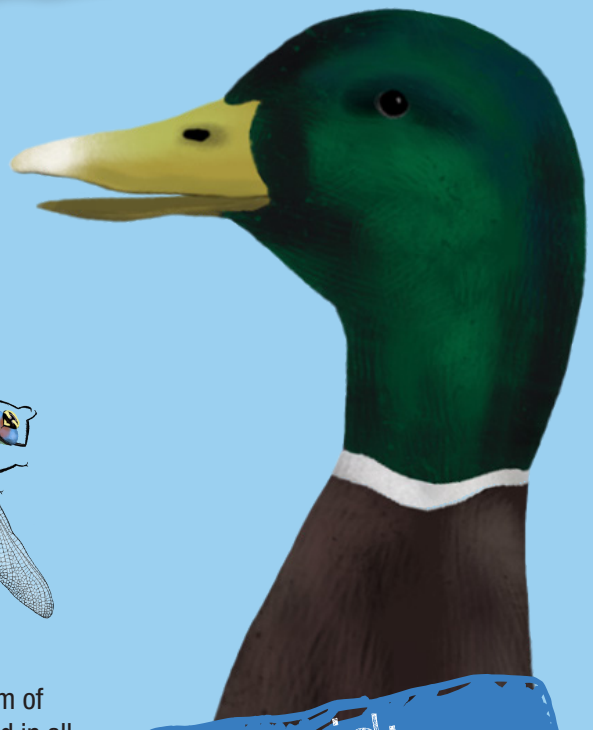
Tick (✓) or tally (𝍸) what you find

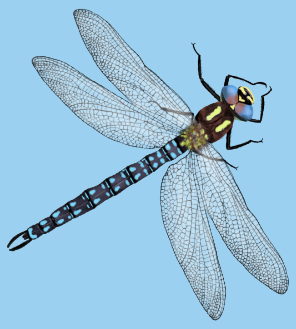
Name of creature	Woodland	Grasssland	Pond	Other habitats
Total:				

Factsheet

Pond

Freshwater habitats are important for wildlife. Freshwater is different from sea water which is salty, as I am sure you will know if you ever swallowed any whilst swimming at the seaside.





Let's think about the names of different wetland habitats. How many can you think of? Did you remember ponds, lakes, rivers, canals, streams and ditches? And don't forget the lovely damp and marshy areas around water which are also fantastic for a range of plants and animals too.

Wetlands provide valuable homes for a whole host of wildlife. Some like to be on top of the water, such as ducks, pond skaters and a plant with a white flower called Frogbit. Others live under the water, such as the nymphs of dragonflies and damselflies, pond snails, fish and a plant called Water-crowfoot. Some frogs hibernate in the silt at the bottom of the pond during the winter.

Trees such as willow and alder like damp places. Other water-loving creatures include kingfishers, herons, newts, toads, water voles and otters. I bet you can think of loads more. Many other creatures make a trip to the water's edge to take a lovely drink, especially in hot weather.

There are an estimated 90,000 km of rivers in the UK and they are found in all parts of the country.

Two thirds of all freshwater species are supported by ponds. Sadly, over fifty percent of ponds were lost during the 20th Century. What could you do to reverse this trend? In general, larger ponds with a range of depths will support the most wildlife. An ideal size is around 1m wide and 2m long. But even a small pond made from an old sink, will still attract and support a whole range of creatures. And it gets better, as many pond creatures such as frogs, toads, dragonflies and bats, love to eat your garden pests.

Factoid:

Over the past 10 years the "Freshwater Habitats Trust" have made networks of new ponds as part of the **Million Ponds Project** – with the ultimate aim of getting back to the one million ponds that once enriched the British landscape 100 years ago.

the Land Trust

Recording sheet

Pond

Name: _____ **Land Trust site:** _____ **Date:** _____

Describe the weather today:

_____

Tick (✓) or tally (𝍸) what you find

Name of creature	Woodland	Grasssland	Pond	Other habitats
Total:				

Factsheet

Woodland

Trees and woodlands are ‘tree-mendously’ important! They are the biggest plant on the planet and they provide us with oxygen. Their fruits and nuts provide us and other animals with yummy sources of free and healthy food.

