The Roots of Judy Woods:

Education Pack

The Friends of Judy Woods
July 2006

Royds Community Association

BRADFORD
Arts, Heritage & Leisure

BRADFORD ENVIRONMENTAL ACTION TRUST - BEAT

Local Heritage initiative

The Countryside Agency

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Introduction

This education pack has been designed to help you – the teacher/ leader and your pupils to make the most of Judy Woods and all that it has got to offer as an educational resource. The pack includes worksheets for a variety of age groups and covers a wide range of educational topics, for example, minibeast hunts and pond dipping.

Judy Woods is owned by the City of Bradford Metropolitan District Council (CBMDC) and managed by their Parks and Landscapes Service. Judy Woods is the third largest wood in the Bradford district and is situated in south Bradford between Wyke and Woodside.

The Friends of Judy Woods were formed in 2002 "to help conserve the woods for the quiet enjoyment of the public, and for the plants and animals that live there." If you would like further information about the group and the woods, then please visit their website – www.judywoods.org.uk .

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Planning an Environmental Education Session in Judy Woods

Please think about the following factors before arriving at Judy Woods for an environmental education session:

Weather
Equipment needed for sessions
Adequate supervision for group
Undertake a site visit and risk assessment – please refer to Appendix 1: Health and Safety Issues

Take a look at the Friends of Judy Woods website – www.judywoods.org.uk for further information about the woods.

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National Curriculum Reference Table

Environmental Education Session	Topic	Subject	Key Stage	Attainment Target
1	Leaf Trees	Art	1	1 – 3; 3 a + b; 4 a + b 1 a + b; 2 a, b + c
2	Picture Frames	Art Art English English	1 2 1 2	1 - 3 2 – 5; 1 a, b + c En3: 2 – 3; 1a, c + d En3: 2 - 5
3	Sensory Trail	Art Art	1 2	1 – 3 2 - 3
4	Minibeast Hunts	English English English Maths Maths Maths Science Science Science	1 2 3 1 2 3 1 2 3	En3: 2 – 3 En3: 2 – 5 En3: 3 – 7 Ma2: 1 – 2; Ma4: 2 – 3 Ma2: 2; Ma4: 2 – 5 Ma4: 3 – 5 Sc1: 1 – 3; Sc2: 1 – 3 Sc2: 2 – 3; Sc2: 2 – 5 Sc2: 3 - 6
5	Pond Dipping	English English English Maths Maths Maths Science Science Science	1 2 3 1 2 3 1 2 3	En3: 2 – 3 En3: 2 – 5 En3: 3 – 7 Ma2: 1 – 2; Ma4: 2 – 3 Ma2: 2; Ma4: 2 – 5 Ma4: 3 – 5 Sc1: 1 – 3; Sc2: 1 – 3 Sc2: 2 – 3; Sc2: 2 – 5 Sc2: 3 - 6
6	Soil Profiles	Science Science Science	1 2 3	Sc1: 1 – 3 Sc1: 2 – 5 Sc1: 3 – 6
7	A Day in the Life of…..	English English English History History	1 2 3 2 3	En3: 2 – 3 En3: 2 – 5 En3: 3 – 7 4 – 5 4 – 7
8	Bird Surveys	Maths Maths Maths Science	1 2 3 2	Ma2: 1 – 2; Ma4 2 – 3 Ma2: 2 – 3; Ma4: 2 – 5 Ma4: 3 – 5 Sc1: 2 – 5; Sc2: 4 – 5

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		Science	3	Sc1: 3 – 5; Sc2: 4 - 5
9	Create a Creature	Art Art Science Science	2 3 2 3	2 – 5 3 – 5 Sc2: 2 – 3 Sc2: 3 - 4
10	Life Cycles	Science Science Science	1 2 3	Sc2: 1 – 2 Sc2: 2 – 3 Sc2: 3
11	Food Chains	Science Science	2 3	Sc1: 2 – 5; Sc2: 3 Sc1: 3 – 5; Sc2: 3 - 6
12	Habits	Geography Geography Science Science	2 3 2 3	2 – 5 3 – 7 Sc1: 2 – 5 Sc1: 3 – 5
13	How Green is My Wyke…	English English English Geography Geography	1 2 3 2 3	2 – 3 2 – 5 3 – 7 2 – 5 3 - 7

Subject	**Attainment Target**	**Abbreviation**
English	1: Speaking and Listening	En1
English	2: Reading	En2
English	3: Writing	En3
Mathematics	1: Using and Applying mathematics	Ma1
Mathematics	2: Number and Algebra	Ma2
Mathematics	3: Shape, Space and Measures	Ma3
Mathematics	4: Handling Data	Ma4
Science	1: Scientific Enquiry	Sc1
Science	2: Life Processes and Living Things	Sc2
Science	3: Materials and their Properties	Sc3
Science	4: Physical Processes	Sc4

Key stage	**Year Group**	**Class**	**Attainment Targets**
1	4 – 6	Infants	1 – 3
2	7 – 11	Juniors	2 – 5
3	11 - 13	Seniors	3 – 7

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1. Leaf Trees

Aim: To identify different trees by the shape of their leaves. To accurately record observations with drawings or words.

Work sheet Number	Topic	Subject	Key Stage	Attainment target
1	Leaf trees	Art	1	1 – 3; 3 a + b; 4 a + b 1 a + b; 2 a, b + c

Equipment:
Leaves picked of the ground.

Leaf Rubbings: thin paper, wax crayons, scissors, large sheet of paper, paste, coloured pencils

Leaf Stencils: paper, watercolour paint, fairly stiff brush

Leaf Prints: good paper, scrap paper and cartridge or blotting paper, watercolour paint, brush

Leaf Pressings: paper, weight

Method:
Early autumn is the best time to collect leaves. Leaf rubbing is a suitable activity for young children; whereas, leaf stencils, prints and pressings are recommended for older children. Leaf stencils and prints could be used to supplement drawings for 'Picture Frame' session (please refer to Worksheet 2. 1: Site Observation Form: pages 10 – 11), in autumn. Leaf pressings could form part of the file for the ' Habitats' session (please refer to Worksheet 12. 1: Animal/Vegetation Index Card: page 52).

Leaf Stencils:

- Lay a sheet of paper on table or desk.
- Lay a leaf on the paper and hold firmly in the middle.
- With almost a dry brush, brush paint outward from the centre of the leaf all round the edges.
- Lift off the leaf to reveal its silhouette.

Note: Some leaves are not suitable; for example; ash and horse chestnut

Leaf Prints:

- Lay a sheet of paper on desk or table.
- Mix fairly thick watercolour paint (not top watery).
- Holding the leaf by its stem on scrap paper, paint evenly over the back of the leaf making sure to cover the edges.
- Lay leaf wet side down on good paper, cover with blotting paper and press over the shape of the leaf.

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- Lift blotting paper off carefully.
- Allow to dry.

Leaf Pressings:

- Sandwich leaves between two sheets of paper. Arrange them carefully, so that they don't change position.
- Place weight on top of sheets.
- Leave leaves to dry out. This will take several days or even weeks - depending on the leaves

Ask pupils to talk about which leaves they liked and why. Also discuss which was the most effective method of recording, i.e. which one showed the shapes and textures best.

Use Worksheet 1.1: Leaf Identification Sheet to help identify the leaves that you have collected.

Result:
A collection of leaf drawings that can be used for further analysis, display etc.

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Worksheet 1.1

Leaf Identification Sheet

ENGLISH or PEDUNCULATE OAK
Quercus robur

BEECH
Fagus sylvatica

HAWTHORN or MAY

Crataegus monogyna

SILVER BIRCH

Betula pendula

HAZEL
Corylus avellana

HOLLY
Ilex aquifolium

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2. Picture Frames

Aim: To learn basic surveying skills for observing and contrasting different areas within the reserve. To record visual observations accurately.

Worksheet	Topic	Subject	Key Stage	Attainment Target
Number				
2	Picture Frames	Art	1	1 - 3
		Art	2	2- 5, 1a, b + c
		English English	1 2	En3: 2-3; 1a, c + d En3: 2-5

Equipment:
Sheets of cardboard
Pencils
Binoculars
A4 paper
Coloured pencils
Wooden stakes
Rulers
Clipboards

Method:

- Choose a number of areas in the woods with views of particular interest for the class to survey. Areas can be marked out with wooden stakes.
- Keep a record of location of sites chosen especially if intending to return to them at different times of the year or over a number of years for comparative studies. The map in the Appendix 4 can be photocopied and used for that purpose.
- The class can be divided up to cover the different areas of the woods so that all the results can be compared / contrasted at end of the day's session.
- Provide each child with a cardboard frame to look through in order to focus on a limited area.
- Hand each student a copy of the 'Site Observation Form' (please refer to Worksheet 2.1 – page 11 - 12).
- Each student describes the view with specific reference to the time of year using drawings, photographs and / or written descriptions.
- Compile a file of these descriptions to use as a reference for subsequent visit

Result:

- Descriptive statements illustrating students' knowledge of environment, such as habitats, plants and animals
- Drawings depicting environment
- A file to be used for future reference

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Worksheet 2.1
Site Observation Form

Use this sheet to record observations about sites chosen for activities such as Picture Frames, Soils, and Habitats. Use the map of Judy Woods to cross-reference site locations.

1. Describe the location of the site:

2. Dates / seasons this particular site was visited:

3. What is the weather like?

4. Describe the site:
   - Warm or cold?
   - Windy or sheltered?
   - Light or dark?
   - Damp or dry?
   - Sloping or flat?
   - If on a slope, top of slope or bottom of slope?
   - Facing north, south, west or east?
   - Grassland, meadow
   - Woodland, scrub
   - Wetland

5. Any other particulars?

6. What words describe the way the pupils feel about the site? i.e.
   - bleak
   - magical
   - relaxing,
   - sad
   - wild

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Worksheet 2.1
Site Observation Form
(cont.)

7. Describe any rocks found.

8. List the plants seen.

9. List the creatures found.

10. Drawing of view / site.

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3. Sensory Trail

Aim: To explore different senses.

Work-sheet Number	Topic	Subject	Key Stage	Attainment Target
3	Sensory Trail	Art Art	1 2	1-3 2-3

Equipment:
A number of different objects that have different tactile qualities
Blindfolds

Method:

- Collect a number of objects in the reserve having different tactile qualities.
- Blindfold a student and see if he /she can identify the object by touch only.
- Once the object has been identified, have the students name other objects with a
- similar texture.
- Ask the students to list all the words they know which describe textures.
- Are any of the textures associated only with a particular part of the reserve?
- Are any of the textures associated only with a particular season?
- Discuss as a group expressive words listed below.
- Which are the most appropriate for different textures?

Examples of texture words:
Sticky, spongy, slimy, rough, smooth, powdery, hairy,
prickly, bumpy, squelchy, rigid, damp, feathery, brittle, soft, velvety, crinkly, soapy, jagged, cracked

Result:

Students will have learnt to enhance their sense of touch and how to describe different textures.

