

Your Outdoor Classroom Guide





Contents

This pack contains a complete introduction to the 10 Community Woodlands owned and managed by the Forestry Commission and their use as a green classroom.

The Forestry Commission own and manage 10 Community Woodlands within the Thames Chase Community Forest. These Woodlands provide an excellent opportunity to allow children to experience the outdoors. By linking these visits to the National Curriculum it will help them to develop and learn whilst having fun.

The Forestry Commission own the following sites within Thames Chase:

- Berwick Glades (on the corner of Berwick Pond Road)
- Bonnetts Wood (On Gerpins Lane near the Recycling Centre)
- Cely Woods (Car Park situated on Warwick Lane)
- Folkes Lane Woodland (On Folkes Lane, Just off the A127)
- Harold Court Woods (At the end of Harold Court Road, off the A12)
- Ingrebourne Hill (Off Rainham Road and to the South of Hornchurch Country Park)
- Mardyke Woods (Opposite the Junction of Stifford Road and Daiglen Drive)
- Pages Wood (Between Hall Lane and Shepherds Hill)
- The Thames Chase Forest Centre (off Pike Lane, which is off St Mary's Lane)
- Tylers Wood (Off Warley Road just before you cross the bridge over the M25)

This pack includes:

- Lesson plans
- Benefits of the green classroom
- The health dividend
- Forest Schools
- Curriculum links
- Example risk assessment

Introduction

The following lesson plans are a small taster of the activities that can be undertaken in your local Forestry Commission Woodland. With this asset right on your doorstep you will be able to make it a part of your school day and everyday life. Community woodlands are perfect as a green classroom as well as somewhere to relax and enjoy the outdoors.

Let us give you a flavour of our woodlands by revealing some of the lessons that you can run by taking a mini trip around our community woodlands. First, a well-planned introduction to the site will provide children with the opportunity to explore and spark their enthusiasm:

- Exploring Woodlands
- Senses Walk

Forestry Commission Woodlands comprise of three distinct habitats with differing lesson opportunities;

1. Open Water

The ponds offer opportunities for pond dipping as well as observing wildlife, so our ponds are home to many different creatures including Newts, Beetles and Dragonflies. Some sites have well-established neighbours which help to increase the over all wildlife, not just in open water but across the whole of the woodland.

Our main site for pond dipping is The Thames Chase Forest Centre. Other sites do have open water but is either seasonal or do not have a dipping platform.

- Pond Dipping

2. Wooded Areas

The woodland areas are planted with a variety of native species. These can range from scrub species such as hawthorn to larger deciduous and coniferous trees such as Oak and Scots Pine. Woodlands are ideal places to learn about trees and wildlife in your local environment.

- Tree Detectives 1 & 2
- Autumn

3. Meadows

Wildflower meadows are diverse habitats, which are home to an array of plant and animal life. Many of our sites have large wildflower meadows especially Pages Wood and The Thames Chase Forest Centre. Meadows are in their prime during the summer months when the grass is long and the flowers are in bloom. These areas are great for insects, reptiles and small mammals as well as ground - nesting birds like the skylark.

- Minibeasts Safari

Exploring Woodlands

Keystage: 1, 2

National Curriculum Links:

Science 1 Scientific Enquiry
Science 2 Life Processes
Geography (knowledge, skills & understanding)

Links with other subjects

Art & Design
English

Learning Objectives:

- To be familiar with the site and to use firsthand experience to answer questions.
- To find out about the different kinds of plants & animals in the local environment.
- To make maps and plans. KS2 to explore scales symbols and keys.
- To identify and describe what places are like.

Resources:

- Clipboards/paper/pencils etc
- Digital camera
- For younger children an outline map of the site.

Activity

This activity may need more than one visit to complete.

Starter /Introduction

Before visiting the site give a brief introduction to the woodland. In groups the children could complete a mind map about what they expect to find at the site. Don't forget to give a safety talk.

Main Activity

Once at the site let the children explore the different areas. Regroup and discuss their views, continue exploring. Children can list the things they see and draw some of them. Look at areas such as the paths, meadow, around the pond. Include trees, weeds, bushes and flowers. Sketch a simple map of the site.

Plenary

Discuss site. Finish session with a sounds map activity. Find an area where the group can sit quietly and safely. Close your eyes and listen. Try to create a sound map of the noises you heard. If you use symbols, make sure you have a key of what they mean.

Suggestions for Follow up Activities

- Produce a map of the site to share with parents and other classes.
- Design & produce a leaflet about the woodland you visit.
- Presentation / PowerPoint presentation about the woodland you are visiting.
- Models / posters

Senses Walk

Keystage: 1

National Curriculum Links:

Science 1 Scientific Enquiry
Science 2 Life Processes

Links to other subjects

PSHCE /English /Art

Learning Objectives:

- To appreciate and understand the natural world through sensory exploration.
- To explore using their senses and to make and record observations.

Resources:

- Paper / crayons
 - Colour palettes from DIY store
 - Card with double - sided tape
 - Pots
-

Activity

Starter /Introduction

- Discuss the senses of sight, hearing, smell and touch. (NOT taste!) What do we use our senses for?

Main Activity

Safety talk. Remind children not to taste plants.

This lesson is a walk made up of a number of activities, which help children to investigate the green space using their senses.

Suggested activities:

- Using the colour palettes find examples of the same colour in nature.
- Smelly cocktails - Discuss how in nature there is a variety of smells. Give each group a pot to make their own 'smelly cocktail'. Find things to add to their 'cocktail'. Use a small stick to stir the concoction and then the groups exchange 'cocktails' and discuss the different smells.
- Bark rubbings - Ask children to use words to describe the different bark textures.
- Drawings / map of what can be seen.
- Sounds map. Find an area where the group can sit quietly and safely. Close your eyes and listen. Try to create a sound map of the noises you heard. If you use symbols make sure you have a key of what they mean.

Plenary

Allow time for children to share their ideas and observations.

Pond Dipping

Keystage: 1, 2

National Curriculum Links:

Science 1 Scientific Enquiry

Science 2 Life Processes

Links to other subjects

Geography (study of localities)

English

Learning Objectives:

- To familiarise children with freshwater habitat.
- To study living things in their habitat.
- To be able to express their views about different plants and animals.

Resources:

- Pond nets
- Trays
- Bug pots /magnifying bug pots
- ID books

Activity

Starter /Introduction

Introduce session with safety talk. Use of nets and safety around water.

Main Activity

Look at pond before dipping. Look for water birds, holes in the bank, tracks in the mud, places where plants grow. Look at the surface of the water. Can any creatures be seen?

Dip in an orderly fashion followed by reviewing in groups what they have discovered. Observe movement, number of legs, colours etc.

Children not dipping could draw picture of specimens collected or pictures of the plants and say which part of the pond they come from.

Plenary

Review findings.

Why is it important to return the creature to the pond?

Suggestions for Follow up Activities

- Make a mini pond
- Detailed drawings of pond life.
- Investigate life cycles

KS2 - food chains, biodiversity, Techniques in sampling.

Tree Detectives (1)

Keystage: 1, 2

National Curriculum Links:

Science 1 Scientific Enquiry
Science 2 Life Processes

Links to other subjects

PSCHE
Maths
Art & Design
Geography (7b)

Learning Objectives:

To describe shapes & differences between leaves.
To understand the function of parts of a tree.
To make & use keys for tree identification.

Resources:

- Trays to collect leaves, bark, galls etc.
- Tree / leaf keys
- ID books e.g. Collins Guide to Tree ID

Activity

Starter /Introduction

- Introduce session with safety talk.
- Discuss types of trees (deciduous & coniferous) and their leaf/needle shapes etc.

Main Activity

Divide out equipment. Children to go for a walk and look for various species and collect samples. Use keys & ID books for identification. Collect leaf & bark rubbings. Younger children: Provide an outline of a leaf and children find a leaf to match that shape.

Plenary

Review findings. Look at leaves. Hold a leaf up to the light and look at veins and leaf structure. Compare differences in leaves. (shape / size / colour)

Suggestions for Follow up Activities

- Use leaf & bark rubbings to make a tree collage.
- Create a montage with rubbings. Try to match leaf to the bark.
- Make leaf snap cards. Extension - Children to call out the tree species instead of snap.
- Find out about tree life cycle / internal tree features.

Tree Detectives (2)

Keystage: 1, 2

National Curriculum Links:

Science 1 Scientific Enquiry

Science 2 Life Processes

Science 3 materials and their properties. (grouping materials c) KS1

Links to other subjects

Maths

Art & Design

English

Learning Objectives:

To understand the function of parts of a tree.

To make & use keys for tree identification.

Resources:

- Clipboards
- Tree / leaf keys
- ID books e.g. Collins Guide to Tree ID

Activity

Starter /Introduction

- Introduce session with safety talk.
- Discuss what makes a tree a tree? How is it different from a plant? This could be recorded as a mind map before visiting the site. On their return children can add or change mind maps.

Main Activity

Divide out equipment. Children to investigate trees found at in the woodlands you are visiting. Record observations and make drawings to use to aid research back in the classroom. Bark rubbing and leaf collection will also act as reminders. How many different trees can you find and name?

Plenary

Review findings. How many different trees did you find?

KS2 Explore the reasons "Why trees matter?" (E.g. provide homes for creatures / trees use up carbon dioxide in order to grow and give off oxygen.)

Suggestions for Follow up Activities

- Label parts of a tree. KS2 why is each part needed?
- Use reference books to look at the differences between coniferous and deciduous trees. (KS2)
- Detailed drawings of leaves and trees.
- Complete life cycle of a tree.
- Use of trees. Use reference books to look at trees as fuel, food, products from trees.
- ICT database showing types of trees found in woodlands.

Autumn

Exploring Forestry Commission Woodlands throughout the different seasons will give children firsthand experience of the changes that occur in a natural environment throughout the year.

Keystage: 1, 2

National Curriculum Links:

Science 1 Scientific Enquiry
Science 2 Life Processes

Links to other subjects

PSHCE /English /Art /Geography

Learning Objectives:

- To understand how plants and animals adapt to the coming winter.
- To observe autumn colours.

Resources:

- Bug viewers
- Collecting trays
- Magnifying glasses

Activity

Starter /Introduction

Discuss the changes in seasons, especially autumn. How does it relate to their lives – days getting shorter, darker, colder etc. Follow on with animals and plants.

Main Activity

Go on a seed hunt. Collect seeds, leaves, twigs etc. Observe and draw the changing colours of the leaves. Look at the differences between deciduous and coniferous leaves/needles.
Seed Socks – Place socks over shoes and walk through an area of tall grass. Examine socks and see what seeds have appeared. This shows how seeds are distributed by animal fur.

Plenary

What did you find out? Discuss how seeds are dispersed.

Suggestions for follow-up activities

- Use leaves, twigs, seeds etc to make pictures / sculptures. Look at artists who use nature in their work. e.g. Andy Goldsworthy
- Leaf prints
- Autumn paintings
- Take part in the Autumn Colours Campaign (Forestry Commission)
- Research and record findings on:
 1. Seed dispersal.(wind, animal, water)
 2. Animal strategies for coping with winter (migration etc)
 3. Changes in leaves and trees

Minibeasts Safari

Investigating Invertebrates

This lesson may need more than one visit to complete. Visiting at different times of the day or year and in different weather conditions will create further work and make the children more inquisitive.

Keystage: 1, 2

National Curriculum Links:

Science 1 Scientific Enquiry
Science 2 Life Processes

Links to other subjects

PSHCE /English / ICT /Art
Maths 4 (KS2)

Learning Objectives:

- To be familiar with woodland and grassland creatures.
- To study living things in their habitat.
- To relate life processes to animals and plants found in the environment.

Resources:

- Trays / bug pots / magnifying bug pots / magnifying glasses / plastic spoons
- Sweep nets
- ID key
- Paper for making sketches of creatures found.

Activity

Starter /Introduction

- Introduce session with safety talk. Watch out for bees, wasps and nettles.
- Can the children suggest where they might find minibeasts?
- Show some techniques for capturing minibeasts into bug pots. E.g. shaking trees, grass onto tray/ card/paper.

Main Activity

Go on a minibeasts hunt. Test their predictions. Younger children may need adult help to collect the creatures.

Methods of collection

Short grass: Use plastic spoons and pots to collect and examine minibeasts.

Long grass: 'Sweep' nets can be swept through long grass to gather many species at once.

Trees: Place a white sheet (paper or cloth) under a low branch and shake the branch gently. Minibeasts will fall onto the sheet allowing children to examine them.

Plenary

Discuss and compare observations. Did you find any creature that you were unable to identify?

Curriculum Links

	Exploring Woodlands		Pond Dipping		Tree Detectives 1 & 2		Minibeasts Safari		Senses Walk		Autumn	
	KS1	KS2	KS1	KS2	KS1	KS2	KS1	KS2	KS1	KS2	KS1	KS2
Science 1 Scientific Enquiry	2abceij	1a 2abeh	1 2abegij	1b 2abefghl	1 2abef	1b 2abjl	1 2abe ghi	1ab 2abce filk	2efij		1 2abc efgj	1ab 2abcjl
Science 2 Life Processes	5abc	4abc	1bc 2abe 4b 5bc	1abc 4bc 5abcd	1c 3a 4b 5abc	1bc 3bc 4abc 5ab	1bc 2be 4b 5abc	1ac 4abc 5abcd	1b 2g		1c 3abc 4b 5ac	1bc 3a 5abc
English	✓		✓		✓		✓		✓		✓	
Maths					✓		✓					
ICT							✓					



	Exploring woodlands		Pond Dipping		Tree Detectives 1 & 2		Minibeasts Safari		Senses Walk		Autumn	
	KS1	KS2	KS1	KS2	KS1	KS2	KS1	KS2	KS1	KS2	KS1	KS2
Science 1 Scientific Enquiry	2abceij	1a 2abeh	1 2abegij	1b 2abefghl	1 2abef	1b 2abijl	1 2abe ghi	1ab 2abce filk	2efij		1 2abc efgj	1ab 2abcijl
Science 2 Life Processes	5abc	4abc	1bc 2abe 4b 5bc	1abc 4bc 5abcd	1c 3a 4b 5abc	1bc 3bc 4abc 5ab	1bc 2be 4b 5abc	1ac 4abc 5abcd	1b 2g		1c 3abc 4b 5ac	1bc 3a 5abc
Geography			✓		✓						✓	
Art	✓				✓		✓		✓		✓	
PSHCE					✓		✓		✓		✓	



Early Years

Getting to know your local area and making use of green space nearby will help to widen children's experience. Forestry Commission Woodlands are ideal places to provide opportunities for children to use their senses and to examine & explore the outdoors. It will also develop their involvement with the community.

Suggestions for activities:

Knowledge & Understanding of the World

- Senses walk
- Mini beast hunt
- Observation & recording wild life, trees etc.
- Observing nests
- Use of magnifying glasses to notice detail
- Pond dipping and observation of pond life.

Creative Development

- Senses walk
- Colour work – spring colours
- Drawings of flowers / trees etc
- Scavenger Hunt to find materials. E.g. twigs, leaves, feathers, for a natural collage.

Communication, Language and Literacy

- Names of spring flowers
- Discuss birds building nests
- Link to stories. (e.g. "The Hungry Caterpillar")

Personal & Social Development

- Caring for living things in the environment.
- Noticing changes in the world around us. Change in colour, change in growth.

Benefits of a Green Classroom

Who benefits?

Children

Children generally have an appetite for nature and the outdoors; we need to foster this enjoyment. Making use of the outdoors provides opportunities for children to use all their senses and to enjoy a greater sense of freedom and independence. It can also reduce children's concerns about the environment.

Interacting and playing outdoors enables children to learn some of the skills needed for adult life. They develop an appreciation for the environment and acquire a better understanding of their community. It is proven that outdoor play improves children's physical, mental and emotional development.

Parents

If children have positive experiences in the outdoors they will take these experiences home. Parents' interest and attitude will change as they see the impact on their children. This will also encourage parents to visit green spaces and this will promote physical activity for the whole family.

Natural green space boosts people's well being and morale.

Teachers

The green classroom enables teachers to observe and assess their charges in a different context. Individual learning styles can be identified and teaching can be planned to tailor the individual needs. Learning in the green classroom can be linked to the national curriculum and foundation stage objectives.

Altogether the green classroom provides a better learning experience, as it is multi-sensory, involving three different types of activity:

- kinaesthetic
- visual
- auditory



Forest Schools

Bringing learning to life

Forest Schools were initiated in England by the Forestry Commission to develop activities around children and young people's play and leisure. Such classrooms are proven effective in bringing learning to life for all children, whatever their capabilities; to explore and learn in a more constructive way.

What exactly are Forest Schools?

A Forest School is a secure area of woodland, which acts as an outdoor classroom. There, people can explore and discover the outdoor environment. It provides a valuable teaching tool and is an excellent way of supporting and enriching the national curriculum.

Forest Schools have demonstrated success with children of all ages who visit the same local woodlands on a regular basis and through play, learn about the natural environment, how to handle risks and most importantly to use their own initiative to solve problems and co-operate with others.

(See www.forestschoools.com)



Reap the health dividend

Research shows that outdoor activity supports the growth of a child. A child's body experiences its greatest physical growth between the ages of three and twelve, this is demonstrated by their urge to run, climb and jump in outdoor spaces.

Consideration should be given to the health and fitness bonuses for all ages and abilities. The health dividend from modest physical exercise can be considerable

- reduced risks of premature mortality
- cuts in cardiovascular diseases
- decreased risks of colon cancer and lowers risk of breast cancer
- protects against Type II diabetes
- prevents hyper-tension and thereby reduces Coronary Heart Disease (CHD)
- strengthening against osteoporosis
- counters damaging obesity
- depression/anxiety relief and can raise self-esteem amongst the young to promote psychological wellbeing
- counteracts dementia
- can help pain management

All in all there is considerable potential for quality of life improvement to be derived from exercise in community woodlands. Our woodlands offer a natural outdoor setting for education on which a range of activities can be performed:

- act as a natural play setting or provide trails for self – led activity
- provide an opportunity for supervised play and leisurely activity



Risk Assessments

Please find an example risk assessment for one of our woodlands included in this book. This risk assessment should help you to in-turn write your own for any trip you wish to undertake.

If you would like an up to date copy of the risk assessment for the woodland you are visiting please contact us and we will gladly send you a copy.

If you have any concerns or questions regarding risk in our woodlands please do not hesitate to contact us and we will happily answer any of your questions.



Example Member of the Public Risk Assessment Form

Forestry Sites and trails

Time Period Covered		Location	
Forestry Commission staff, contractors and members of the public			
Nature of Hazard	Hazard Location	Who Could be Harmed?	Level of Risk?
Forest Environment Dead trees, roots, uneven ground, etc.	Forest, Trails, Road edge	All	Med
Constructed environment Surfaces & structures	Picnic areas, Benches, Bridges, Play sculptures	All	Med
Getting lost	Trails	Members of public	Low
Conflict with other users	Trails	All	Low
Controls / Actions		Implementation / Monitoring	
<ul style="list-style-type: none"> Regular, monthly written checks. Control and removal of dangerous observations Tree safety management inspections as set out in Operational Guidance Booklet 1. 		<p>Community Ranger to ensure routes are inspected each month and observations & actions are recorded on file.</p> <p>Liase with Forester to ensure remedial work is carried out to a high standard.</p> <p>Team Leader to record yearly audit of sample of inspection records (prompted by FD resumption system) HSM36.</p>	
<ul style="list-style-type: none"> Regular, monthly written checks. Visual checks by contractors. Checklist, inventory for all facilities. Written records of remedial work. Annual ROSPA check for play sculptures. 		<p>Community Ranger to ensure facilities are inspected each month and observations & actions are recorded on file.</p> <p>Liase with Forester to ensure remedial work is carried out to a high standard.</p> <p>Security and maintenance contracts require faults to be reported.</p> <p>Team Leader to record yearly audit of sample of inspection records (prompted by FD resumption system) HSM36.</p>	
<ul style="list-style-type: none"> Regular, monthly written checks. Checklist, inventory for all facilities. Written records of remedial work. 		<p>Community Ranger to ensure routes are inspected each month and observations & actions are recorded on file.</p> <p>Liase with Forester to ensure remedial work is carried out to a high standard.</p> <p>Team Leader to record yearly audit of sample of inspection records (prompted by FD resumption system) HSM36.</p>	
<ul style="list-style-type: none"> Regular, monthly checks of waymarked trails. Checklist, inventory for all facilities on trails. Written records of remedial work. Provision of information on multi-usage where conflicts become evident. Liaison with community forest team with regards to shared boundary 		<p>Monitor forestry operations.</p> <p>Ranger staff to carry out checks and maintain records.</p> <p>Team Leader yearly audit, HSM36.</p>	

Environment - Illegal activities	Site/Trails	All	Low	<ul style="list-style-type: none"> • Ensure access controls, barriers, and earth banks are secure and tidy. • Liase with local police • Office staff to report instances to FC • FC targeted signage. 	Ranger staff to ensure routes are checked regularly and observations & actions are recorded on file. Team Leader yearly audit, HSM 36.
Forest Operations	Site	All	Medium	<ul style="list-style-type: none"> • Liase within Forestry Commission to ensure all forest operations are monitored in relation to public access areas. • Forestry signage • Forestry guidelines relating to forest operations involving public areas. 	Ops 1 system. Monitor forestry operations. Ranger staff to carry out checks and maintain records. Team Leader yearly audit, HSM 36.
Traffic	Site entrance/ driveway	All	Med	<ul style="list-style-type: none"> • Speed humps, speed signage and grass maintained along driveway. • Regular monthly checks of exit, maintain grass. 	Ranger staff to ensure areas are inspected regularly and observations & actions are recorded on file. Liase with Forester to ensure remedial work is carried out to a high standard. Team Leader yearly audit, HSM36.
Ponds	Site	All	Low	<ul style="list-style-type: none"> • Shallow graded sides to allow easy access out • Regular, monthly written checks. 	Ranger staff to ensure areas are inspected regularly and observations & actions are recorded on file. Liase with Forester to ensure remedial work is carried out to a high standard. Team Leader yearly audit, HSM36.
Flytipping / Litter/ Dog faeces	Site entrance/ Trails	All	Low	<ul style="list-style-type: none"> • Regular, monthly checks. • Weekly visual checks of car park by contractors. • Daily observations by office staff. • Control and removal of dangerous observations. 	Ranger staff to ensure routes are checked regularly and observations & actions are recorded on file. Maintenance contracts require faults to be reported. Team Leader yearly audit, HSM 36.
Needles & syringes	Site entrance/ Trails	All	Medium	<ul style="list-style-type: none"> • Use appropriate tools for rubbish clearing. • Only pick up needles / syringes with correct tools and put into sharps box. 	Ranger staff to ensure routes are checked regularly and observations & actions are recorded on file. Team Leader yearly audit, HSM 36
Assessment by	Name :		Signature :		Date :
Approved by	Name :		Signature :		Date :

Notes

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For additional information visit:
www.forestry.gov.uk/thameschase

Contact Us

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