They also do lots of other clever things, such as absorb greenhouse gases (carbon), stabilise soil, and can act as brilliant sound barriers, thus helping to reduce noise pollution from roads, etc.

The wood from trees can be used to make all manner of useful things including tools, furniture, homes, and musical instruments. In the past we even made ships from wood. Can you think of what else we use wood for?

Trees also provide valuable homes (habitats) for a wide variety of wildlife. It has been estimated that one of our most common and loved trees, the iconic Oak, supports over 350 species - more than any other native tree in the UK. Oaks can grow up to 40m in height and can live for over 1000 years.

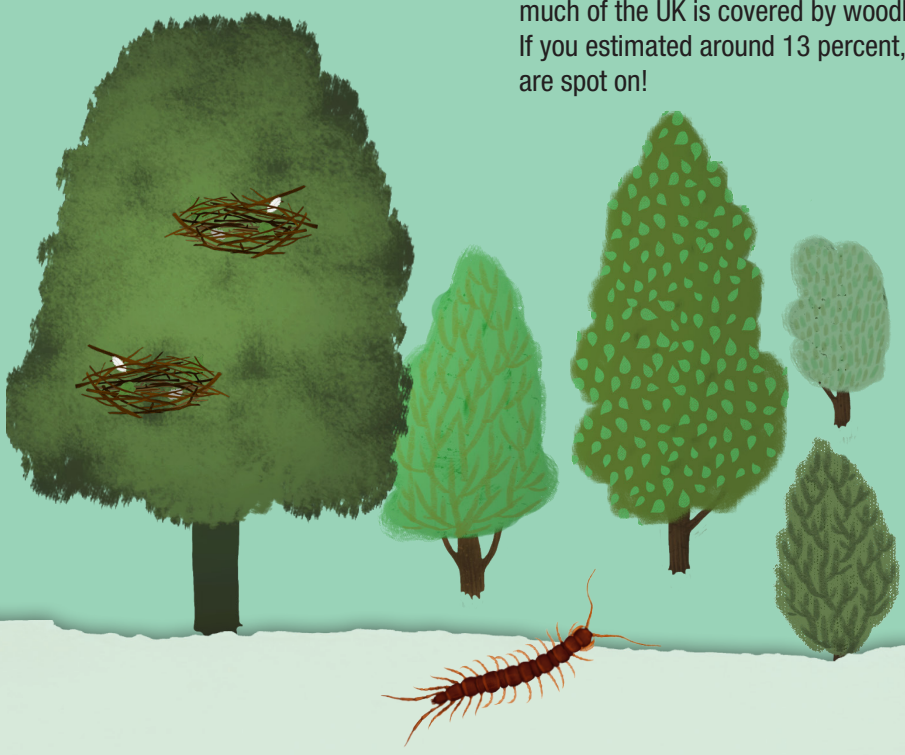
Trees can be divided into two main types; broadleaved (which have flat and wide leaves such as oak and silver birch) and conifers (with needle-like leaves and cones such as scots pine and douglas fir).

Most broadleaved trees are ‘deciduous’ and lose their leaves in autumn, growing lovely new fresh leaves every spring. Most conifers are ‘evergreen’, which mean they keep their leaves all year round.

Can you estimate, as a percentage, how much of the UK is covered by woodland? If you estimated around 13 percent, you are spot on!

Factoid:

Like other plants trees can make their own food via a process called photosynthesis. The fresh leaves are then eaten by caterpillars, which are in turn eaten by birds such as blue tits that may then be eaten by a bird of prey. This is called a Food Chain.



the Land Trust

Recording sheet

Woodland

What did you see?	What was it doing?	Where was it?

Grassland doodle sheet

What can you see in the grassland today?

Grassland writing sheet

What did you enjoy about being in the grassland today?

What surprised you in the grassland today?

What did you learn about in the grassland today?

Pond doodle sheet

What can you see in the pond today?

Pond writing sheet

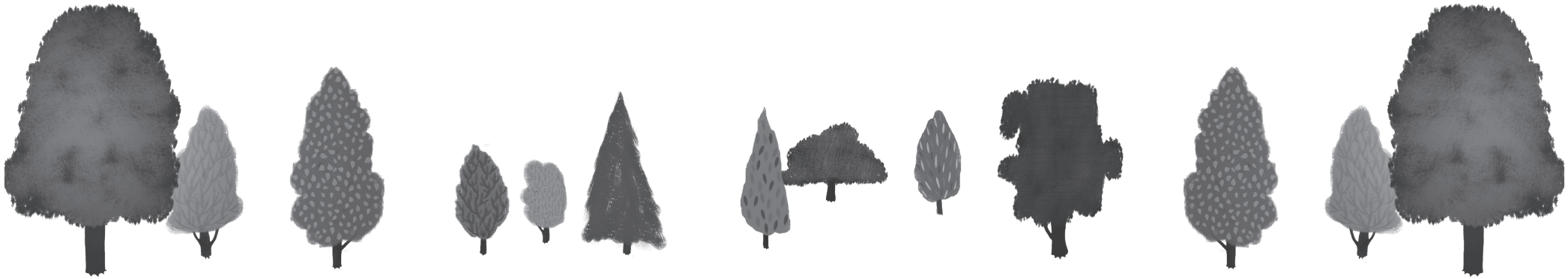
What did you enjoy about being in the pond today?

What surprised you in the pond today?

What did you learn about in the pond today?

Woodland doodle sheet

What can you see in the woodland today?

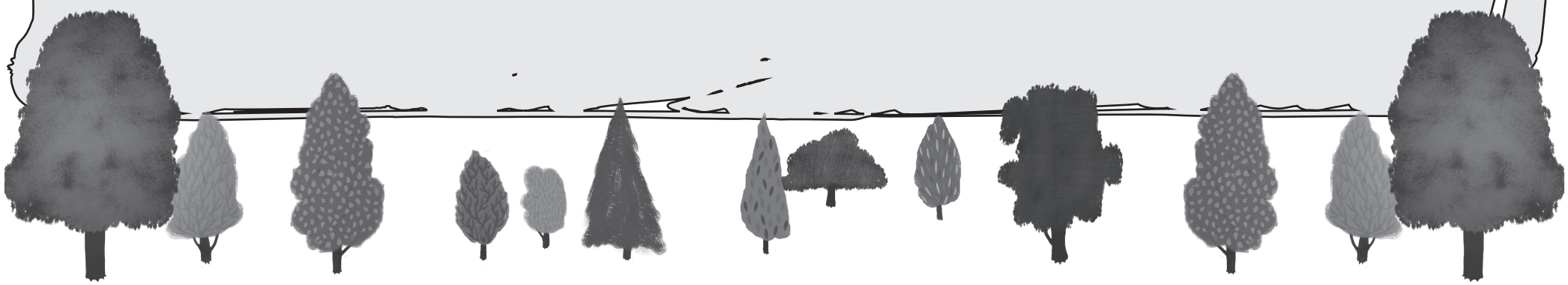


Woodland writing sheet

What did you enjoy about being in the woodland today?

What surprised you in the woodland today?

What did you learn about in the woodland today?



Risk Assessment Template

The Land Trust Outdoor Learning Pack

Assessing risk outdoors

Assessing risks for taking children outdoors is easier than you think. The benefits of taking children outside are so great and the risks can be measured and managed with a straight forward approach.

When making a risk assessment outside, just like inside the classroom or for school trips, there are three aspects to think about:

- **Benefit** – the positive outcomes of the experience/planned activities
- **Hazard** – the potential for something to cause harm
- **Risk** – the likelihood of it happening

You should familiarise yourself with the site, by arranging a visit via the Ranger in advance. Analyse the Lesson Plan/s you intend to deliver to consider the potential hazards in relation to your class.

If you are ever unsure of your evaluation check with other school staff so that you can get a balanced view of the risk and benefits inherent in a site or activity.

Review your risk assessments every quarter as there may be changes to the site, activities or cohort of children or adults on your trip.

On the next page is a template that you can use to make your own risk assessments of the planned lessons specific to the site you will be using and the children in your care.

the Land Trust

Name of site:

Location of site (include GPS if possible)**:**

Nearest Hospital/A&E Department:

Assessor:

Date of assessment:

Nearest phone/person with mobile (is there phone reception?)

Name:

Number:

Checked by:

Date of review:

LH.S = Likelihood score (1-5) S.S = Severity score (1-5)

Activity	Possible Injury/harm	Who could be harmed?	LH.S 1-5	S.S 1-5	Risk level LH.S x S.S	Existing controls	Action required	By whom?
Getting to site on foot	Child becoming detached from group – run over, lost	Children	1	9	9	All members of staff familiar with lost child policy and procedures. Members of staff to walk at front and to rear of group. Good communication between staff at all times - proximity/walkie talkies/phones. Staff aware and make use of the safest route to site.	Children asked to walk in pairs where appropriate (buddy system). Children made aware of the dangers/ consequences of becoming detached from the group.	Staff
Getting to site by minibus or public bus service – road traffic accident	Minor bumps and bruises, major injury (very rare)	All	1	9	9	Vehicle regularly serviced and well maintained with current MOT. Driver is appropriately trained with a current, clean driving licence. Staff check everyone's safety belt. All equipment and bags stowed safely, securely and away from aisles and emergency exits. At least one member of staff to have up to date first aid training. First Aid kit in known, easily accessible location. Staff to carry mobile phones.	Children asked to keep noise to an acceptable level so driver is not distracted. Children reminded to keep their safety belts on until told that the vehicle has come to a final stop.	Staff & children
All activities taking place outdoors.	Sun-stroke, heat stroke, hyperthermia	All	1	4	4	Advise parents about appropriate clothes and hats for their children. Lots of layers in cold weather. Sun-cream applied in hot weather.	Any child showing symptoms of hyperthermia to be taken inside to warm up. Change programme if necessary. Plenty of fluids in hot weather.	Staff
Extreme weather conditions (wind, storms)	Falling trees, branches	All	2	4	6	Check 24 hour weather reports. Do not enter woodland areas in high winds/electric storms.	Relocate or cancel session as necessary. Monitor weather throughout session. Identify areas of shade. Ensure appropriate clothing is worn.	Staff
Uneven ground, slips, trips, falls.	Broken bones, sprains, cuts, grazes.	All	3	2	6	At least one member of staff must have up-to-date First Aid training. First aid kit left in known, designated area. Staff to carry mobile phones	Children asked not to run and made aware of uneven ground, holes, tree roots etc. and any wet/ slippery areas at start of session.	Staff & children
Collecting natural materials and contact with hazardous plants (berries, fungi etc.) or dog faeces	Poisoning, nausea, ill health, E-coli (rare), Toxocariasis	All	2	4	8	Area is checked prior to visit and hazardous plants such as Foxglove, Lily of the Valley (use an ID chart) and dog faeces removed. Each child is in sight of staff at all times. Staff First Aid trained and mobile phone with staff.	Children advised not to put ANYTHING (including fingers) into mouth and to wash hands with soap after all outdoor learning sessions and before food is eaten.	Staff & children

Activity	Possible Injury/harm	Who could be harmed?	LH.S 1-5	S.S 1-5	Risk level LH.S x S.S	Existing controls	Action required	By whom?
Contact with insects (bees, wasps etc.)	Sting, insect bites, allergies	All	2	3	6	At least one member of staff must have up-to-date First Aid training. First aid kit left in known, designated area. Staff to carry mobile phones	Children made aware of how to behave eg not swatting at wasps or bees where necessary.	Staff & children
Contact with allergens	Severe allergic reactions	All	2	5	10	Staff to be aware of all children/adults with allergies (health forms filled out and checked prior to all sessions). Any medication/Epipen on site & easily accessible. Any training given to staff if appropriate. Working mobile phone/signal checked before session.	Follow emergency evacuation procedure in the case of any person suffering from severe allergic reaction.	Staff
Puncture wounds from sticks or prickly plants	Puncture wounds	All	2	3	6	Clear any low branches prior to session. At least one member of staff must have up-to-date First Aid training. First aid kit left in known, designated area.	Point out any areas of nettles or brambles to the children.	Staff & children
Litter, hazardous waste, inc. needles	Trips, cuts from litter	All	2	3	6	Staff to check teaching area and clear litter etc. prior to start of session (using gloves, litter pickers). Dispose of any sharps appropriately.	Children told if they see anything 'unsafe', or that should not be there, to tell an adult and NOT to touch. All adults to be vigilant.	Staff & children
Tree layer – general well-being of trees and dead, broken or rotting branches	Puncture wounds, bruises, head injuries	All	1	6	6	Staff to check tree canopy and lower branches before session. Remove any small branches.	Report any unsafe looking trees. Relocate session if necessary.	Staff
Accident or ill health	Child or adult becomes ill or are hurt during the session.	All	1	8	8	Be aware of any medical conditions of any participants (health forms filled out and checked prior to all sessions). Any medication on site & easily accessible. Any training given to staff if appropriate.	Designated first aider stays with ill or injured person. One adult phones emergency services. One adult stays with and occupies the rest of the group.	Staff
Contact with dogs	Dog bite	All	1	7	7	Staff to be aware of any dogs entering the area. Before start of session children advised not to approach or touch any dogs (Can wave instead).	Children reminded not to approach or touch. Designated first aider to treat child. Other staff to stay with and occupy rest of the group where needed.	Staff & children
Lost child	Child lost	Children	1	9	9	Staff to be familiar with Lost Child Policy and Procedures. Children told to stay with the group before session. Adults do regular head counts and have a list of children present readily available. Adults to be aware of any persons entering the session area.	Follow Lost Child Policy. Have up to date photos of each child available to give to police if necessary.	Staff
Tick bites	Rash, round, red inflamed area of skin. Lyme Disease (rare).	All	1	8	8	All adults and children to wear long trousers and long sleeved tops. First aid kit to include tick remover/staff trained in how to recognise and safely remove ticks.	Avoid waking through areas of long grass.	Staff
Carrying sticks	Puncture wounds, pieces in the eye.	All	1	7	7	Tell children how to carry sticks safely – one end pointing to the ground. Choose sticks no longer than your forearm. Tell children how to break sticks safely – snapping them towards the ground. First aider and kit easily accessible and contains sterile eye wash pods.	Remind children about the rules when necessary.	Staff & children
Sessions near water/ ponds	Drowning, stomach bug from ingestion of water, infection of open cuts	All	1	5	5	Staff to closely observe and supervise children throughout the session. Staff to be alert to children near the edge of the pond and maintain safe work practices. Staff to carry out regular head count checks. Cover any cuts with waterproof plaster before working with water or pond life.	Tell children to kneel while at water's edge or come away from the edge if necessary and about danger and consequences of falling in if needed.	Staff

Lost Child Policy and Procedure Template

The Land Trust Outdoor Learning Pack

Policy statement

Safety of the children is our highest priority and every attempt is made to implement safe practice during our outdoor sessions with the children, including regular head counts.

In the unlikely event that a child becomes separated from the group we will follow our missing child procedure.

Procedure

- As soon as it is noticed that a child is missing the relevant member of staff alerts the leader of the group.
- The leader asks that all other children stand with a designated member of staff who keeps them calm and occupied.
- The leader makes a record of when and where the child was last seen.
- The register is checked to make sure no other child has gone missing.
- All available members of staff (excluding the staff member responsible for the other children) make a comprehensive search of the immediate vicinity, prioritising pond, stream and woodland areas and calling the child's name.
- If the child is not found within 10 minutes the leader will call the Ranger for assistance in the search.
- If the child is still missing the incident must be reported to the police and a description given. The school must also be notified. The search continues until the police arrive.
- When the police arrive their guidance is followed. An up-to-date photo can also be handed over, if available.
- If the child is not found after 3) minutes the leader/head teacher will contact the parents using all available emergency contact routes.

the Land Trust