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4. Minibeast Hunts

Aim: To safely explore and understand the habitats of invertebrates. To discover the link between the physical features of invertebrates and their habitat. To identify invertebrates through the use of charts and/ or keys. To report on findings using tables, drawings and written descriptions.

Worksheet Number	Topic	Subject	Key Stage	Attainment Target
4	Minibeasts	English	1	En3: 2 - 3
		English	2	En3: 2 - 5
		English	3	En3: 3 –7
		Maths	1	Ma2: 1 – 2: Ma4: 2 – 3
		Maths	2	Ma2: 2: Ma4: 2 – 5
		Maths	3	Ma4: 3 – 5
		Science	1	Sc1: 1-3: Sc2: 1-3
		Science	2	Sc2: 2-3 Sc2: 2-5
		Science	3	Sc2: 3-6

Equipment:
White trays
Magnifying jars
Identification charts
Pencils
Bug hunters
Small nets
Clipboards
Coloured pencils

Method:

The best time of year for minibeast hunts is May until September / October.

Not all minibeast hunts have to involve the capture of creatures. Flying insects such as dragonflies and butterflies can be noted and identified without having to net them.

Collection and release of minibeasts:
Minibeasts are delicate creatures and they should not be picked up in the fingers - a paintbrush, spoon or a bug hunter should be used instead.

Using bug hunters safely:
Make sure child sucks on tube with mesh or cap on it. The correct tube could be labelled green and the incorrect tube labelled red to make it easy to identify the right tube. Keep bug hunters out of

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direct sunlight and don't allow moisture in, as this could kill the delicate minibeasts. Do not capture minibeasts that are too big to fit comfortably in the bug tube at any angle. As if they are too large they may become squashed or stuck in the tube. The minibeasts should be released back to their habitat as soon as they have been identified, as there is not a lot of space within a bug hunter.

There are various methods for searching out minibeasts:

1. Walks:

- Follow a set route through the woods visiting different habitats. Note down all the minibeasts discovered.

2. Leaf Litter and Logs:

- Check fallen leaves and turn over logs to find hidden minibeasts.

3. Beating:

- Choose a tree with low branches.
- Place an upturned umbrella, a white tray or piece of white paper attached to a clipboard under a branch.
- Give the branch a few short shakes.
- Collect as many minibeasts as possible into a bug hunter.

4. Sweeping:

- Find an area of long grass
- Sweep a small net amongst the grass a couple of times to dislodge and collect insects.
- Check the net for minibeasts. If any are present, suck them up into a bug hunter.

What's in a Name?

A successful minibeast hunt will produce a variety of creatures for the children to identify. To help them identify the minibeast it would be helpful for them to understand what characteristics define the different orders.

<u>Knowing Your Bugs from Your Beetles</u>

In beetles, the wing cases join together in a more or less straight line down the insect's back, whereas for bugs, the wing cases broadly overlap. Beetles have biting jaws. Bugs have piercing and sucking tube-like mouthparts. The antennae of beetles have eleven segments, but the antennae of bugs have only four or five. Beetle eggs yield a larva, which once fully developed will pupate inside a chrysalis before it emerges as an adult beetle. Bug eggs yield a nymph, a miniature wingless version of the adult. The nymph becomes ever more adult-like with every skin moult until it reaches maturity.

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Knowing Your Moths from Your Butterflies

Butterflies have knobs at the end of their antenna. Moths do not.

Knowing Your True Flies from Other Flying Insects

Unlike most other insects, true flies, ranging from bluebottles and horseflies to leggy crane flies and tiny midges, have only one set of wings. Their larvae are mainly legless maggots.

Identifying Minibeasts

- Identify as many of the minibeasts as possible using the simple identification chart included in this education pack or your own books and identification charts.
- Fill in the Tally Table to show which minibeasts have been identified and the numbers of each seen.

Investigating Minibeasts:

The study of minibeasts should not be limited to merely identifying them.
For educational purposes the main objective should be to find out more about the creatures themselves.
First of all, have the children describe the minibeast as thoroughly as possible.

Examples of the questions they should try to answer are:

1. Describe its body.
   - What colour is it?
   - Is the body in segments? How many body parts does it have?
   - How big is it?
   - Does it have soft skin or hard?
   - Does it have a shell?

2. How does it move?
   - How does it move?
   - Does it move quickly or slowly?
   - Does it leave a track?

3. Does it have legs? If so, how many?
   - Does it have prolegs as well as true legs?
   - Are the legs segmented?
   - How long are the legs?
   - Are the legs hairy?

4. Does it have a tail? What shape is it?

5. Is the head large or small?
   - What colour is the head?
   - Where are the eyes? How many eyes does it have?

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6. Does it have antennae?

- How long are they?
- Are they segmented?
- Is there a knob at the end of them?
- Are the antennae feathery?

7. Does it have wings?

- How many?
- Are they transparent? Can you see through them?
- What colour are they?
- Do the wings meet in the centre of its back or do they overlap?
- Are there any eyespots? How many?
- What patterns do the veins make?
- How long are the wings?
- Are the wings open or closed when the insect is resting?
- How does it fly? What kind of flight pattern does it have?

8. Where is the mouth?

- What shape is it?
- Does it have large jaws?
- Does it have pincers?
- What does it eat? Is it a detritivore, herbivore or carnivore?

9. Does it have a nose?

- How does it breathe?

Secondly, they should describe the habitat in which the creature was discovered.

Habitat types:

- Light or dark
- Dry or damp
- In the air or on land
- On the ground or burrowing in it
- On live vegetation: flower heads, leaves
- Tree canopy leaves or leaf litter on ground
- In the bark of live trees or on rotting logs or on standing dead tree trunks (called snags)
- In water of ponds, streams

Habitat classifications:

- Grasslands
- Woodlands
- Wetlands

Students can collect data and draw a graph to show the largest and smallest quantities of insects found in a particular habitat. These can then be compared to see which habitats are most and least favourable for invertebrates.

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Worksheet 4.1
Learning About Minibeasts

Here's a few notes about the different minibeasts you might encounter at the reserve which will help students complete Worksheet 4.4 (Investigating Minibeasts), and Worksheet 11.1 (Food Chains).

Snails - found in dark and damp habitats
- coiled or hedge snails: these creatures are herbivores; they have a rasping tongue
- which they use to tear leaves
- garden snail: this creature is a detritivore and eats fragmented organic matter

Worms - find them in dark and damp habitats
- earthworm: this creature is a detritivore and eats fragmented organic matter
- flatworm: this creature is a carnivore; it eats other creatures

Slugs - find them in dark and damp habitats
- garden slug: this creature is a herbivore; it eats vegetation
- great black slug: this creature is an omnivore; it eats vegetation and other creatures

Woodlice - find them in dark and damp habitats
- this creature is a detritivore; it feeds on decaying vegetable matter

Centipedes - find them in dark and damp habitats
- reddish -brown centipede: this creature is a carnivore; it feeds on other creatures
- snake centipede: this creature has 101 pairs of legs and lives in eathworm burrows. It is a carnivore. It paralyses its victims with venom from its poisonous fangs. It eats worms and other minibeasts.

Millipedes - find them in dark and damp habitats
- snake millipede: this creature is a herbivore; it eats vegetation

Spiders - find them in light and dry habitats
- a spider's body is in two parts
- spider: this creature is a carnivore; it eats other creatures
- wolf spider: this is a hunting spider; it runs over bare ground and low-growing plants for its prey. It kills its victim with a poisonous bite then sucks the body juices out of the body.

Harvestman - found in light and dry habitats
- a harvestman's body is in one part
- this creature is a carnivore; it eats other creatures

Caterpillars - find them on grasses and leaves of plants and trees
- these creatures are herbivores; they are fussy eaters. Each species has its own foodplant. If you separate a caterpillar from its foodplant, it will not survive.
- Caterpillars have prolegs as well as three sets of true legs to help it crawl over plant.

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Worksheet 4.1
Learning About Minibeasts (cont.)

Ladybird larva - find them on plant leaves

- ladybird larva: this creature is a carnivore; it eats aphids

Lacewing larva - find them on plant leaves

- green lacewing larva: this creature is a carnivore; it eats aphids

True flies - often these will find you!

- True flies have only one set of wings
- Hoverflies: They may resemble wasps, but they do not sting. Their wasp-like colours may be what protects them from predators. These creatures are herbivores; they eat pollen, nectar and honeydew. However, their larvae are carnivorous. They eat aphids.
- Bluebottles and house flies: These are common around human habitats
- Dung flies: These are found in pastures.
- Craneflies: These creatures are also called daddy -longlegs. The male has feather-like antennae. Look for them in wooded areas

Beetles - found in a variety of habitats

- Beetles generally have horny forewings that meet in a straight line down the middle of their back. The hindwings, if present, are folded away under their forewings.
- 7 spot ladybirds: these beetles are carnivores; like their larvae, they eat aphids. They also take nectar from flowers. They prefer light and dry habitats. They have wings and do fly.
- 22 spot ladybirds: these beetles feed mainly on mildews
- Soldier beetle: this creature is a herbivore; it feeds on plant nectar. It likes light and dry habitats.
- Sexton beetle: this creature is a carnivore; it scavenges on dead animal materials. It prefers dark and damp habitats
- • Violet ground beetle: this creature is a carnivore; it feeds on other insects and their larvae; it is flightless

Bugs - found in a variety of habitats

- Leafhopper: Its young is found in cuckoospit on vegetation. The adult can really hop.
- Shield bugs: these creatures are herbivores; look for them in hedgerows and woodlands on tree leaves

Lacewings: look for them among vegetation; they may be hidden amongst leaves of shrubs and trees

- Adults and larvae are carnivorous. They eat aphids.
- They are weak flyers. When at rest, the wings are folded roof-like over the body. The wings are transparent.

Dragonflies:

- These creatures have two sets of wings. The wings are transparent. Look at their intricate network of veins. At rest, they spread their wings out flat.
- The long-legged creatures have large eyes and short antennae.
- Dragonflies are carnivores; they fly fast and catch insects in mid-air.

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Worksheet 4.1
Learning About Minibeasts (cont.)

Mayflies: Their nymphs live in water; you'll find the adults nearby

- Their wings are transparent.
- The adults do not feed.

Damselflies:

- Weaker-flying than dragonflies. Their wings are transparent.
- These creatures are carnivorous; they take insects from waterside vegetation.

Butterflies, Skippers and Moths: You might see them flying by, nectaring on flowers, laying eggs on foodplants or basking in the sun on walls, stones or leaves.

- These creatures' wings are not transparent. They are covered with scales. Some have scent markings and eyespots. Some colours advertise to predators that these creatures are not good to eat. Some colours make good camouflage.
- The antennae of butterflies have knobs on the end; the antennae of moths do not.
- Shape of these insects gives you a clue to what species they are

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Worksheet 4.2
Minibeast Investigation

Chose one of your minibeasts to investigate in more detail below (books and identification charts can be used):

1. Draw and label a detailed diagram of your minibeast:

2. Where does it live?

3. How does it breathe?

4. What does it eat?

5. Has it any other interesting features, which help it to survive?

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5. Pond Dipping

Aim: To safely explore and understand the habitats and characteristic features of aquatic invertebrates. To learn how these features are adapted to a particular habitat and lifestyle. To gain experience in using identification charts. To describe observations through tables, drawings and written descriptions.

Worksheet Number	Topic	Subject	Key Stage	Attainment Target
5	Pond Dipping	English	1	En3: 2 - 3
		English	2	En3: 2 - 5
		English	3	En3: 3 –7
		Maths	1	Ma2: 1 – 2: Ma4: 2 – 3
		Maths	2	Ma2: 2: Ma4: 2 – 5
		Maths	3	Ma4: 3 – 5
		Science	1	Sc1: 1-3: Sc2: 1-3
		Science	2	Sc2: 2-3 Sc2: 2-5
		Science	3	Sc2: 3-6

Equipment:
Small and large pond dipping nets
Magnifying jars
Identification charts
Pencils
White trays
Jugs
Clipboards
Coloured pencils

Method:

Before beginning a pond dipping session, ask the class to make observations about what they can see in and near the water; look for any animal activity and note what plants are present and any signs of pollution.

Use the net in a gentle stroking action in amongst the vegetation present. Transfer any thing caught to a container of water from the pond, trying not to directly touch any water minibeasts with your hands.

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Use the Worksheet 5.1: Learning About Pond Creatures and Worksheet 5.2: Pond Dipping Identification Chart to identify what was caught.

Have students look closely at the pond creatures, so that they are able to describe their identifying features.

Worksheet 5.3: Pond Dipping Investigation can be used to answer questions about the creatures themselves and the pond they inhabit.

For example, the BMWP Scale for Pollution Tolerance rates the sensitivity of creatures to the presence of pollution. A high score (8-10) means a creature can only live in clean water. A median score of 5 or 6 means a creature is somewhat tolerant of pollution. A low score (1 - 4) indicates that a creature can adapt to the low oxygen levels found in highly polluted water.

Ponds can also be rated by the diversity of the species found in it. A basic rule of thumb is more species can be expected in clean water than in polluted water.

When pond dipping, it is wise to keep carnivores separate from other pond life or you can leave them together if you wish to graphically illustrate the food chain in action!

Result:
Students will have gained a good understanding of freshwater habitats and the creatures that use them.

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Worksheet 5.1
Learning About Pond Creatures

Water flea: It's approximately 1.5 mm in size with more than 4 pairs of legs although they are not visible. It is a herbivore filter feeder; it filters one-celled plants through its legs into its mouth. Its predators are flatworms, phantom midge larvae and greater and lesser boatmen. Habitat conditions: light.

Cyclops: It is approximately 1 mm. It is transparent and has a number or legs, although they are not visible. It is a particle feeder. It seizes particles of food in the water. Habitat conditions: light.

Pond snail: There are different varieties. Shells may be coiled or spiral. They are herbivores. They sometimes can be seen on the surface of plants and stones, eating the algae that grow there. The large pond snail has a lung which can fill up with air and this snail can se seen floating just below the water surface. If it is disturbed, it expels air from it lung allowing the snail to sink to the bottom of the pond. Leeches are predators of snails. Habitat conditions: both light and dark; absent from very acidic water. Tolerant of polluted water; the small pond snail, the common pond snail and the ram's horn snail all score 3 on the BMWP scale for pollution tolerance.

Mussels: These are filter feeders. The water current brings particles of food towards it and the food becomes stuck to its mouth. Habitat conditions: dark.

Leech: It can be up to 33mm in size. It has a segmented body with a sucker at each end. It moves by looping or swimming. It is a carnivore. It preys on other invertebrates. Some suck the blood of water snails, fish and frogs; but some actually eat water snails. Fish prey on leeches. Habitat conditions: dark; tolerant of polluted conditions. Leeches score 4 on the BMWP scale for pollution tolerance.

Flatworm: It can be as small as 6mm or large as 40mm. It is very flat and it glides over stones along the bottom of the pond. It sometimes has horns or eyespots. It is a detritivore and a carnivore; it takes small prey like midge larvae and mayfly larvae whole. Fish prey on flatworms. Habitat conditions: dark. It scores 5 on the BMWP scale for pollution tolerance.

True worm: It looks like a small earthworm. It is a detritivore / decomposer. It eats fragmented organic matter. Its predators are cranefly larvae and damselfly nymphs. Habitat conditions: dark.

Midge larva: It swims by flicking its body in a figure-8 movement. It is a carnivore. It feeds on other midge larvae. Flatworms prey on midge larvae. Habitat conditions: dark; tolerant of the low oxygen levels found in polluted water. It scores 2 on the BMWP scale for pollution tolerance.

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Worksheet 5.1
Learning About Pond Creatures (cont.)

Phantom midge larva: This one is a carnivore. Habitat conditions: light

Bloodworm: This is a particle feeder. It feeds on organic particles found in the mud at the bottom of the water. Habitat conditions: Dark.

Mosquito larvae: Transparent, approximately 10mm. It is a detritivore / herbivore. It is a particle feeder. With its mouth brushes, it whisks tiny plants and organic material into its mouth. Habitat conditions: dark

Mayfly nymph: Look for three varieties: swimming, clinging (crawls rather than swims) and burrowing (lives in sandy burrows). It has a torpedo-shaped body with three tails. It is a herbivore feeding on plant materials such as algae. Flatworms and alderfly larva prey on mayfly larvae. Habitat conditions: light; common in clean water; sensitive to pollution. Most varieties require unpolluted water, scoring the top score 10 on BMWP scale for pollution tolerance.

Damselfly nymph: It has three flattened tails. These tails are feather-like. It moves its body from side to side when swimming. It is a carnivore. It feeds on small invertebrates. Its predators are dragonfly nymphs, alderfly larvae and frogs. Habitat conditions: both light and dark.

Dragonfly nymph: Three short prongs for tails. It crawls. This is one of the top invertebrate predators as it even takes small fish. Habitat conditions: both light and dark. Prefers clean water. Varieties score 6, 8 and 10 on BMWP scale for pollution tolerance.

Stonefly nymph: This one has two tails, which can be quite long. Its gills are not usually obvious and it has to move constantly to ensure fresh water passes over them in order to breathe. It crawls slowly. It is a ferocious predator. Habitat conditions: dark; not tolerant of polluted conditions, you will find this one only in clean water. It scores 10 on the BMWP scale for pollution tolerance.

Great diving beetle larvae: This one has two tails. [It has a segmented body.] It is a carnivore preying on fish, frogs and other pond creatures. Habitat conditions: both light and dark. Scores 5 on BMWP scale for pollution tolerance.

Caseless caddis fly larvae: These do not build cases; they spin webs to filter the water for food. Some are active predators. Habitat conditions: both light and dark. These prefer clean water.

Cased caddis fly larvae: These live in a case of sand, twigs, pieces of leaf. It crawls along the bottom of the pond dragging its case. It is a detritivore / herbivore and possibly carnivore. Habitat conditions: both light and dark. These prefer clean water. Hydropsyche, the ones in a

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silken tube, score 5 and Phryganae, the ones in a case of plant material, score 10 on the BMWP scale for pollution tolerance.

Alderfly larvae: This one has one tail. It has a stout body. Long gills trail from the sides of its body. It is a carnivore preying on the immature forms of mayflies, damselflies, dragonflies, cased caddis and craneflies. These are tolerant of polluted conditions; they score 4 on the BMWP scale for pollution toleration.

Water beetles: Many types all of which have hard wing cases meeting in a line down the centre of their back. Some are crawlers; others are swimmers - often very fast swimmers. All are carnivores.

Great diving beetle: Common in ponds. It can fly to different sites. It has large paddle-like legs making them fast swimmers. It has an oxygen bubble below its wing cases to provide it with air when it dives. It is a carnivore preying on fish, frogs, dragonfly larvae and other pond creatures. Habitat conditions: both dark and light. It scores 5 on the BMWP scale for pollution tolerance.

Whirligig beetle: Black and shiny and less than 7mm long. It spins quite fast on the surface of the water. Habitat conditions: light.

Pond skater: It has a dark brown to black body. Most have short wings or none at all. It skims or skates over the surface of still or slow moving water. It is a carnivore. It uses its front legs to grab insects, which fall on to the water surface and are drowning in the water. Habitat conditions: light. It scores 5 on the BMWP scale for pollution tolerance.

Greater waterboatman: This bug swims on its back using its long back legs as oars. Its belly looks shiny because it carries a bubble of air trapped in its body hairs. When it surfaces, it comes up tail first to renew its air supply. It is a carnivore. It eats tadpoles, freshwater shrimp and hoglice, and water fleas. Dragonfly nymphs and great diving beetle are its predators. Habitat conditions: Both light and dark. It scores 5 on the BMWP scale for pollution tolerance.

Lesser waterboatman: It lives mainly on the bottom. It swims right way up. It is a detritivore, herbivore and carnivore. It feeds on plant debris and microscopic organisms such as water fleas.

Water scorpion: It is fully winged, but it rarely flies. It is very flat. The spine at the rear is a breathing tube through which air is drawn from surface. It creeps slowly over mud and vegetation in shallow water. It is a carnivore. It catches its prey in its front legs. It eats tadpoles and small fish.

Water mite: It has a single body part and 8 legs. It is a carnivore. Leeches prey on them. Habitat conditions: light.

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Worksheet 5.1
Learning About Pond Creatures (cont.)

Water spider: It has a body with two parts. It too has 8 legs. It is a carnivore. It catches creatures on or near the water surface. Habitat conditions: light.

Freshwater shrimp: It swims very quickly on its side. It is a scavenger and decomposer. It lives on decaying matter and organic refuse. The Greater waterboatman preys on it. Habitat conditions: both light and dark. It scores 6 on the BMWP scale for pollution tolerance.

Water Hoglouse: It looks similar to woodlouse. It crawls. It is a decomposer; it feeds on decaying matter. Habitat conditions: It scores 3 on the BMWP scale for pollution tolerance.

Water Skater: It has 14 legs. It is a detritivore; it feeds on fragmented organic matter. Habitat conditions: dark.

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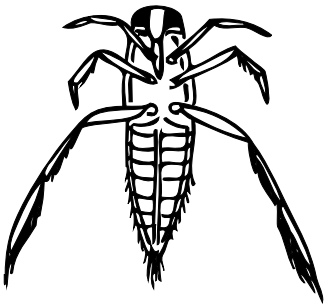
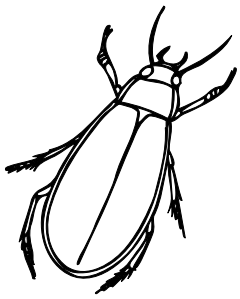
Worksheet 5.2
Pond Dipping Identification Chart

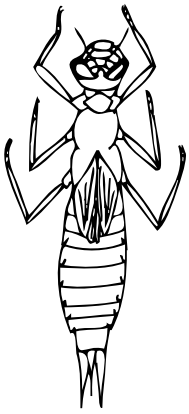


Greater Water Boatman

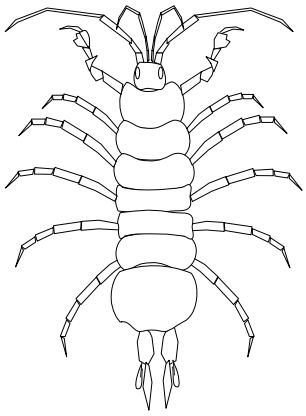
Lesser Water Boatman



Great Diving Beetle



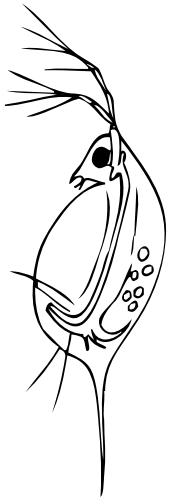
Dragonfly Nymph



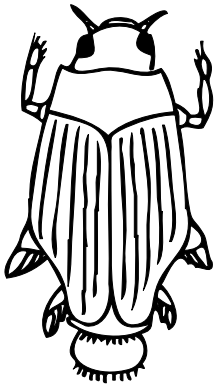
Water Hoglouse

Pond Skater

Water Scorpion



Water Flea



Whirlygig Beetle

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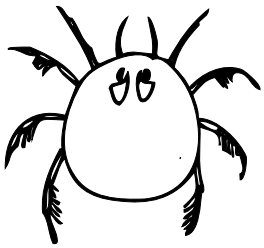
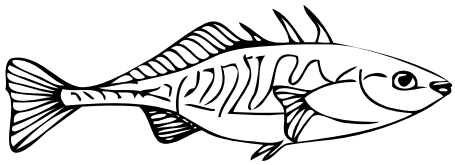
Worksheet 5.2
Pond Dipping Identification Chart (cont.)



Water Mite



Three Spined Stickleback

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Worksheet 5.3
Pond Dipping Investigation

Chose one of your freshwater minibeasts to investigate in more detail below (books and identification charts can be used):

Draw and label a detailed diagram of your minibeast:

Where does it live?

How does it breathe?

What does it eat?

Has it any other interesting features, which help it to survive?

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6. Soil Profiles

Aim: To understand that soil is made up of different components. To use simple methods to distinguish different soil types. To record observations accurately.

Worksheet Number	Topic	Subject	Key Stage	Attainment Target
6	Soils	Science Science Science	1 2 3	Sc1: 1 - 3 Sc1: 2 - 5 Sc1: 3 - 6

Equipment:
Trowel Jug
Water
Labels
Metre rule
Wooden lolly sticks for stirring
Clear jars

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Method:

- Soil samples can be taken to build a profile of the soil horizons (layers) at a single site. Or, soil samples can be taken from different sites for comparison purposes.
- Choose a site or sites well away from the footpaths. Choose from ground beneath deciduous trees, coniferous trees, scrub, meadow, park grassland or wetland. Or compare the soil at the top of a slope with the soil at the bottom of a slope.
- For Health and Safety considerations, do not attempt to take a soil sample from along steep slopes no matter how interesting the soil may appear to students.
- Mark the site(s) on a map. There is a map of Judy Woods in the Appendix which can be photocopied and used for this purpose. Write the name of the site on labels to attach to containers that will be used to hold soil samples.
- Have the students fill in a Site Observation Sheet (Worksheet 6.1) for each site where they work. This information will help them interpret their findings.
- While digging, the students should be encouraged to note their observations, as the soil characteristics are likely to change the deeper they dig. Don't mix soil layers. Keep soil in different piles.
- Always backfill holes where soil samples have been taken before leaving the site. Remember to refill in the opposite order in which the soil was taken.

Soil Horizons Profile

- Here the students will be looking at the soil found at different depths at a single site.
- They will need to be observant as they work down. The surface layer is the debris layer.
- This is followed by layers of topsoil and subsoil before reaching bedrock. The depth of each layer varies from site to site. Each layer should have different characteristics.
- Topsoil is generally dark because it contains organic matter. Students may find soil organisms in this layer, such as earthworms and centipedes. These should be noted under 'Other observations' on first soil sampling worksheet. Subsoil is usually lighter in colour. If there is no change in colour between the topsoil and subsoil layers, the topsoil is not fertile, as it is low in organic matter. Note: species-rich wildflower meadows grow on nutrient-poor soil.
- Before starting to dig, decide on which two layers the students intend to sample. Young children can do the debris layer and topsoil layers; where as older students can dig deeper and compare topsoil and subsoil and possibly take a look at the bedrock. Begin slowly digging a hole straight down into the earth. Soil should be piled along the edge keeping layers separate. Use the metre rule to record how deep each layer is and the depth sample is taken from.
- Depending on how many soil tests the class is planning to do. Take a sufficient amount of soil for the sample and place it in labelled container(s).

Contrasting Soil Profiles

- To have a controlled scientific experiment, samples from different habitats should be taken from similar layers, i.e. take both from debris, topsoil or subsoil layer.
- Samples should be placed in correctly labelled containers.
- Soil sample results can be recorded in the form of a bar graph to show their composition

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Analysing Soil Samples

- Colour, smell and texture are basic tests for analysing soil samples.
- To try the soil composition test, put samples of soil into clear jars so that each one is approximately half full. Then add enough water in each jar to nearly fill it. Stir contents well, then leave to settle for at least an hour before making any observations. Check again later to see what changes, if any, have occurred.

Recording Observations

- Record observations of colour, smell and feel of two samples on the form provided. Use the key to draw conclusions about soil samples taken.
- Results of the soil composition test can be entered on the Soil Sampling 2 form. A key is provided for interpreting what has been discovered.

Soil Colours and their Significance:

Dark soils: These soils have a lot of humus (decomposing organic matter) in them making them fertile; they are also the spongiest - holding moisture and heat better. These soils warm up the quickest.

Light-coloured sandy soils: These soils are infertile, and slow to warm up.

Yellow clays: These are slow to warm up. Minerals are fully oxidised.

Red clays: Minerals are partially oxidised.

Bluish-grey clays: Minerals are locked up.

Blue mottling: Found on the soil surface indicates stagnant waterlogged soil. This soil may have an unpleasant smell.

List all ingredients, which make up soil:

Soil Smells and their Significance:

- A sweet earthy smell suggests the presence of slime moulds, which destroy pathogenic organisms in the soil.
- A sour smell suggests waterlogged soils. Poor drainage and heavy rainfall can cause carbon dioxide to get trapped in the soil causing acidification.
- Rich smell suggests a fertile soil.

Soil Type Identification Key:

The main components of soil are mineral particles, humus, water and air.

The size of the mineral particles found in the soil sample is a key to the soil type. Clay has the smallest mineral particles; silt has larger particles, and sand, the largest. Soil that has a mixture of the three are called loams.

Another factor to consider in identifying soil type is cohesiveness, i.e. whether lt sticks together.

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- Sandy soils have the largest mineral particles. These particles are clearly visible and feel very gritty. If the soil is very sandy, one can actually hear the sound of the grains rubbing together. Sandy soils will not stick together of form a ball. Sandy loams are more cohesive.
- Clay soils have the finest mineral particles. They have the least amount of air in their structure. Clay soil has an almost plasticine-like quality. When wet, it feels sticky and it can be rolled into a ball that changes shape when pressed. Clay feels heavy. When rolled and smoothed, there's a glaze on its surface that causes it almost to shine.
- Silt soils are often found in river valleys. Mineral particles are about 25x larger than those found in clay soils. These particles feel silky or soapy to the touch. These soils tend to compact easily. Silt loams may show imprints when pressed with a finger

Key for Soil Composition Test:

- Stones, gravel and sand will settle first.
- Silt will settle next.
- Clay will take much longer to settle.
- Leaves, grass, twigs, fur and feathers will float to the top.

Result:

Students will have learnt to classify different soil types and why they exist in the first place.

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Worksheet 6.1
Site Observation Form

1. Describe the location of the site.

2. The date and season this particular site was visited.

3. What is the weather like?

4. Describe the site:

- Warm or cold?
- Windy or sheltered?
- Light or dark?
- Damp or dry?
- Sloping or flat?
- If on a slope, top of slope or bottom of slope?
- Facing north, south, west or east?
- Grassland, meadow
- Woodland, scrub
- Wetland

5. Describe any rocks found.

7. List any creatures found.

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Worksheet 6.2
Soil Sampling 1

You will have two samples of soil taken from two different sites

Source of Two Samples

Sample 1	Sample 2
Horizon:	Horizon:
Depth:	Depth:

What colour is your soil - Black/ Brown/ Red/ Grey/ Blue or a combination of these?

Sample 1	Sample 2

Describe how your soil samples smell:

Sample 1	Sample 2

Roll the soil between your fingers - how does it feel? Rough/ Gritty/ Sticky/ Smooth/ Silky or a combination of these?

Sample 1	Sample 2

Other observations:

Sample 1	Sample 2

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Worksheet 6.3
Soil Sampling 2

The soil composition test can be done in the classroom at school.

Half fill a glass jar with a soil sample. Add enough water to nearly fill it. Stir or shake then leave to settle for at least an hour.

Is anything floating on or to the surface?

Sample 1	Sample 2

Is the water clear or does it contain particles of soil?

Sample 1	Sample 2

Describe what has sunk to the bottom of the jars:

Sample 1	Sample 2

Any other observation?

Sample 1	Sample 2

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7. A Day in the Life of…

Aim: For students to learn about their community, and how it has changed.

Work-Sheet Number	Topic	Subject	Key Stage	Attainment Target
7	A Day in the Life of…	English English English History History	1 2 3 2 3	En3: 2 – 3 En3: 2 – 5 En3: 3 – 7 4 – 5 4 - 7

Equipment:
Paper
Pencils – lead and coloured

Method:
The changing face of Wyke/ Woodside etc is one way to help students understand how history is relevant to them. Students should be encouraged to talk about in what ways their lifestyles and opportunities reflect the state of the local area today, i.e. economically, environmentally.

Have them try to picture what the area looked like.

Then have them try to picture what the area will look like in the future:

- What do they see as the future for Judy Woods? Will it be protected as a recreational and environmental resource? Or, will there be economic pressure which will favour development instead?

Have the children assume roles typical of the time. Let them explore in words or drawings what life would be life for them then.

- What is the economic climate of the time? How prosperous would they be?
- What would their workweek be like? How many hours, how many days, shiftwork?
- What would the housing be like?
- What level of hygiene could be expected?
- What clothes and shoes would they wear?
- What form of transport would be available?

Result:
The students will have gained an experience of how life has changed in their community and will have a written record to show their thoughts and feelings.

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8. