

Lesson in a Box

Curriculum Based Activities
for school visits to

Boundary Wood & Tippings Wood LNR

within the Greenwood Community Forest



Nottinghamshire
County Council

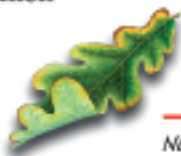


Forestry Commission
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Nottinghamshire's Community Forest bringing Sherwood Forest to your doorstep

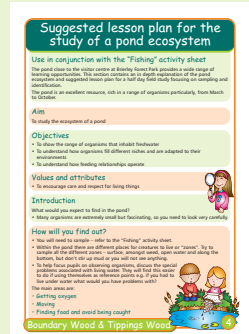
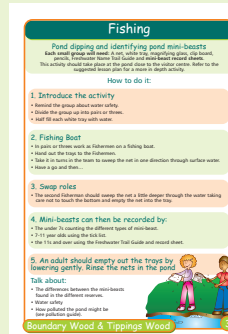
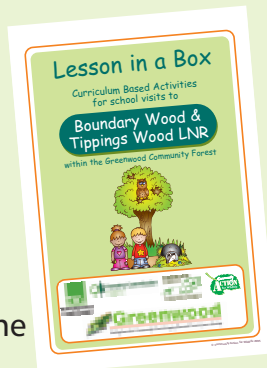
Welcome To Lesson in a Box

This activity kit has been designed for use with groups of children in the outdoors to help enrich their knowledge of the environment and their local area. The activities are linked to the National Curriculum and QCA documents but are equally valuable for groups not working to these targets. The resources have been designed to be accessible to all teachers and group leaders most of whom will not be environmental education specialists.

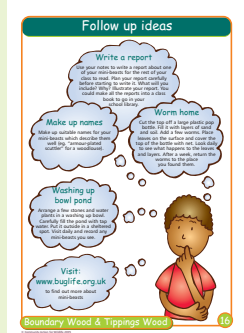
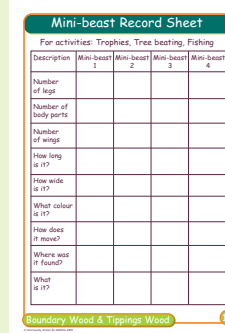
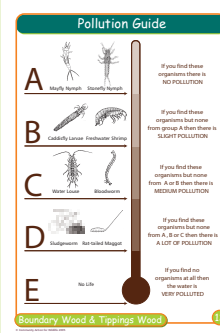
The activities are designed to support the curriculum while providing a wide variety of experiences which are easy to follow and fun to do. The activities can be linked to form a daily programme or used individually to complement existing subject planning.

Included in the activity sheets:

- A description of suggested activities
- What you will need for each activity
- Instructions on how to do the activities
- Ideas for further work
- Photocopiable sheets related to the activities

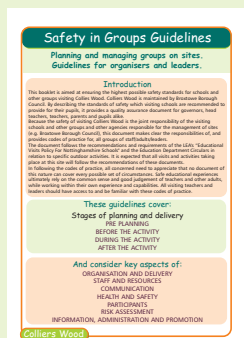


The activities can be used with KS1 and KS2 pupils. The Teacher Lesson Planning Grid links all of the activities to the National Curriculum and QCA documents and shows learning outcomes and resources needed. It is intended that this grid will complement subject planning structures in schools.



Although the aim is that groups self-lead their activities, some INSET training and on site support is available and is outlined in An Introduction for Teachers and Leaders included in this kit. It is intended that this publication will provide the information required by leaders when organising a visit to Boundary Wood and Tippings Wood.

Also included in this pack is Safety In Groups Guidelines. This includes advice on safety policies, codes of practice and risk assessments for schools visiting Boundary Wood and Tippings Wood, covering the health and safety aspects of organising a visit to a non- LEA site. Further advice on risk assessments and copies of activity risk assessments and site risk assessments are available from the Sherwood Forest Community Rangers at Sherwood Pines. Tel: 01623 822447.



Equipment contents for Lesson in a Box

Item	Quantity	Missing
Colour Swatches	10	
Tarpaulin	1	
Large White Sheet	1	
Bags (for collecting)	15	
Long Rope	1	
Tape Measure	1	
Ball String	1	
Sticky Cards	30	
Hoops	4	
White Trays	5	
Small Pots (bug viewer)	35	
Pooters	10	
Plastic Beakers	30	
Large Pond Nets	5	
Small Nets	5	
Magnifying Glass	15	
Small Mirrors	15	
Whistle	2	
Blindfolds	15	
Throw Line	1	
Woodland Trail Guide	10	
Freshwater Trail Guide	10	
Woodland Plants Guide	4	
Paper Fasteners	Box	
Mini Flags	30	
Lolly Sticks	30	
Stained Glass Window Cards	30	

Missing items and comments

For missing equipment, please photocopy this sheet and:

- record missing items in the right hand column of the table above.
- sign and return this form to the Lesson in a Box lender.

Comments

.....

.....

School Name

Signed Date

Boundary Wood & Tippings Wood

Pupil feedback sheet - Boundary Wood & Tippings Wood

My Name: _____

My Age: _____

My School: _____

The date we came to Boundary & Tippings: _____

How safe did I feel during the visit?

VERY SAFE

QUITE SAFE

NOT VERY SAFE

How I would make Boundary & Tippings even better...

Why I felt like that...

Have you been to Boundary & Tippings before?

YES

NO

I didn't really enjoy it because...

What's the best thing about Boundary & Tippings?

My favourite activity of the day was...

Coming to Boundary & Tippings has made me think more about...

What would you like to do if you came to Boundary & Tippings again?

What I learned most from my visit to Boundary & Tippings...

Please do not send all feedback sheets but a sample of these would be gratefully received.

Teacher and Leader Feedback Sheet

Please take a few minutes to complete this questionnaire and hand it back when you return Lesson in a Box. Your feedback is important to us and helps us to make adjustments so that the resource is easier to use.

General Questions

Site visited

Date of visit

School or group

Contact name

• How did you find out about Lesson in a Box?

Letter article leaflet word of mouth

Other

• Age and number of children participating in the activity?

• How long did your visit last?

Booking Procedure

• How easy did you find the booking procedure for Lesson in a Box?

Easy difficult very difficult

• How can we make it easier?

Content of the resource

• What activities did you try on your visit?

Teacher and Leader Feedback Sheet

• Do you have any comments about any of the activities that you tried?

.....
.....
.....

• Do you have any general comments about the kit?

.....
.....
.....

Future use

• Would you consider borrowing the box again in the future?.....yes/no

If so, is there anything that we could do to make this easier for you?

.....
.....
.....
.....

• Have you or any of your colleagues used Lesson in a Box before ?yes/no

• Have you ever attended a Lesson in a Box training event ?yes/no

• Would you, or your colleagues, like to be included in any training in the future? ..yes/no

The Site Visited

• Do you have any comments about the general appearance of Boundary Wood &

Tippings Wood?

.....
.....
.....
.....

Thank you for your time

Boundary Wood & Tippings Wood

Lesson in a Box and Fun in a Box

There are three Lesson in a Box resource kits to cover activities on Brierley Forest Park, Huthwaite, Colliers Wood, Eastwood, Boundary Wood and Tippings Wood LNR, Blidworth.

Contact the Greenwood Team for further information on these free to loan resources on 01623 758231.

There are also Fun in a Box resource kits which are activity based and can be used on any site with suitable habitats and space. These kits are aimed at smaller groups although resources can be shared. Below is a list of titles. Contact the Forestry Commission at Sherwood Pines on 01623 822447 for details of this free to loan scheme (nominal registration fee).

Activity title	Activity description
New Country	Using the five senses to explore the natural world
Nature Detectives	Looking for animal tracks and signs
Connecting	Environmental games
Correct ID	Plant and tree identification
Mini-beast Safari	Looking at small animals and pond dipping
Hideaway	Shelter building
Where Now?	Orienteering and mapping
What's for Dinner	Food chain ecology
Imaginary Creatures	History and folklore in nature
Flying High	Birds and flight
Natural Verses	Sensory activities, reading, observing and writing
Tree Modellers	Outdoor maths
Natural Beauty	Natural art and crafts
Woodland Wonder	Managing woodland
The Card Factory	Card/paper making
Nature Nurtures	Living off the land - Iron age life
Sounds of Music	Making musical instruments
Kite Flight	Kite making

Lesson in a Box

An Introduction for Teachers
and Leaders

Boundary Wood & Tippings Wood LNR

within the Greenwood Community Forest



Nottinghamshire
County Council



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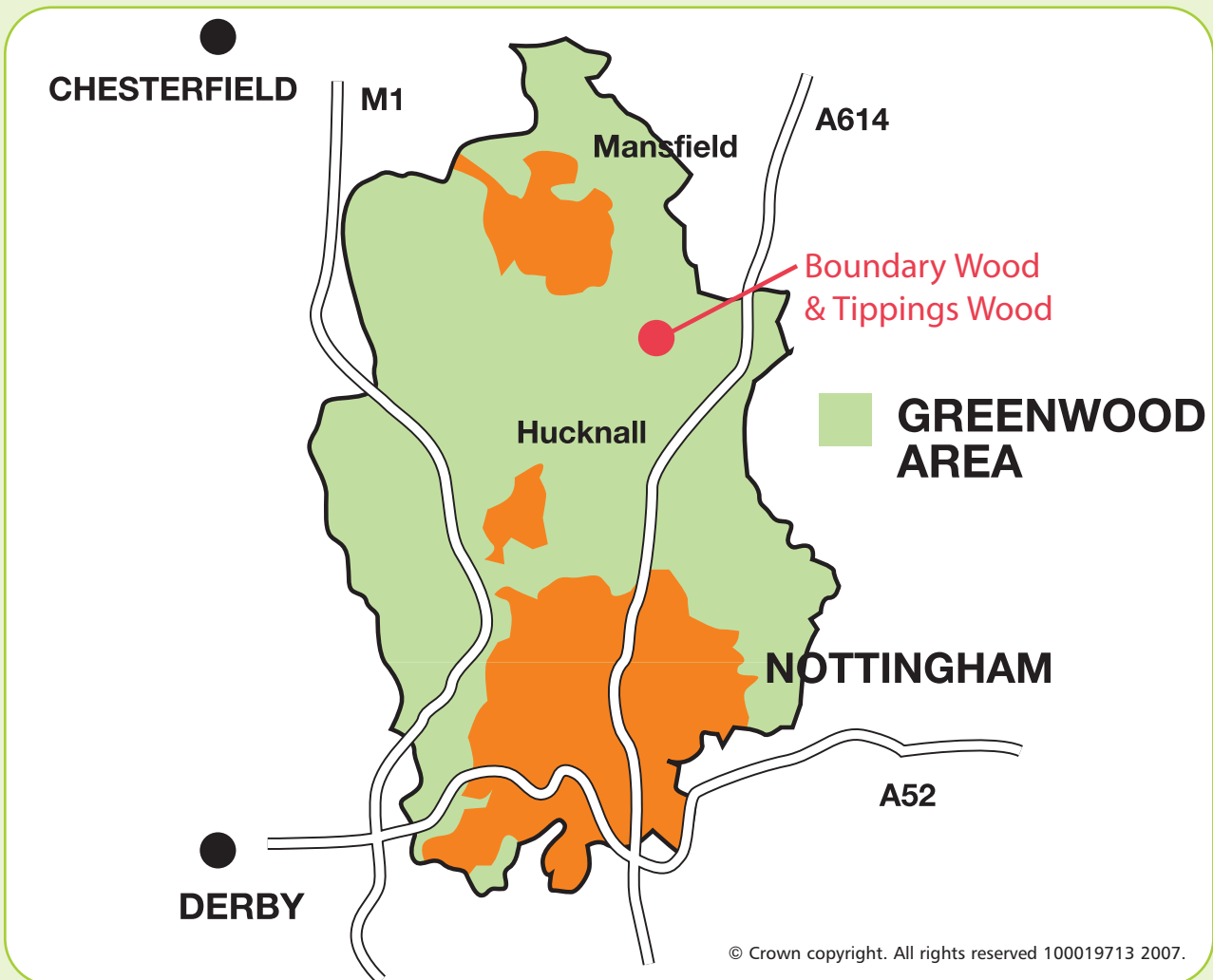
Community Rangers



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Greenwood Community Forest



Greenwood is Nottinghamshire's Community Forest, and with a working partnership is transforming the local landscape to make it a greener and healthier place to be. We are creating green spaces on derelict land around towns for recreation and sport, providing new habitats for wildlife, making outdoor classrooms for environmental education and much more on the doorsteps of over a million people living in and around the towns of Nottinghamshire.

Boundary Wood and adjoining Tippings Wood are two of a growing number of forest parks within the Greenwood Community Forest.

As well as these resource kits, the Greenwood Team can offer environmental experience workshops to suit your needs, based on arts, environment and health themes on green spaces and country parks within Greenwood. These are free, fun, informal visits that are linked to the National Curriculum. Please contact us on 01623 758231 if you are interested in taking part in a workshop.

Sherwood Forest Community Rangers can also lead visits to Boundary Wood and Tippings Wood. Please ask at time of booking on 01623 822447.

Boundary Wood & Tippings Wood

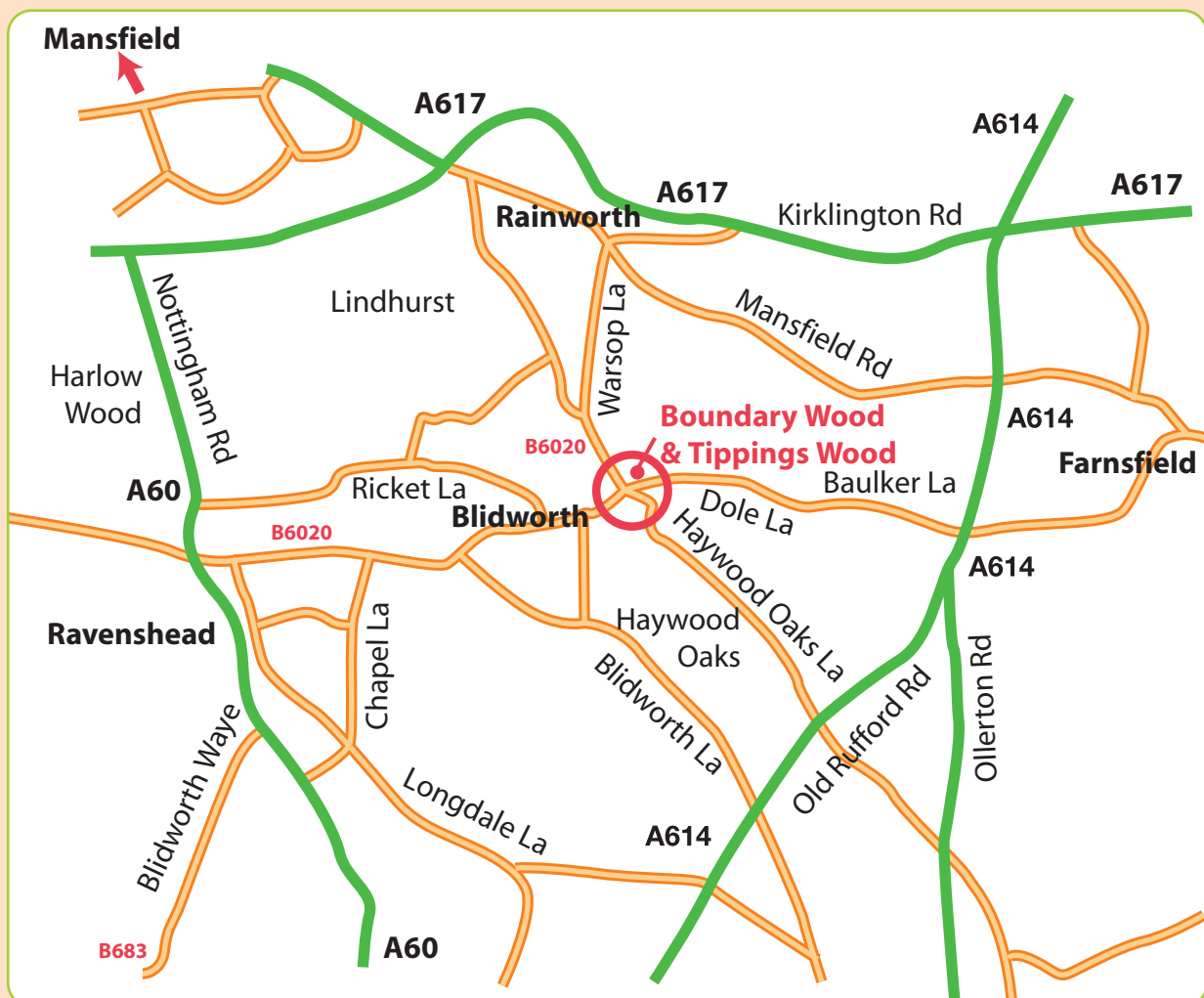
Boundary Wood and Tippings Wood LNR

Boundary Wood and Tippings Wood together cover an area of 135-hectares between the villages of Blidworth and Rainworth, to the southeast of Mansfield. It is divided into two sections lying either side of a disused railway line, which now forms part of the Sustrans National Cycle Network, Route 6.

Boundary Wood and Tippings Wood offer an exciting variety of curriculum opportunities across the woodland, grassland and wetland habitats. Although both Boundary Wood and Tippings Wood have a good network of surfaced paths and tracks, visitors with limited mobility will have some problems accessing all areas due to the hilly terrain.

Please do not wander too far off the marked paths, as you may be walking into a sensitive wildlife area.

Boundary Wood and Tippings Wood are easily reached by road and public transport and the site is open to the public all year round. The site lies off the B6020, which runs between the A614 and the A60. The main park entrance is off Burma Road and there is a regular bus service. Contact Traveline on 0870 608 2608 for travel plans.



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Boundary Wood & Tippings Wood

The History of Boundary Wood and Tippings Wood LNR

Boundary Wood and Tippings Wood are both flagship sites within the Greenwood Community Forest. The park has been created on the former Blidworth Colliery site. The colliery opened in 1924, built on farmland between the villages of Rainworth and Blidworth. In 1989 with the closure of the colliery reclamation of the site began, and thousands of trees were planted. A variety of habitats, including wetlands and grasslands were also created on the former spoil tip.

As the habitats have developed and matured over the last fifteen years careful management has been required to ensure we make the most of the site for both people and wildlife. The wetland is inhabited by many plants including Reedmace and is frequented by many different damselflies and dragonflies. The Bee Orchid, a flower typical of post-industrial sites, and Painted Lady butterflies are among the other species to be seen during the summer months.

Community involvement at Tippings Wood is strong with a well-established 'Friends of' group who carry out environmental projects. Sherwood Forest Community Rangers also work closely with the local community to encourage community involvement in the park. They may be able to lead your visit, but there may be a charge for this service.

Booking

Any visit, whether ranger-led or self-led should be booked through:-

Sherwood Forest Community Rangers
Forestry Commission
Sherwood & Lincs Forest District
Sherwood Pines
Edwinstowe, Mansfield
NG21 9JL
Tel: 01623 822447.

Please refer to "**Educational Visits Policy For Nottinghamshire Schools**" when planning the numbers of staff for supervision of groups visiting the park. Support on the day of the visit can be requested during the booking process. **Any requests for support for your visit from the Sherwood Forest Community Rangers must be made at the time of booking.**

Your completed risk assessment should be forwarded to the Forestry Commission at Sherwood Pines before your visit.

Ring 01623 822447 for further information and booking details.

Boundary Wood & Tippings Wood

Boundary Wood and Tippings Wood LNR

Parking

There is on street parking at the entrance to Boundary Wood off Burma Road.

Equipment and materials

When using the resource kit, please check the contents of the box on the checklist enclosed before use and report any missing items on returning the resource to Sherwood Pines.

For your visit you will need to provide:

- Clipboards
- Paper
- Pencils
- Erasers and pencil sharpener
- First Aid kit

All other equipment is provided for each activity. You may need to photocopy worksheets and make the pond dial in class before your visit.



Working in Boundary Wood and Tippings Wood

The map provided shows paths in the park and it is important that school groups stay on these, unless instructed to explore further, to avoid trampling through environmentally sensitive areas.

Weather conditions may also prevent groups from entering the woods at certain times of the year, when strong winds or heavy snow can cause fallen branches. Again, please check if uncertain. This only applies to the more mature areas of woodland where the trees are above head height.

Boundary Wood and Tippings Wood is a public site so please ensure children are aware of "stranger danger" procedures and how to behave when dogs are around.

Doing our bit for the environment

Please take all your rubbish back to school and recycle cans, foil, paper if possible.

Boundary Wood & Tippings Wood

Boundary Wood and Tippings Wood LNR

Trailblazer

Many schools are now taking part in the Trailblazer scheme and a day at Boundary Wood and Tippings Wood is an excellent way of working towards credits and awards. Further details can be obtained from Nottinghamshire County Council and Nottingham City Council education departments. Schools are encouraged to work towards credits in all strands of the scheme. A day on site lends itself to the PLAN – DO – REVIEW model and children can be involved in all aspects of a visit. One idea for a children's review sheet is included in the curriculum based activities pack.

After your visit

When using Lesson in a Box, please clean any dirty pieces of equipment and replace any resources used before returning the resource to Sherwood Pines.

Please fill in an evaluation form which can be found in the pack, to help us continue to provide what you need.

After your visit, photographs, with consent, children's work, letters, drawings, artwork, photocopies of Trailblazer record books etc will be gratefully received by the Forestry Commission at Sherwood Pines.

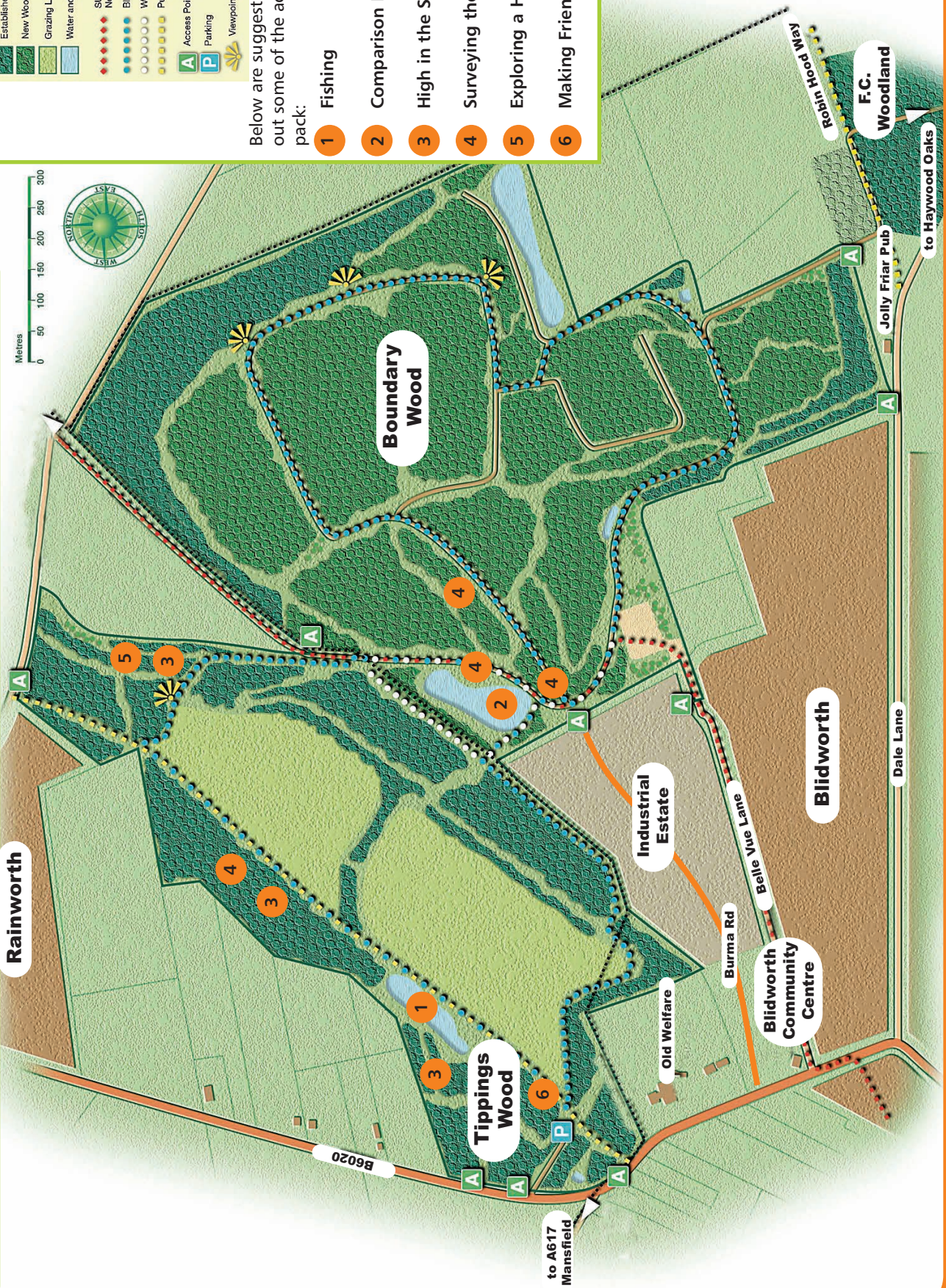
Thank you.

HAVE A GREAT DAY.



Boundary Wood & Tippings Wood

Boundary Wood & Tippings Wood



Key

- Established Woodland
- New Woodland
- Grazing Land (no public access)
- Water and Wetlands
- Sustrans National Cycle Network, Route 6
- Blue Trail: 5km
- White Trail: 1km
- Public Footpath
- Access Point
- Parking
- Viewpoint

Below are suggested areas to carry out some of the activities in the pack:

- 1 Fishing
- 2 Comparison Pond for Fishing
- 3 High in the Sky
- 4 Surveying the Area
- 5 Exploring a Hedgerow
- 6 Making Friends

Lesson in a Box

Teacher Lesson Planning Grid

These guidelines cover:
National Curriculum objectives
QCA Learning Outcomes
Resources needed

Boundary Wood & Tippings Wood LNR

within the Greenwood Community Forest



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Page	Activity	National Curriculum and QCA Units Supported by this Activity	Learning Outcomes	Resources Needed
	<p>Study of Pond Eco-system</p> <p>Mini-beast Safari and Fishing</p>	<p>Science – KS 1 and 2</p> <ul style="list-style-type: none"> Life Processes and Living Things Materials and Their Properties <p>QCA Units – KS 1 and 2 Science</p> <p>1B - Growing plants</p> <p>1C - Sorting and using materials</p> <p>2B - Plants and animals in the local environment</p> <p>2C - Variation</p> <p>3B - Helping plants grow well</p> <p>3C - Characteristics of materials</p> <p>3D - Rocks and soils</p> <p>4B - Habitats</p> <p>5B - Life cycles</p> <p>6A - Interdependence and adaptation</p> <p>6B - Micro-organisms</p> <p>Geography - KS1 and 2</p> <ul style="list-style-type: none"> Geographical enquiry and skills Knowledge and understanding of places Knowledge and understanding of patterns and processes Knowledge and understanding of environmental change and sustainable development <p>QCA Units – KS 1 and 2 - Geography</p> <p>1 – Around our school, the local area</p> <p>6 – Investigating our local area</p> <p>8 – Improving the environment</p>	<ul style="list-style-type: none"> Have a “hands on” knowledge of the life processes and living things (plants and animals) found in the woodland. Experience planning, making and setting of pit fall traps for mini beast collection/observation/sorting/classification. Investigate the mini beast life of the woodland through leaf litter survey, pit fall trapping, tree shaking and general observation. Better understand the properties of the natural materials in the woodland. Increase knowledge of bio-diversity in the area local to their working. Gain greater understanding of the energy flow through the woodland including soil making, life cycles, food webs, interdependence and adaptation and the importance of micro organisms especially fungi. Understand that their actions will have consequences and a careful approach should be adopted to environmental welfare. Develop an understanding of the importance and value of biological diversity (Agenda 21) and how their actions can impact on the environment. 	<p>Nets, trays, magnifying glasses, clip boards, pencils, Freshwater Trail Guides, mini-beast record sheets,</p> <p>Pollution guide</p> <p>2m length string, mini-flags, pooters for small creatures,</p> <p>Woodland trail guides, pots</p>

Page	Activity	National Curriculum and QCA Units Supported by this Activity	Learning Outcomes	Resources Needed
	<p>Study of Pond Eco-system Mini-beast Safari and Fishing Continued</p>	<p>Science - KS 1, 2</p> <ul style="list-style-type: none"> • Life Processes and Living Things • Materials and Their Properties <p>QCA Units – KS 1 and 2 - Science</p> <p>1B - Growing plants 1C - Sorting and using materials 2B - Plants and animals in the local environment 2C - Variation 3B - Helping plants grow well 4B - Habitats 5B - Life cycles 6A - Interdependence and adaptation</p> <p>Geography- KS 1 and 2</p> <ul style="list-style-type: none"> • Geographical enquiry and skills • Knowledge and understanding of places • Knowledge and understanding of patterns and processes • Knowledge and understanding of environmental change and sustainable development <p>QCA Units – KS 1 and 2 - Geography</p> <p>1 – Around our school, the local area 2 – How can we make our local area safer? 6 – Investigating our local area 8 – Improving the environment 11 - Water</p>	<ul style="list-style-type: none"> • Have a “hands on” knowledge of the life processes and living things (plants and animals) found in the pond. • Recognise the importance of marginal vegetation as habitats and experience their planting. • Experience collection, observation, sorting, identification and classification of aquatic creatures. • Greater understand the energy flow through the aquatic environment including life cycles, food webs, interdependence and adaptation. • Understand that their actions will have consequences and a careful approach should be adopted to environmental welfare. • Develop an understanding of the importance and value of biological diversity (Agenda 21) and how their actions can impact on the environment, especially on the quality of water. 	

Page	Activity	National Curriculum and QCA Units Supported by this Activity	Learning Outcomes	Resources Needed
	High in the Sky	<p>Science – KS 1 and 2</p> <ul style="list-style-type: none"> • Life Processes and Living Things <p>QCA Unit – KS 1 and 2 Science</p> <p>1A - Ourselves</p> <p>1B - Growing plants</p> <p>2B - Plants and animals in the local environment</p> <p>3C - Characteristics of materials</p> <p>4B - Habitats</p> <p>Art – KS 1 and 2-</p> <ul style="list-style-type: none"> • Recording from first-hand observation, represent and communicate observations. • Investigating qualities of materials, visual and tactile elements, colour pattern and texture, line and tone, shape, form and space. <p>QCA Units – KS 1 and 2 Art</p> <p>1B – Investigating materials</p> <p>2A – Picture this</p> <p>2B – Mother Nature, designer</p> <p>3B – Investigating pattern</p> <p>4A - Viewpoints</p> <p>6C – A sense of place</p> <p>9 – Visiting a museum, gallery or site</p>	<ul style="list-style-type: none"> • Develop awareness of the richness of the environment. • Increased awareness of the qualities of materials. • Improve observation and concentration skills. • Understand how we learn about our environment through our senses. • Explore ways of framing images – frame and record an interesting viewpoint • Identify and record a variety of features and aspects of the environment. • Develop sketches from observations. 	Mirrors (suitable for children)

Page	Activity	National Curriculum and QCA Units Supported by this Activity	Learning Outcomes	Resources Needed
	<p>Quadrats and Transects</p> <p>Hedgerow Survey (Exploring a hedgerow)</p>	<p>Science – KS 1 and 2</p> <ul style="list-style-type: none"> Life Processes and Living Things <p>QCA Units – KS 1 and 2 Science</p> <p>1B - Growing plants</p> <p>2B - Plants and animals in the local environment</p> <p>2C - Variation</p> <p>3B - Helping plants grow well</p> <p>3D - Rocks and soils</p> <p>4B - Habitats</p> <p>5B - Life cycles</p> <p>6A - Interdependence and adaptation</p> <p>6B - Micro-organisms</p> <p>Geography - KS1 and 2</p> <ul style="list-style-type: none"> Geographical enquiry and skills Knowledge & understanding of places Knowledge & understanding of patterns and processes Knowledge & understanding of environmental change and sustainable development <p>QCA Units – KS 1 and 2 - Geography</p> <p>1 – Around our school, the local area</p> <p>6 – Investigating our local area</p> <p>8 – Improving the environment</p> <p>Mathematics – KS 1 and 2</p> <ul style="list-style-type: none"> Using and applying number Processing, representing and interpreting data Using and applying shape, space and measures Handling data <p>PSHE</p> <ul style="list-style-type: none"> Collaborative working, negotiation, taking and sharing responsibility 	<ul style="list-style-type: none"> Have a “hands on” knowledge of the life processes and living things (plants and animals) found in the woodland. Experience collection/observation/sorting/identification and classification of plants and animals. Increase knowledge of bio-diversity in the area local to their working. Gain a greater understanding of the energy flow through the woodland including soil making, life cycles, food webs, interdependence and adaptation. Understand that their actions will have consequences and a careful approach should be adopted to environmental welfare. Develop an understanding of the importance and value of biological diversity (Agenda 21) and how their actions can impact on the environment. Using and applying number and measures in practical contexts. Using mathematical language to communicate ideas and results. Presenting information in a clear and organised way, recording results in diagrams, graphs and charts and drawing conclusions. Working together, sharing equipment. 	<p>Hoops, clipboard, pencils, paper, woodland plant identification guide, rope, measure, Recording sheets</p>

Boundary Wood & Tippings Wood

Page	Activity	National Curriculum and QCA Units Supported by this Activity	Learning Outcomes	Resources Needed
	Cocktail Souvenirs	<p>Science – KS 1 and 2</p> <ul style="list-style-type: none"> Materials and Their Properties <p>QCA Units – KS 1 and 2 - Science</p> <p>1C - Sorting and using materials</p> <p>3C - Characteristics of materials</p> <p>Literacy – KS 1 and 2</p> <ul style="list-style-type: none"> Vocabulary extension, describing, adjectives, communication, speaking and listening <p>Art – KS 1 and 2</p> <ul style="list-style-type: none"> Recording from first-hand observation, represent and communicate observations. Investigating qualities and possibilities of materials, <p>QCA Units – KS 1 and 2 Art</p> <p>1A - Ourselves</p> <p>1B – Investigating materials</p> <p>2B – Mother Nature, designer</p> <p>6C – A sense of place</p> <p>9 – Visiting a museum, gallery or site</p>	<ul style="list-style-type: none"> Understand how we learn about our environment through our senses. Develop awareness of the richness of the environment. Identify and record a variety of features and aspects of the environment. Increase awareness of the qualities of materials. Linking vocabulary with features found in the local environment. Collect and describe natural materials, using a wider range of adjectives, adverbs, similes and phrases. 	Plastic cups, small sticks, a little water
	Prickly Tickle	<p>Science – KS 1 and 2</p> <ul style="list-style-type: none"> Materials and Their Properties <p>QCA Units – KS 1 and 2 - Science</p> <p>1C - Sorting and using materials</p> <p>3C - Characteristics of materials</p> <p>Literacy – KS 1 and 2</p> <ul style="list-style-type: none"> Vocabulary extension, describing, adjectives, communication, speaking and listening 	<ul style="list-style-type: none"> Linking vocabulary with features found in the local environment. Collect and describe natural materials, using a wider range of adjectives, adverbs, opposites, similes and phrases. Understand how we learn about our environment through our senses. 	blindfolds, natural found objects

Boundary Wood & Tippings Wood

Page	Activity	National Curriculum and QCA Units Supported by this Activity	Learning Outcomes	Resources Needed
	<p>Prickly Ticky Cont...</p>	<p>Art – KS 1 and 2</p> <ul style="list-style-type: none"> Recording from first-hand observation, represent and communicate observations. Investigating qualities and possibilities of materials, visual and tactile elements, colour pattern and texture, line and tone, shape, form and space. <p>QCA Units – KS 1 and 2 Art</p> <p>1A - Ourselves</p> <p>1B – Investigating materials</p> <p>2A – Picture this</p> <p>2B – Mother Nature, designer</p> <p>3B – Investigating pattern</p> <p>4A - Viewpoints</p> <p>6C – A sense of place</p> <p>9 – Visiting a museum, gallery or site</p> <p>PSHE</p> <ul style="list-style-type: none"> Collaborative working, negotiation, taking and sharing responsibility 	<ul style="list-style-type: none"> Develop awareness of the richness of the environment. Identify and record a variety of features and aspects of the environment. Increase awareness of the qualities of materials. Improve observation and concentration skills. Working co-operatively. 	
	<p>Stained Glass Windows and One of a Kind</p>	<p>Art – KS 1 and 2</p> <ul style="list-style-type: none"> Recording from first-hand observation, represent and communicate observations. Investigating qualities and possibilities of materials, visual and tactile elements, colour pattern and texture, line and tone, shape, form and space. Knowledge and understanding of the work, roles and purposes of artists, craftspeople and designers in different times and cultures. 	<ul style="list-style-type: none"> Develop awareness of the richness of the environment. Increase awareness of the qualities of materials. Improve observation and concentration skills. Understand how we learn about our environment through our senses. Explore ways of framing images – frame and record an interesting viewpoint. 	<p>Cards with windows cut out, recording materials, fallen leaves</p>

Boundary Wood & Tippings Wood

Page	Activity	National Curriculum and QCA Units Supported by this Activity	Learning Outcomes	Resources Needed
	<p>Stained Glass Windows and One of a Kind Cont...</p>	<p>QCA Units – KS 1 and 2 Art 1B – Investigating materials 2A – Picture this 2B – Mother Nature, designer 3B – Investigating pattern 4A - Viewpoints 6C – A sense of place 9 – Visiting a museum, gallery or site</p>	<ul style="list-style-type: none"> Identify and record a variety of features and aspects of the environment. Develop sketches from observations. 	
	<p>Making Friends</p>	<p>Art – KS 1 and 2</p> <ul style="list-style-type: none"> Recording from first-hand observation, represent and communicate observations. Investigating qualities and possibilities of materials, visual and tactile elements, pattern and texture, line, shape, form and space. <p>QCA Units – KS 1 and 2 Art 1B – Investigating materials 2A – Picture this 2B – Mother Nature, designer 3B – Investigating pattern 4A - Viewpoints 6C – A sense of place 9 – Visiting a museum, gallery or site</p> <p>PSHE</p> <ul style="list-style-type: none"> Collaborative working, negotiation, taking and sharing responsibility 	<ul style="list-style-type: none"> Develop awareness of the richness of the environment. Increase awareness of the qualities of materials. Improve observation and concentration skills. Understand how we learn about our environment through our senses. Explore ways of framing images – frame and record an interesting viewpoint. Identify and record a variety of features and aspects of the environment. Develop sketches from observations. Working co-operatively, caring for one another, understanding other points of view. 	<p>Blindfolds</p>

Boundary Wood & Tippings Wood

Page	Activity	National Curriculum and QCA Units Supported by this Activity	Learning Outcomes	Resources Needed
	<p>Colour Palette</p>	<p>Art – KS 1 and 2</p> <ul style="list-style-type: none"> Recording from first-hand observation, represent and communicate observations. Investigating qualities and possibilities of materials, visual and tactile elements, colour pattern and texture, line and tone, shape, form and space. Knowledge and understanding of the work, roles and purposes of artists, craftspeople and designers in different times and cultures. <p>QCA Units – KS 1 and 2 Art</p> <p>1B – Investigating materials 2A – Picture this 2B – Mother Nature, designer 3B – Investigating pattern 4A - Viewpoints 6C – A sense of place 9 – Visiting a museum, gallery or site</p>	<ul style="list-style-type: none"> Develop awareness of the richness of the environment and the colour to be found there. Understand how we learn about our environment through our senses. Increase awareness of the qualities of natural materials. Improve selection, observation and concentration skills Identify parts they like and say what they found interesting about colour/patterns they have created. Identify similarities and differences between their own and others’ work. Exploring art techniques, visual and tactile qualities of natural materials. Identify and describe objects and their properties. 	<p>Range of natural materials in woodland etc.</p> <p>Bags for collection</p>
	<p>Colour Check</p>	<p>Art – KS 1 and 2</p> <ul style="list-style-type: none"> Recording from first-hand observation, represent and communicate observations. Investigating qualities and possibilities of materials, visual and tactile elements, colour pattern and texture, line and tone, shape, form and space. Knowledge and understanding of the work, roles and purposes of artists, craftspeople and designers in different times and cultures. <p>QCA Units – KS 1 and 2 Art</p> <p>1B – Investigating materials</p>	<ul style="list-style-type: none"> Develop awareness of the richness of the environment and the colour to be found there. Understand how we learn about our environment through our senses. Increase awareness of the qualities of natural materials. Improve selection, observation and concentration skills Identify parts they like and say what they found interesting about colours they have created. 	<p>Colour cards</p> <p>sticky cards</p>

Page	Activity	National Curriculum and QCA Units Supported by this Activity	Learning Outcomes	Resources Needed
	<p>Colour Check Cont...</p>	<p>2A – Picture this 2B – Mother Nature, designer 6C – A sense of place 9 – Visiting a museum, gallery or site</p>	<ul style="list-style-type: none"> • Identify similarities and differences between their own and others' work. • Exploring art techniques, visual qualities of natural materials. • Identify and describe objects and their properties. 	
	<p>Magic Camera</p>	<p>Art – KS 1 and 2</p> <ul style="list-style-type: none"> • Recording from first-hand observation, represent and communicate observations. • Investigating qualities and possibilities of materials, visual and tactile elements, colour pattern and texture, line and tone, shape, form and space. • Knowledge and understanding of the work, roles and purposes of artists, craftspeople and designers in different times and cultures. <p>QCA Units – KS 1 and 2 Art</p> <p>1B – Investigating materials 2A – Picture this 2B – Mother Nature, designer 3B – Investigating pattern 4A - Viewpoints 6C – A sense of place 9 – Visiting a museum, gallery or site</p> <p>PSHE</p> <ul style="list-style-type: none"> • Collaborative working, negotiation, taking and sharing responsibility 	<ul style="list-style-type: none"> • Develop awareness of the richness of the environment through pattern, texture, colour, shape, line and form. • Understand how we learn about our environment through our senses. • Working co-operatively. • Communication, speaking and listening skills. • Increased awareness of the qualities of materials. • Improve selection, observation and concentration skills. • Explore ways of framing images – frame and record an interesting viewpoint. • Identify and record a variety of features and aspects of the environment. • Identify and describe objects and their properties. • Develop sketches from observations. 	<p>A whistle</p>

Page	Activity	National Curriculum and QCA Units Supported by this Activity	Learning Outcomes	Resources Needed
	<p>Outlines</p>	<p>Science – KS 1 and 2</p> <ul style="list-style-type: none"> • Life Processes and Living Things • Materials and Their Properties <p>QCA Units – KS 1 and 2 - Science</p> <p>1A - Ourselves 1C - Sorting and using materials 2B - Plants and animals in the local environment 2C - Variation 3C - Characteristics of materials 4B - Habitats 6A - Interdependence and adaptation</p> <p>Art – KS 1 and 2</p> <ul style="list-style-type: none"> • Recording from first-hand observation, represent and communicate observations. • Investigating qualities and possibilities of materials, visual and tactile elements, colour pattern and texture, line and tone, shape, form and space. <p>QCA Units – KS 1 and 2 Art</p> <p>1B – Investigating materials 2A – Picture this 2B – Mother Nature, designer 3B – Investigating pattern 4A - Viewpoints 6C – A sense of place 9 – Visiting a museum, gallery or site</p>	<ul style="list-style-type: none"> • Understand how plants and animals have adapted to their surroundings and the reasons for those adaptations • Develop awareness of the richness of the environment and the shapes, forms and lines found in it. • Increased awareness of the qualities of materials. • Improve selection, observation and concentration skills. • Understand how we learn about our environment through our senses • Identify and record a variety of features and aspects of the environment. • Develop sketches from observations • Explore ways of framing images – frame and record an interesting viewpoint • Communication, speaking and listening skills. • Exploring art techniques, visual and tactile qualities of natural materials. 	<p>Recording materials, outlines check list</p>

Safety in Groups Guidelines

Planning and managing groups on sites.
Guidelines for organisers and leaders.

Introduction

This booklet is aimed at ensuring the highest possible safety standards for schools and other groups visiting Boundary Wood and Tippings Wood. Boundary Wood is maintained by the Forestry Commission and Tippings Wood by Nottinghamshire County Council. By describing the standards of safety which visiting schools are recommended to provide for their pupils, it provides a quality assurance document for governors, head teachers, teachers, parents and pupils alike.

Because the safety of visiting Boundary Wood and Tippings Wood is the joint responsibility of the visiting schools and other groups and agencies responsible for the management of sites, this document makes clear the responsibilities of, and provides codes of practice for, all groups of staff/adults/leaders.

The document follows the recommendations and requirements of the LEA's "Educational Visits Policy For Nottinghamshire Schools " and the Education Department Circulars in relation to specific outdoor activities. It is expected that all visits and activities taking place at this site will follow the recommendations of these documents.

In following the codes of practice, all concerned need to appreciate that no document of this nature can cover every possible set of circumstances. Safe educational experiences ultimately rely on the common sense and good judgement of teachers and other adults, while working within their own experience and capabilities. All visiting teachers and leaders should have access to and be familiar with these codes of practice.

These guidelines cover:

Stages of planning and delivery

PRE PLANNING

BEFORE THE ACTIVITY

DURING THE ACTIVITY

AFTER THE ACTIVITY

And consider key aspects of:

ORGANISATION AND DELIVERY

STAFF AND RESOURCES

COMMUNICATION

HEALTH AND SAFETY

PARTICIPANTS

RISK ASSESSMENT

INFORMATION, ADMINISTRATION AND PROMOTION

Boundary Wood & Tippings Wood

Activity planning

1. Assess the purpose, nature and extent of the activity.

- The location, and route, activities on site and resources needed.
- How it will be managed – What staff and resources? What ratio of staff to children?
- Who is leading the activity? What leader/facilitator skills are needed? Do they have relevant training? – This will depend on the nature and scope – Essentially a trained first aider with a Certificate of Qualification in First Aid (to at least basic emergency level), and first aid kit.
- Are there any agreements or special requirements needed from sites or others? E.g. booking, letter of agreement, special leaders, a site risk assessment.
- Will any additional tools or specialist skills be required?

2. Establish Health and Safety arrangements

- Consult Risk Assessment for the site (available from the Forestry Commission and Nottinghamshire County Council) and carry out risk assessment for your group/activities, including the journey.
- Accident, emergency and communication arrangements. An emergency communication system must be set up between the visiting group, the school and the parents.
- What First Aid provision is available and is it clearly marked and accessible?
- Radio or mobile telephone communication procedure. These should include provisions for abandoning the activity if the weather deteriorates or if any other unexpected problem arises during the activity.

3. Set the parameters for the participants:

- Maximum number of participants
- What clothing is required?
- What footwear is required?
- What level of fitness is required and have any relevant medical conditions been disclosed to teacher/leader?
- Are special skills required?
- Is any additional equipment required?

4. Information, administration and promotion arrangements

- What information is or can be made available to potential participants? This may depend on the way in which the activity is promoted. Information needs to be provided which will enable potential participants (via organiser) to make choices about whether to become involved, to ensure that they are properly prepared (the leader must be aware of any relevant medical conditions of participants) and to make the most of the learning opportunities available.
- How can information be provided? Via a leaflet, poster or by inviting participants to telephone the leader.
- Establish an appropriate booking system, if required.

Before the activity

Safety Responsibilities

1. Safety responsibilities of The Forestry Commission (Boundary Wood) and Nottinghamshire County Council (Tippings Wood).

Take overall responsibility for the management of health and safety of all areas in their operational control, including risk assessment, fire safety etc. and communicating this to visiting groups.

2. Safety responsibilities of visiting schools

Through the management of the teacher leading the visit and the school's own Educational Visits Co-ordinator, the visiting school is responsible for:

- Ensuring the leader of the visit, and other visiting staff if possible, visit the site prior to the visit. If no visit takes place, then the leader of the visit must assess the site and needs to brief other staff thoroughly.
- Ensuring that all visits take place within the policies, guidelines and Codes of Practice provided by their LEA and Boundary Wood & Tippings Wood's Lesson in a Box.

3. General emergency procedure

- All leaders in charge of a group should be prepared for and ready to deal with any emergency which may arise. Groups are advised to have a mobile phone with them when visiting the site.
- Take charge of the situation. Ensure safety and well being of the whole group. Make sure all members of the party are accounted for.
- Establish who is injured or ill and the extent of injuries or illness. Give emergency aid if necessary (to sustain breathing and circulation and prevent bleeding).
- If the situation is urgent or life threatening, telephone 999 and ask for the required services, giving your name, location, number of casualties and an assessment of injuries/illness. Ask for immediate medical advice if necessary.
- Ensure any pupil taken to hospital is accompanied by an adult.
- Prevent access to telephones, including mobile phones by anyone other than group leaders, to ensure information about the event is managed appropriately. Contact the head teacher giving clear details of the situation. The head teacher should contact parents and the chairman of school governors.
- Ensure that other pupils are cared for, that they understand what has happened and are distanced from the situation if appropriate. Be aware that others in the party, adults and pupils, you included, may be suffering from shock.
- In the event of a serious incident the head teacher should contact the Education Department and the Health and Safety Executive.

Re-assess activity

Check Risk Assessment for Changes

- Is there any work going on in the vicinity of the planned activity?
- Is the route safe and free of hazards? Have hazards been guarded against?
- Ensure that accident, emergency (see section "General Emergency Procedure") and communication arrangements are planned and understood by all.
- Is appropriate First Aid available?
- Details of the activity (including time leaving, route, destination, return time, mobile phone numbers, number in party and name of guide) should be left with a responsible person.
- On assembly the organiser must ensure that the participants meet all the criteria which have been set:
 - Is everyone's name on the register?
 - Are they wearing the appropriate clothing?
 - Are they wearing the appropriate footwear?
 - Do they appear to meet the fitness requirements?
 - Do they have the appropriate skills?
 - Are they the correct age?
 - Has the maximum number been exceeded?
 - Where vehicles, bicycles or equipment are provided by participants, do they appear to be safe and suitable for the planned activity?
 - If the leader/organiser, the participants or the equipment do not meet these requirements, the activity should not be allowed to go ahead.

Introductory talk

- Check that all staff can hear you.
- Essential at the start of every new project or activity to inform participants about:
 - Why they are doing the activity – their contribution, social improvements, quality of life, improving access, sharing good practice, country code etc.
 - What to expect – may be length and type of activity, equipment needed (refer to risk assessment).
 - What is expected of them – how you need them to work as a team, what skills they need to employ, what sort of behaviour is acceptable, arrangements and supervision for "free time" and break times.
 - Gives key information in relation to the activity and their safety – what to do in the event of an emergency or accident, first aid and communication arrangements, lets them know how to use equipment, defines limits and boundaries of area being used etc.

You might also need to include:

TOUR OF WHOLE SITE AREA – site management and care, tasks required.
EQUIPMENT DEMONSTRATION – name and use for each, safety information. Pair experienced helpers with newcomers if you can – show good practice.
INFORMATION FOR PUBLIC ON SITE ABOUT THE ACTIVITY.

During the activity

- It is important that the leader/organiser is free to keep an overview of the activity and is not tied to one particular group or area.
- The organiser should, depending on the nature of the activity, ensure that the party stays together and should make regular checks to ensure that all participants are present and well. One person should be nominated to stay at the back of the group to ensure that nobody falls behind. Regular head counts should also be taken.
- The leader must ensure suitable behaviour and supervision of pupils at all times.
- If the weather deteriorates or if there are any other unexpected problems the organiser must have regard to the pre-arranged emergency procedures and decide the appropriate course of action and communicate this to the participants.
- Ensure good working practices – pair experienced with non experienced adults, make sure everyone has something to do at the start, set realistic targets, rotate jobs if possible, delegate wherever possible, give praise, keep work site tidy, keep equipment in one place, try to call people by their names (wear labels if you need to), draw on volunteers skills.
- Respond to differing levels of ability, fitness and challenge – ask them about their interests, be aware that some adults have phobias, including insects, spiders, long grass, water etc.
- Following any accident, illness or 'near miss' incidents, record these back at school, and report them to the Forestry Commission at Sherwood Pines and Nottinghamshire County Council. Procedures outlined by the LEA should be followed precisely.

Sherwood Forest Community Rangers
Forestry Commission
Sherwood & Lincs Forest District
Sherwood Pines
Edwinstowe, Mansfield
NG21 9JL
Tel: 01623 822447.

Nottinghamshire County Council
Trent Bridge House
Fox Road,
West Bridgford
Nottingham
NG2 6BJ
0115 9 823 823

After the activity

- Allow time for clearing up if needed, and check the area is left tidy and undisturbed.
- Thank everyone for taking part and check everyone is there – a formal head-count is essential.
- Evaluate the safety arrangements and if appropriate amend the procedure or implement change for the next event. Return any evaluation sheets to Sherwood Pines.
- At the end of every visit, the whole programme should be reviewed and any lessons learned taken on board for any future visits.
- Ensure relevant and adequate follow-up work to consolidate learning in a variety of styles.

More safety information

British Standards Institute
www.bci-global.com/Corporate/BritishStandards

Health and Safety Executive
www.hse.gov.uk

BTCV – a range of useful information on volunteers
www.btcv.org.uk

Council for Environmental Education
www.cee.org.uk

Department for Education and Science
www.dfes.gov.uk

Institute for Leisure and Amenity Management
www.ilam.org.uk

Institute for Public Rights of Way
www.iprow.org.uk

RoSPA (Royal Society for the Prevention of Accidents)
Useful information on water safety
www.rosipa.com

Visitor Safety in the Countryside Group
www.vscg.co.uk

Walking for Health Initiative
www.whi.org.uk

Standard First Aid Kit

Vary, normally for 10-12, usually contain:

Guidance card

20 sterile adhesive dressings

2 sterile eye pads

6 triangular bandages

6 safety pins

6 medicated, unsterilised dressings

2 large, sterile, unmedicated dressings

3 extra large, sterile, unmedicated dressings

Disposable fine elastic gloves

Plastic mouth resuscitation unit

900ml of sterile water or saline

Recommended Welfare kit

Additional useful equipment

Mobile phones

Wet wipes – general cleaning

1 pair scissors

10 safety pins

Needle and thread

Pencil and paper

Toilet roll/sanitary towel

Cotton wool

30 plasters (hypoallergenic only)

10p/20p pieces

Set of spare clothes

Towels (when working in or near water)

Mints or sweets

Blanket/sheet

Whistle

Torch

Basic Principles for Safety

Who is the qualified First Aider? Make sure everyone knows who they are.

Make sure that you and participants have plenty of drinking water, especially in hot weather.

Long trousers are more appropriate in woodland.

Always wear strong shoes, boots or Wellington boots.

Wear a hat for warmth or shade from hot sun.

Only carry as much equipment as you can comfortably manage.

Supplementary notes

Education and groups and insurance

Be aware of the LEA Guidelines and Policies on school visits and that the LEA's position regarding insurance is clear to schools. Need to check with your organisation's Head for private/independent schools. Arrange an insurance policy for an amount acceptable to your organisation.

There are new guidelines in circulation from Department for Education and Science - see website www.dfes.gov.uk

Always discuss the visit and activities with your school's Educational Visits Co-ordinator and plan it well with their help.

Children and vulnerable adults

As a volunteer, group or task leader, you take on a position of responsibility with regards to children (Children Act) and are therefore required to obtain Disclosure by the Criminal Records Bureau (CRB). This is a checking process against a national registered database of offenders and information held by departments – Home Office, Health, Education and Employment. Where this is required it will be carried out by employer or project organiser.

Follow your group's/school's policy on checking volunteers with CRB.

Health and Safety At Work Act (HASWA)

Any organisation will have responsibility under the Health and Safety At Work Act (HASWA) to ensure, so far as is reasonably practicable, that those engaging in these types of activities are not exposed to risks to their health and safety from the activities.

Check with those in charge of your organisation and act appropriately.

Participants and clothing/equipment

Where the organiser believes that a participant is inadequately prepared for the activity, they should make this clear to the person concerned or their guardian. If possible, any warning should be given in the presence of witnesses, and recorded in writing. At all times, the organiser must conduct themselves politely and make it clear that in their opinion the person is not properly equipped or that the planned activity may not be suitable for that person. Where the participants are adults, they should make it clear that if the person insists on participating, that they do so at their own risk. Many sites now have clothing and equipment to borrow – just check it is fit for purpose. Ensure that adult volunteers are not placed in a vulnerable position themselves, for example, pair helpers when distant from other groups.

Supplementary notes continued

The Disability Discrimination Act (DDA)

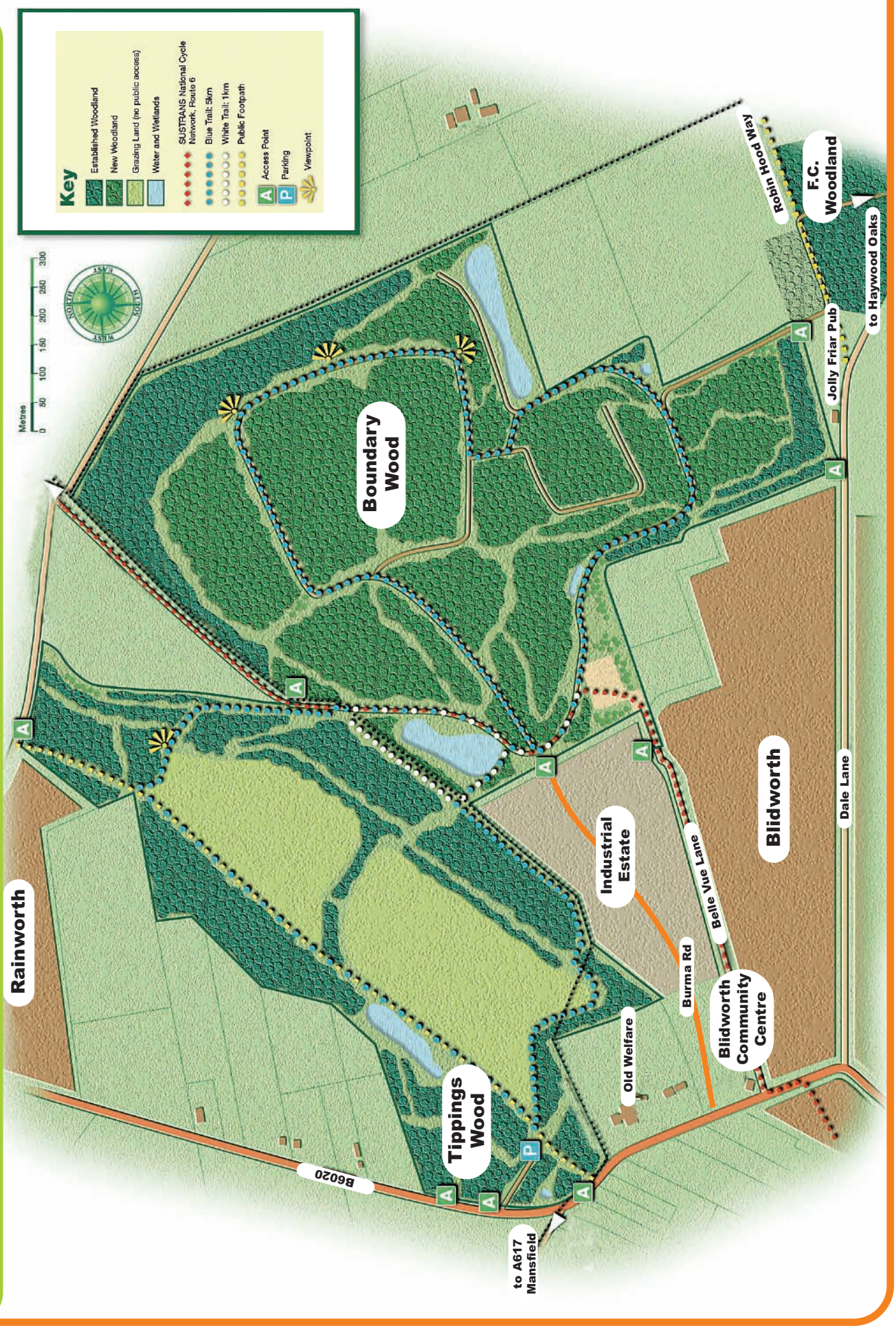
The Disability Discrimination Act was passed in 1995 to ensure that disabled people are treated in a fair and equal way.

The act places duties on providers of goods, facilities and services.

- The duties on service providers are being introduced in three stages:
 - It is unlawful for service providers to treat disabled people less favourably for a reason related to their disability;
 - Service providers have to make "reasonable adjustments" for disabled people, such as providing extra help or making changes to the way they provide their services; and
 - Service providers will also have to make "reasonable adjustments" to the physical features of their premises to overcome physical barriers to access.
- The Act makes it unlawful for a service provider to discriminate against a disabled person:
 - By refusing to provide (or deliberately not providing) any service which it provides (or is prepared to provide) to members of the public; or
 - In the standard of service which it provides to the disabled person or the manner in which it provides it; or
 - In the terms on which it provides a service to the disabled person.

The act does not place any duty on providing for elderly people who do not have a disability or for families with small children or other people who may be restricted in their use of the countryside. However, the benefits of an accessible, inclusive environment for disabled people would also benefit other user groups.

Boundary Wood & Tippings Wood Access Points



Lesson in a Box

Activity Sheets

Boundary Wood & Tippings Wood LNR

within the Greenwood Community Forest



Nottinghamshire
County Council



Forestry Commission
England

SHERWOOD
FOREST



Community Rangers



Greenwood

Nottinghamshire's Community Forest bringing Sherwood Forest to your doorstep

Mini-beast Safari

Mini-beast Safari is a set of activities designed to raise awareness of the wonderful world of small creatures. The suggested activity list is for guidance only and you may pick and mix the activities to fit your needs.

The Camp

Setting the scene and introducing the activities

You will need: A pleasant spot to set up base near to a pond and some trees, something to sit on if it is damp and a whistle.

How to do it:



1. Tell the group:

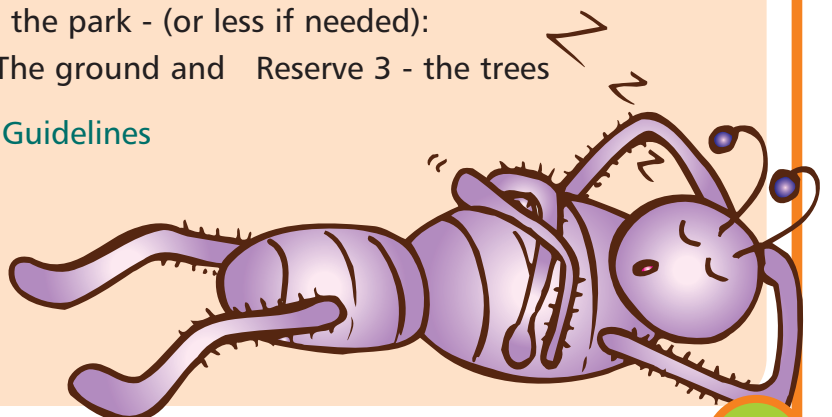
- You are going to go on safari to view mini-beasts. You will be visiting the "Invertebrata National Park" and looking at 3 different mini-beast reserves. The park is known as the "Invertebrata" as mini-beasts belong to a family known as the Invertebrates. This means that they have no backbones.
- Mini-beasts tend to be shy and retiring. If you have to take the roof off one of their homes to see them, make sure you put it back afterwards.
- Mini-beasts are delicate and easily hurt and should be handled with care. One or two mini-beasts may nip. However, most of them only tickle and none of them kill people (in this country!!) Please use post where possible.
- The spot you are in is "The Camp" and you should report back to Camp after all activities and whenever you hear the whistle.
- You are now going on a tour of the Invertebrata National Park.

2. The work area

- Take them on a tour of the boundary of the area they are to work in.

Talk about:

- The Invertebrata National Park may seem small to them but to a mini-beast it is infinitely large.
- They will be looking at 3 reserves in the park - (or less if needed):
Reserve 1 - the pond Reserve 2 - The ground and Reserve 3 - the trees
- Safety issues - see [Safety in Groups Guidelines](#)
- Water safety management
- Hygiene of sharing pooters
- Collecting mini beasts - use lids, not hands where possible
- Do not put hands near to mouths



Boundary Wood & Tippings Wood

2

Fishing

Pond dipping and identifying pond mini-beasts

Each small group will need: A net, white tray, magnifying glass, clip board, pencils, Freshwater Name Trail Guide and **mini-beast record sheets**.
Refer to the suggested lesson plan for a more in depth activity.

How to do it:

1. Introduce the activity

- Remind the group about water safety.
- Divide the group up into pairs or threes.
- Half fill each white tray with water.

2. Fishing Boat

- In pairs or threes work as Fishermen on a fishing boat.
- Hand out the trays to the Fishermen.
- Take it in turns in the team to sweep the net in one direction through surface water.
- Have a go and then...

3. Swap roles

- The second Fisherman should sweep the net a little deeper through the water taking care not to touch the bottom and empty the net into the tray.

4. Mini-beasts can then be recorded by:

- The under 7s counting the different types of mini-beast.
- 7-11 year olds using the tick list.
- the 11s and over using the Freshwater Trail Guide and record sheet.

5. An adult should empty out the trays by lowering gently. Rinse the nets in the pond

Talk about:

- The differences between the mini-beasts found in the different reserves.
- Water safety
- How polluted the pond might be (see pollution guide).



Suggested lesson plan for the study of a pond ecosystem

Use in conjunction with the "Fishing" activity sheet

The pond provides a wide range of learning opportunities. This section contains an in depth explanation of the pond ecosystem and suggested lesson plan for a half day field study focusing on sampling and identification.

The pond is an excellent resource, rich in a range of organisms particularly, from March to October.

Aim

To study the ecosystem of a pond

Objectives

- To show the range of organisms that inhabit freshwater
- To understand how organisms fill different niches and are adapted to their environments
- To understand how feeding relationships operate

Values and attributes

- To encourage care and respect for living things



Introduction

What would you expect to find in the pond?

- Many organisms are extremely small but fascinating, so you need to look very carefully.

How will you find out?

- You will need to sample – refer to the "Fishing" activity sheet.
- Within the pond there are different places for creatures to live or "zones". Try to sample all the different zones – surface, amongst weed, open water and along the bottom, but don't stir up mud or you will not see anything.
- To help focus pupils on observing organisms, discuss the special problems associated with living water. They will find this easier to do if using themselves as reference points e.g. if you had to live under water what would you have problems with?

The main areas are:

- Getting oxygen
- Moving
- Finding food and avoid being caught



Boundary Wood & Tippings Wood

4

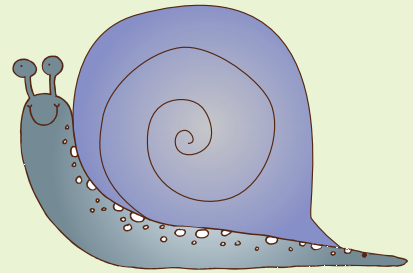
Suggested lesson plan for the study of a pond ecosystem

Getting oxygen

Strictly speaking, not all animals breathe – breathing involves lungs, but all animals do need oxygen. Mammals and birds breathe – fish and insects do not but still have to have ways of getting oxygen.

What happens to us when we go under water? How do we cope with getting oxygen under water? We could:

- **Take a deep breath and come back to the surface to get more.** Some creatures do this. Water beetles visit the surface at intervals to collect fresh air. Whales do too – but you will not find any in our pond. Insects do not have lungs so the oxygen can enter the body in different places e.g. Midge larvae have breathing tubes and spend time suspended on the surface.
- **Take a supply of air down with you** like a diver with air cylinders. Snails and beetles do this.



Movement

Water is a denser medium than air. It is more difficult to move through water than air but water supports you. How do we move through water?

- **Adopt a streamline shape** – so we swim, moving horizontally through the water presenting a smaller surface area to the water – less restrictive than moving vertically. Top competitive swimmers remove body hair to improve streamlining. Most water creatures are streamlined. Water beetles particularly have smoother outlines compared to land beetles.
- **Use our limbs to push against the water.** We maximise area to push back with by wearing flippers. This makes leg movements more effective. Frogs and some newts have webbed feet. Many water insects have limbs which are shaped or fringed with hairs for more effective propulsion.
- **Use boats** – streamlined and using oars with blades to push water back. Several creatures have boat-like shapes and many have specialised oar-like legs to help push them through the water.
- **Pushing water out behind helps to propel craft forward.** Dragonfly larvae use this method to move rapidly forward in a series of spurts. Water is squeezed out of the abdomen shooting the insect forward – during this method of movement its legs are tucked in to improve streamlining.



Suggested lesson plan for the study of a pond ecosystem

Getting food and avoid being caught

As top carnivores we do not have a great problem with this. Possible strategies are:

- Hide - Prey can seek refuge in the weeds or the mud. This is common. Note that organisms you collect in trays will seek shelter under whatever bits of weed are available. Likewise predators can lurk in mud and dart out as prey approaches.
- Camouflage
- Speed to avoid predators
- Several have special mouthparts and adapted legs to help them grab and eat prey. Dragonfly nymphs are notable for their special mouthparts, normally tucked under the head which can shoot out and grasp prey – a fearsome weapon.

Collect organisms

Refer to the "Fishing" Activity Sheets and collect organisms from the pond.

Ask pupils to use magnifying glasses for observation and identification sheets to try to find out:

- What the organisms are
(Hint: creatures with 6 legs will be insects or insect larvae. However, not all insect larvae have legs)
- How the organisms get their oxygen
- What they might feed on (mouthparts may give a clue)
- How they move

Pupils could be given 1 or 2 organisms to investigate and then share what they find out with the rest of the group.

Look at the pollution guide to see if the pond is polluted or clean

How is the pond habitat different from a stream?

- Organisms living in running water have an additional problem in avoiding being washed away. Also it is more difficult for plants to become anchored and there is less vegetation to either hide amongst or provide food.
- The water is running so the oxygen content is higher.
- If you were investigating a stream you would need to look carefully to spot organisms. Nymphs of various species of mayflies which require high oxygen content are common.



Microhike

An ant's view of the world

Each pair/three will need: A piece of string about 2m long, a magnifying glass and some mini-flags

How to do it:

1. Introduce the activity by saying:

- You are going for a hike in the reserve known as 'The Ground'. This is by far the largest reserve you will visit and you will only have chance to explore a very small part of it. However, on the way you will see some spectacular views and if you are lucky, spot some interesting mini-beasts. The string is the route you have to follow and the magnifying glass is to help you look at the scenery and spot mini-beasts.

2. Give out the equipment

- The string is for laying on the ground to mark a route.
- The magnifying glass is for looking closer.
- The flags are for marking interesting features on the way.

3. Exploring the ground

- Tell the group to find an interesting looking spot to lay their string on the ground.
- Next they should lie down on their stomachs at one end of the string and slowly crawl along the string looking through the magnifying glass with their eyes no more than a few centimetres off the ground.
- They should use the mini-flags to mark interesting features on the way.

Talk about:

- What they saw along the route what do their flags mark?
- Was the scenery beautiful?
- Did they spot any mini-beasts?



Pot hunting

Under 7s

Looking at the creatures at our feet

Each small group will need: Two or three small pots, a magnifying glass, a pooter

How to do it:

1. Introduce the activity by saying:

- Mini-beasts are shy and retiring and don't like to be seen by people. They tend to hide away in places where there is good cover such as under stones and logs.

2. Give out the equipment

- The pots are for collecting larger mini-beasts in - they should collect no more than 3 or four per pot. (Be aware that creatures of different species could eat each other).
- The pooter is for sucking up smaller mini-beasts - they suck through the shorter pipe with the covered end and place the longer pipe with the open end over the insect.
- The magnifying glass is for taking a closer look.

3. Exploring the ground

- Give 20 minutes to explore "The Ground".
- See how many mini-beasts they can find.
- They are allowed to collect one of each type of mini-beast but must carefully put back any stones or logs that they move.

4. Return to Camp

- After 20 minutes blow the whistle as a signal for them to return to the Camp.

5. Counting Favourites

- How many different mini-beasts they have found and to decide which is their favourite mini-beast.

6. Finally, they should carefully return all the mini-beasts to where they were found

Please return all magnifying glasses to the box - these can easily start a fire in hot dry conditions.

Talk about:

- How many different mini-beasts each group has found?
- Where the best places were to find mini-beasts, and why?
- Which was the group's favourite mini-beast and why?
- Once used please wipe pooter tubes and return to box.



Boundary Wood & Tippings Wood

8

Trophies

7s & over

Identifying the mini-beasts and keeping records - for the over sevens

Each small group will need: The same equipment as for mini-beast hunting, Woodland Trail Guide, pencils, a clip board and **mini-beast record sheets**.

How to do it:

1. Introduce the activity by saying:

- In times gone by, people used to kill any animals they thought were interesting and have them stuffed to hang on the wall or mounted with pins in display boxes. Today we know that it is better to let the animals live and record what they look like in words and pictures.

2. Give out the equipment

- The pots are for collecting larger mini-beasts in - they should collect no more than 3 or four per pot.
- The pooter is for sucking up tiny mini-beasts - they suck through the shorter pipe with the covered end and place the longer pipe with the open end over the insect.
- The magnifying glass is for taking a closer look .

3. Record the minibeasts

- They should record the details of each mini-beast on the **mini-beast record sheet** and attempt to identify them using the keys.
- There is a simple key for children aged 7-11. Older children should use the Woodland Trail Guide.

4. Finally, they should carefully return all the mini-beasts to where they were found.



Talk about:

- How many different mini-beasts each group has found.
- Where the best places were to find mini-beasts.
- Which was the group's favourite mini-beast and why?
- How easy was it to identify them using the guides?
- Once used please wipe pooter tubes and return to box.



Boundary Wood & Tippings Wood

9

Tree beating

Looking at the creatures that live in trees

You will need: A large white sheet, a tree with branches in easy reach.

Each pair or three will need: A pooter, a magnifying glass, mini-beast record sheets, clip board, pencils and the Woodland Trail Guide.

How to do it:

1. Introduce the activity by saying:

- There are many mini-beasts hiding in the tree.
- The best way of looking for them would be to examine each part of the tree with a magnifying glass as this would disturb the mini-beasts the least. Unfortunately there is not time to do that so instead you are going to get them out by giving a branch a shake.
- They must be ready to pounce on anything that falls out onto the white sheet.

2. Give out the equipment

- The pots are for collecting larger mini-beasts in - they should collect no more than 3 or four per pot.
- The pooter is for sucking up smaller mini-beasts - they suck through the shorter pipe with the covered end and place the longer pipe with the open end over the insect.
- The magnifying glass is for taking a closer look.

3. Get ready

- Stand the group around the tree and place the sheet under a tree.
- Shake the branch when the group are ready to pounce.

4. Collect the beasts

- Using the pots and pooters.

5. Repeat under a different branch

6. Mini-beasts can be recorded by:

- The under 7s counting the different types of mini-beast.
- 7-11 year olds using the mini-beast dial.
- the 11s and over using the Woodland Trail Guide and mini-beast record sheet.

7. Finally, make sure the mini-beasts are released close to the tree

Talk about:

- What they could find and whether they could identify them.



High in the Sky

Looking at the world from a different angle.
Each person will need: A mirror

How to do it:

1. Introduce the activity by saying:

- Many mini-beasts that live in trees can fly at some stage in their life.
- You are going to see what it feels like to fly by going on a mirror walk.

2. Form a line

- Stand the group in a line with one hand on the shoulder of the person in front and with the mirror just under their chins.

3. Using the mirrors

- They need to take big high steps to avoid tripping - practice this first!
- Tell them to look in their mirrors as you lead them through the trees - this gives a feeling of flying.

4. What's in a tree?

- Stop under a tree and ask if they can spot anything interesting in the tree using the mirror (they are not allowed to look up).

5. Share your find with the group

- If someone finds something, the rest of the group should see if they can see it by changing the angle of their mirrors.

Talk about:

- What it felt like.
- Whether they spotted any flying mini- beasts.
- Where such beasts might live up and down a tree.

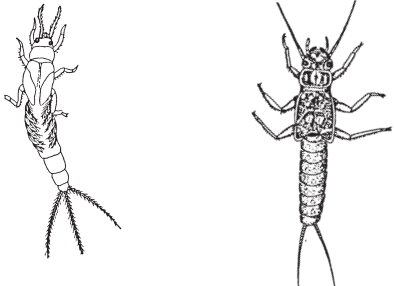
Follow up idea

- Draw the view in your mirror and develop drawings, paintings, collages etc back at school.



Pollution Guide

A

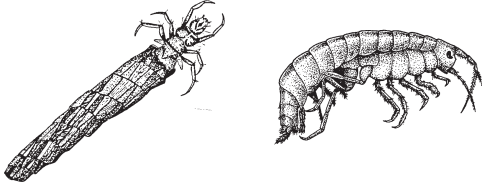


Mayfly Nymph Stonefly Nymph

→

If you find these organisms there is **NO POLLUTION**

B

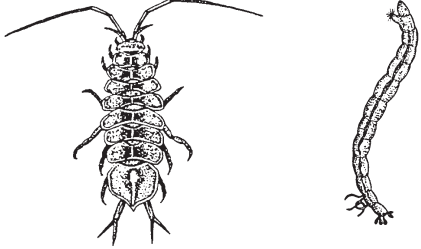


Caddisfly Larvae Freshwater Shrimp

→

If you find these organisms but none from group A then there is **SLIGHT POLLUTION**

C

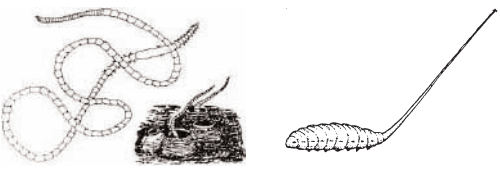


Water Louse Bloodworm

→

If you find these organisms but none from A or B then there is **MEDIUM POLLUTION**

D



Sludgeworm Rat-tailed Maggot

→

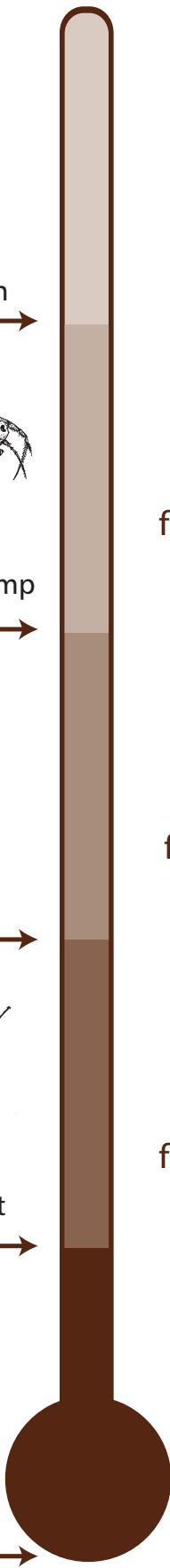
If you find these organisms but none from A, B or C then there is **A LOT OF POLLUTION**

E

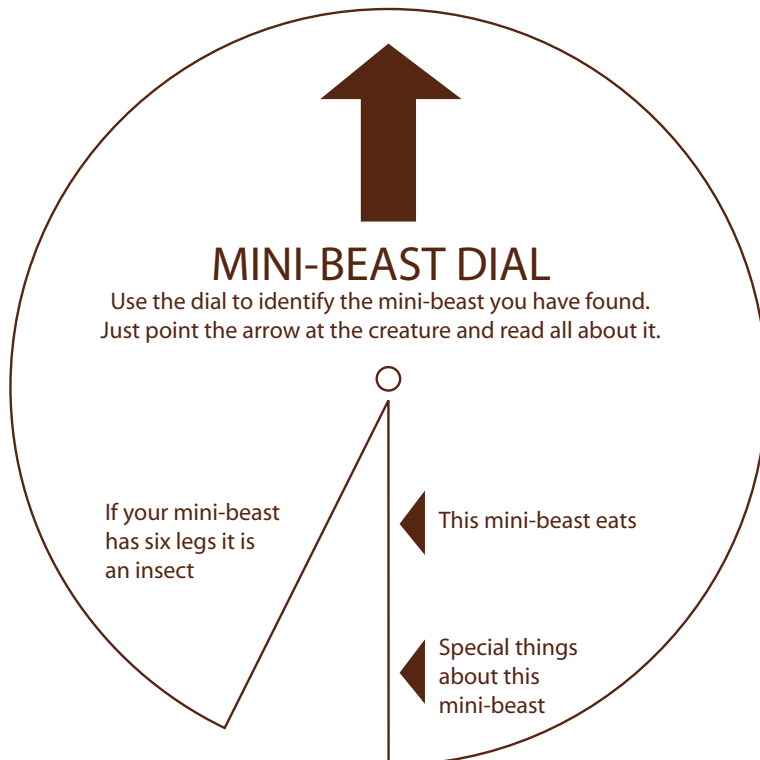
No Life

→

If you find no organisms at all then the water is **VERY POLLUTED**



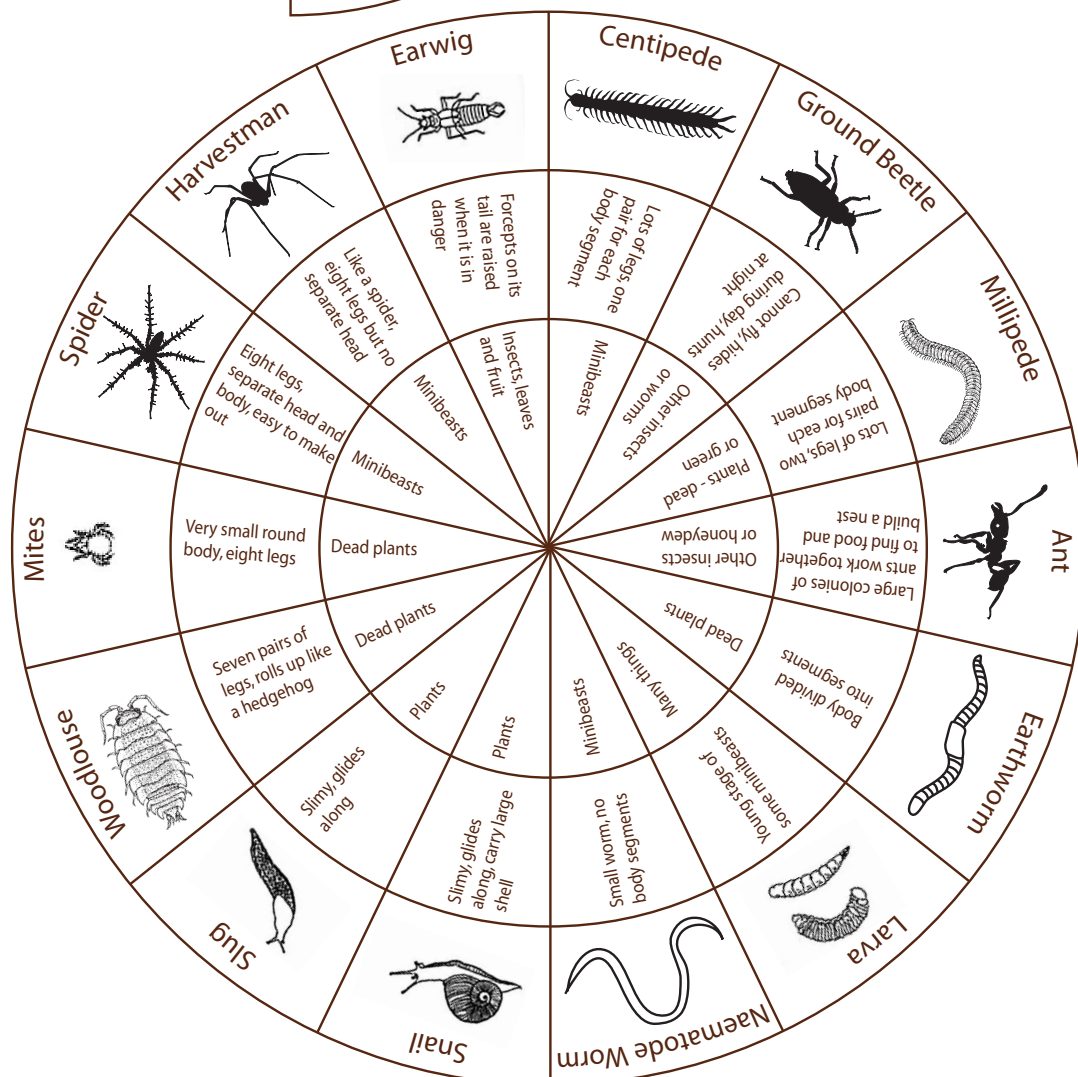
Make your own mini-beast dial



1. Cut out both dials

2. Place the small dial on top of the large one.

3. Put a paper fastener through the centre of both dials, bend back the ends to secure.



Mini-beast Record Sheet

For activities: Trophies, Tree beating, Fishing

Description	Mini-beast 1	Mini-beast 2	Mini-beast 3	Mini-beast 4
Number of legs				
Number of body parts				
Number of wings				
How long is it?				
How wide is it?				
What colour is it?				
How does it move?				
Where was it found?				
What is it?				

Drawing Mini-beasts

For activities: Trophies, Tree beating, Fishing

Mini-beast 1

Mini-beast 2

Mini-beast 3

Mini-beast 4

Follow up ideas

Write a report

Use your notes to write a report about one of your mini-beasts for the rest of your class to read. Plan your report carefully before starting to write it. What will you include? Why? Illustrate your report. You could make all the reports into a class book to go in your school library.

Make up names

Make up suitable names for your mini-beasts which describe them well (eg. "armour-plated scuttler" for a woodlouse).

Worm home

Cut the top off a large plastic pop bottle. Fill it with layers of sand and soil. Add a few worms. Place leaves on the surface and cover the top of the bottle with net. Look daily to see what happens to the leaves and layers. After a week, return the worms to the place you found them.

Washing up bowl pond

Arrange a few stones and water plants in a washing up bowl. Carefully fill the pond with tap water. Put it outside in a sheltered spot. Visit daily and record any mini-beasts you see.

Visit:
www.buglife.org.uk

to find out more about
mini-beasts



Investigating Habitats

Investigating Habitats is a set of activities designed to enable people to improve nature observation and recording skills. The suggested activity list is for guidance only and you may pick and combine the activities to fit your needs. The activities are suitable for a wide range of ages

Setting up headquarters

Setting the scene and introducing the activities

You will need: A pleasant spot to set up base, close to several habitats and hedgerows, something to sit on if it is damp, a whistle.

How to do it:

1. Tell the group:

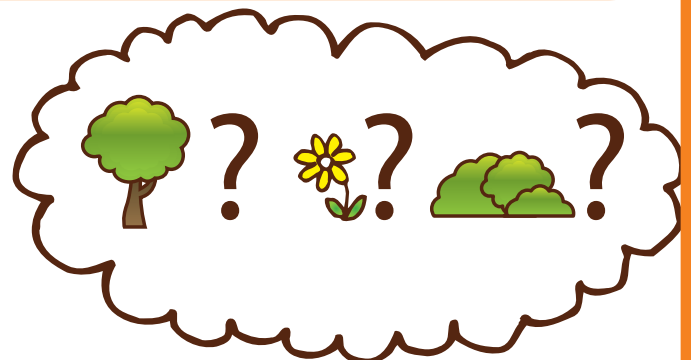
- The spot they are in is Record Headquarters and they should report their findings to HQ after each investigation or whenever they hear the whistle.
- They are going to record some vital statistics about plant life and habitats around them.
- Discuss what they consider to be trees, which are shrubs and which are plants.
- You are now going to take them on a tour of the study area you are going to investigate in more detail.

2. The work area

- Take them on a tour of the boundary of the area they are to work in.

Talk about:

- Safety issues - see Safety in Groups Guidelines
- The equipment they will use
- Looking after the area and the plants and animals found there.



Surveying the Area

Quadrat Survey

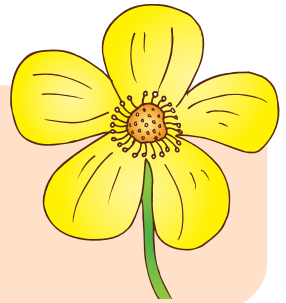
A quadrat is normally a square frame or PE hoop, which is thrown at random in order to investigate plant species growing within a certain area. Choose several different habitats, eg: beneath the tree canopies of different trees; woodland/heathland; water meadows/mown grass round lakes

Each small group will need: A hoop, clipboard, pencil, paper and Woodland Plant Identification Guide.

How to do it:

1. Introduce the activity by saying:

- In the last 40 years, in Britain, we have lost 95% of our wild flower meadows, 50% of our ancient woodlands and 50% of our fens and wet valleys.



2. Give out the equipment

3. Survey the chosen area:

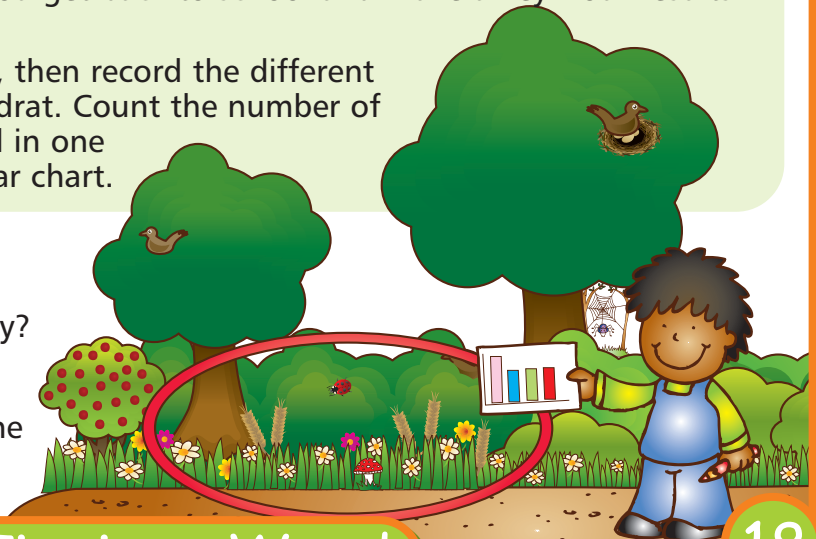
- Tell the group to throw their hoop onto one of the areas named above. Wherever it falls, inspect just what is growing within the area covered – ignore everything else.

4. Compare the different areas

- You can then compare two or three different areas.
- You could pick one or two species to look out for (e.g. clover), or you could look at the percentage ground cover of different types of plants (using identification guides to help you.) Use squared paper with quadrats drawn to scale – colour in the area represented by each plant when you get back to school and make a key. Your results could be shown as a pie chart.
- You may want to make 10 throws, then record the different species identified within each quadrat. Count the number of times the same species is recorded in one location. Show your results as a bar chart.

Talk about:

- Which areas encourage biodiversity?
- Which do not?
- What could be done to increase the variety of life in these areas?



Surveying the Area

Transect Survey (Footpaths)

You will need: A long rope, tape measure, clipboard, pencil, Transect recording sheet

How to do it:

1. Introduce the activity by saying:

- Footpaths become wider and wider as people walk along the edges of the path. This tramples the plants growing there and often causes soil to be washed away from paths in heavy rain. Always keep carefully to paths to avoid scarring the countryside.



2. Survey the area:

- Investigate a footpath through an area of woods. Stretch a long rope between two points on the ground. Record what is growing at 50cm intervals, measure the height of each plant you have found and record your findings on the transect recording sheet on page 21.

Talk about:

- What effects do you think trampling has on the vegetation?
- How could this be avoided?
- Can regeneration take place near to paths? (New plants and trees growing naturally under the older plants.)
- Role play the discussions which might take place between a landowner, conservationists and walkers who are planning a new footpath across a mature woodland area.



Exploring a Hedgerow

You will need: Clipboard, paper, pencils, tape measure, Woodland Plant ID Guide, FSC Tree Guide

How to do it:

1. Introduce the activity by saying:

- Hedges can provide valuable corridors and routes for animals and birds, linking scattered wildlife habitats together. In the last 40 years we have lost 160,000 km of hedges – enough to go round the earth six times.

2. Draw a plan of where the hedge runs.

- What is the function of the hedge? (To mark a boundary, contain stock, a windbreak?)

3. Measure the hedge

- Make a note of how high the hedge is and how wide it is at the bottom. Measure the shadow cast by the hedge. Does one side get more sun than the other? Does this affect the vegetation on each side?

4. Make a list

- Note how many shrubs there are in the hedge and how many plants are growing under or up it. Use the identification sheets to identify the plants and shrubs. Are there any fruits on the shrubs? How are they dispersed?
- Measure a 10m length of the hedge and walk along it to see which is the most common shrub or tree.

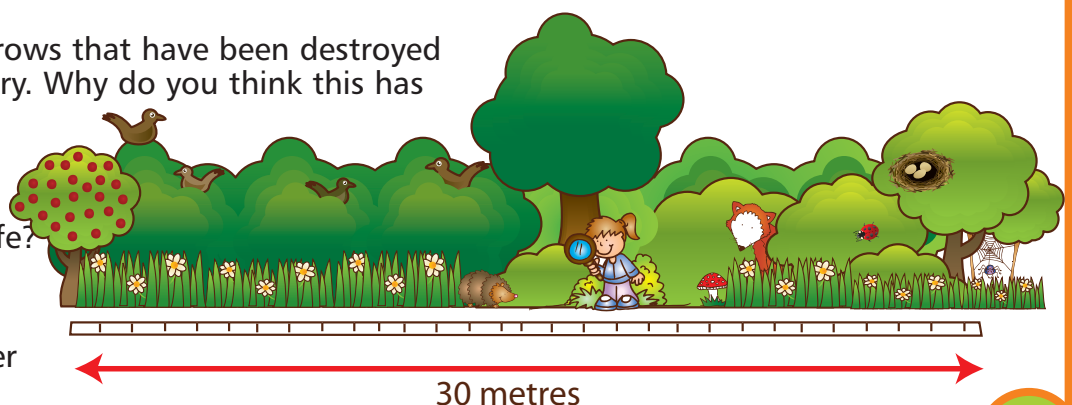
5. Look for evidence of animal, bird or mini-beast homes in and under the hedge.

6. Dating a hedge

- It is possible to estimate the age of an old hedge by counting the number of different kinds of trees and shrubs in a 30m stretch. As a very rough guide, you can say that there is one species for every 100 years of the hedge's life. Max Hooper discovered this simple rule after the study of hundreds of old hedges in Britain. It is best to count the species in several 30m stretches if possible, and average the results. Look for large stumps in the hedge to prove that it is old rather than recently planted with lots of species.

Talk about:

- The many hedgerows that have been destroyed during this century. Why do you think this has happened?
- How good is the hedge as a habitat for wildlife?
- How could it be improved to encourage greater biodiversity?

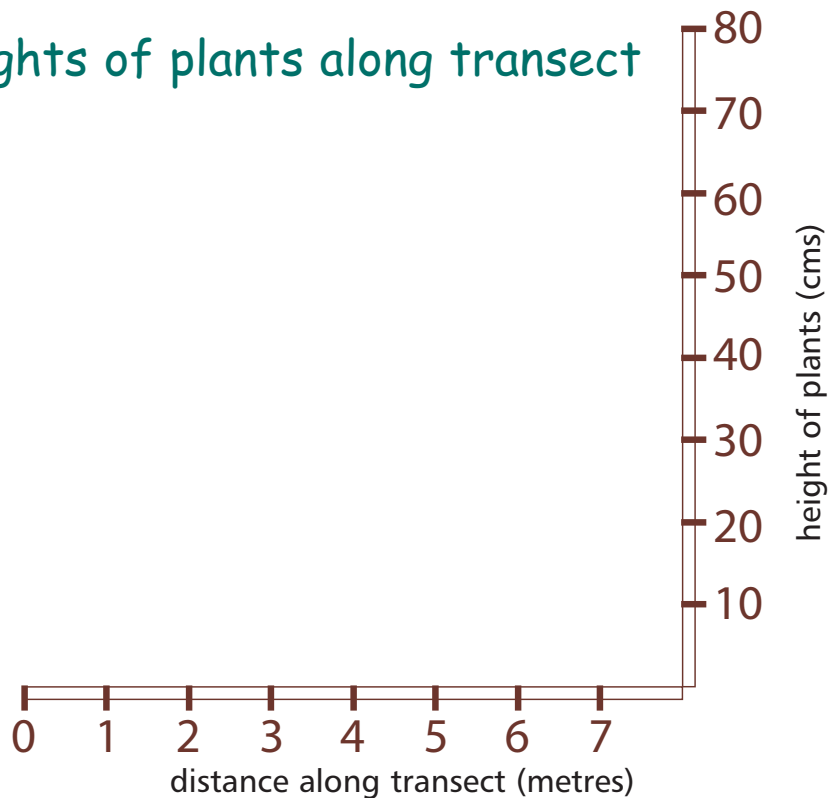


Transect recording sheet

Line Transect

Distance	Plant you have found there	Height of plant

Graph to show heights of plants along transect



New Country

New Country is a series of activities designed to encourage people to use all their senses and to look at the world in different ways. You can pick and choose which activities you do in each section. This activity is suitable for all ages

Setting up base camp

Setting the scene and introducing the activities

You will need: A pleasant spot to set up base, something to sit on if it is damp, a whistle

How to do it:

1. Tell the group:

- They are explorers.
- Imagine you have arrived in a new country that has never been explored before.
- Your sponsors back home have asked you to give a detailed report of the new country.
- The report has to include information collected using some very special and delicate scientific equipment.
- The special and delicate scientific equipment includes:
 - Eyes:** These are sensitive to light and record information about shape and colour.
 - Ears:** These are sensitive to sounds and record information about volume and pitch.
 - Noses:** These are sensitive to chemicals in the air.
 - Tongues:** These are sensitive to chemicals in solids and liquids, but we will not use our sense of taste today!
 - Skin:** This is a large and quite bulky piece of equipment that is sensitive to touch and temperature.
 - Brains:** These are by far the most important pieces of equipment as they are used to understand and store the information collected using the other pieces of equipment.
- The spot you are in is the **"Base Camp"** and you should report back to the **"Base Camp"** after all activities and whenever you hear the whistle. You are now going to go on a tour of the country you are later going to explore in detail.

2. Take them on a tour of the boundary of the area they are to work in.

Talk about:

- Safety issues - see Safety in Groups Guidelines
- We will be doing some quick checks on the "equipment" before we start



Cocktail Souvenirs

Making smells

Each person will need: A plastic cup, a stick and some water. It is best to do this activity after lunch and make sure the groups can clean their hands immediately afterwards.

How to do it:

1. Tell the group that smells can often bring back memories of a place.

- Get them to think about how their home smells when they get back from holiday, their school on the first day of term etc.
- They are going to make a "smelly cocktail" as a souvenir of today.

2. Cocktail cups

- Give each person a plastic cup with a little water in. They are to create a smelly cocktail by collecting small amounts of anything that smells interesting and crushing it in the water using a stick.
- They can collect leaves and things off the ground.
- Some things may need 'scrunching' to let the scent escape - bark or leaves for example.
- **But no berries, mushrooms, prickly plants and no dog mess!!!**

3. Sharing the smell

- Think of a name for your cocktail - how does it make you feel.
- Sit in a circle and share the smell with the other members of the group.
- Do this as a carousel - all pots moving clockwise on a click - take a fresh breath between pots!
- Or let the adult helpers do the smell testing - moving round the inside of the circle and asking names and checking smells.
- Think of adjectives to describe each perfume you smell. Use these words to write a poem.



4. Before going home empty the pots and give the cocktail to a growing plant!

Talk about

- Different smells that make up the countryside smell - not just one big smell
- How the cocktails are good plant food - and will breakdown to become fertiliser just as it actually happens

Follow up idea

- Make posters for your smelly cocktails with a name and description as if you were selling it.

Prickly Ticky

Using touch to explore the natural world
Each pair will need: A blindfold

How to do it:

1. Search for Opposites

- Tell one of the pair they are to search for natural objects that are a pair of opposites eg: prickly and tickly, hard and soft etc. Agree the opposites secretly.
- The other half of the pair is blindfolded and sits or stands in a circle with hands cupped behind. The first child searches around for objects that match the pair of opposites.

2. Return to the circle

- When the first child has found their objects they should place the items separately in their partners cupped hands. The partner has to guess what the secret words are by feeling the things in their hands.

3. Swap Roles

- The pair should then swap over with two new secret words.

Remember to return all your natural objects to the woodland before you leave.

Follow up ideas

- Do the activity back at school, or in another location. Can you find the same or different opposites?
- Use the found objects to make an "opposites" collage.



Stained Glass Windows

Investigating pattern, colour and texture and the structure of leaves.
You will need: Card window shapes of various sizes with holes for windows

How to do it:

1. Searching for materials

- Find yourself a special leaf, preferably large, flat and from the ground.
- Place your leaf on the window and stand in a circle.

2. Hold your window up to the light

- Take note of the position of the sun. (Never look into the sun; stand with the sun behind you).
- Examine your leaf carefully looking at the colours, patterns of veins, holes, etc.

3. Looking through the window

- Once everyone has looked at his or her own leaf pass it to the person on your right to view.



One of Kind

Investigating the unique qualities of each leaf

1. Find a leaf

- Everyone finds a leaf and spends a minute studying it carefully looking for the features that make it unique and recognisable, colours, patterns of veins, holes etc.
- One person should spread all the leaves out in the middle of the circle while everyone turns their backs.

2. Is your leaf unique?

- Everyone turns round again to face the centre of the circle and takes turns to find his or her own leaf again.

3. Swap roles

- Do the same thing again but swap your leaf with a partner before placing the leaf in the circle. Try to find your partner's leaf.



Making Friends

Using the senses of touch and smell

You will need: A flat area with trees

Each pair will need: A blindfold

How to do it:

1. Meet the inhabitants

- Tell the group that they are going to meet some of the inhabitants of a new country.

2. Divide the group into pairs

- One person is the Explorer and is blindfolded. The other is the Guide.
- The role of the Guide is to safely direct the blindfolded Explorer to a tree - telling them where and when to be careful with their steps (holding one elbow is a good way).
- Explorers should lift their feet quite high and step down firmly
- Tell the Guide to gently turn the Explorer round a few times. Then, after making sure that they are not dizzy, lead them to a nearby tree.



3. Exploring the tree

- Use hands and noses to explore the base of the tree, the trunk and up as far as they can reach
- When they feel that they know the tree, the Guide should spin the explorer round, in the same way as before, and lead them back to the place where they started.

4. Finding the tree

- The blindfold should then be removed and the Explorer should try to see if they can find the tree again.
- When they do, they should give the tree a hug.

5. The Explorer and Guide should swap roles

Talk about:

- How did they recognise their tree?
- Was it easy or difficult?



The Colour Palette

Exploring the wonderful world of colour

You will need: a bag to collect things in, a clipboard, pencil, crayons and paper.

How to do it:

1. Nature is full of colour.

- See how many different coloured objects that you can find in 10 minutes.
- If the colour cannot be collected it could be marked using crayons.



2. Exhibit your colours

- Make an exhibition of your objects putting them in the same order as the colours of the rainbow:

red, orange, yellow, green, blue, indigo and violet.

3. Write a rhyme

- Make up a rhyme to help you to remember the order of the colours of the rainbow.
- Try writing out part of your rhyme under your rainbow using natural objects.

Outlines

Exploring shape

You will need: your eyes and the outlines check list.

How to do it:

1. See if you can find natural objects with the following shapes:

A straight line



A spiral



A triangle



A star



A square



A cross



An oval



A heart



A circle



A face



2. Exhibit your finds

- Frame your exhibition using, for example, stones or weaving together bits of twig and wood.

Outlines check list

See if you can find the following shapes. The shapes may be found anywhere, for example as parts of trees, stones and flowers. Either collect the object and exhibit it in your room at Nature's Gallery or make a note of where you found it and show a friend.

1. A straight line



2. A triangle



1. A square



2. An oval



3. A circle



4. A spiral



5. A star



6. A cross



7. A heart



8. A face



Colour Check

Each person will need: Colour card index, sticky cards.

How to do it:

1. Ask everyone to look around them and tell you what colours they can see

- Which colour can they see most of? (usually green and brown).
- Get them to think about if there is just one green or many different shades.

2. Collecting shades of green

- Give them a sticky card.
- Collect as many shades of green on their colour card index.
- Pick small amounts from plants or from the ground.
- Stay away from plants with berries or that can prickle.

3. How many shades have they collected?

- Put the sticky cards on the ground and compare all the colours.
- You may want to use the colour card index to swatch check colours!

4. Cover the cards with the tape to keep them safe

5. Repeat this with shades of brown, bright colours or light colours

Talk about:

- There are lots of different shades of green.
- How artists have used colour to paint the natural world. Look for many shades of one colour in a painting.
- Why plants are green - they have a special agent helping them called "Chlorophyll" that takes out energy from light to make plant food and also reflects back the colour green!



Magic Cameras

Sharing great pictures

To view the natural world as a whole can be overwhelming, and it is difficult to see the small details that make each area unique. The idea of this activity is that children focus their attention on one small part of their surroundings and scrutinise it closely.

You will need: A whistle.

How to do it:

1. Explore the Country

- Tell the group that they have ten minutes to explore the 'country' on their own and find 3 beautiful places or things to show a friend.
- They must return to base camp when the whistle is blown.
- Divide the group into pairs.
- One person is the Photographer and the other the Camera.

2. The Photographer

- Stands behind the Camera and places their hands on the Camera's shoulders.

3. The Camera

- Shuts their eyes (shutters) and the Photographer guides the Camera to something interesting.
- To take a photograph the Photographer taps the Camera once on the shoulder (eyes open) and then, ten seconds later, taps twice (eyes closed).
- Alternatively they can cover the Camera's eyes with their hands from behind and open the shutter by opening their hands briefly.

4. The Photographer

- Takes 3 photos of different places and then swaps places with the Camera.

Talk about:

- The "photographs" they have taken and why.
- How a camera works.

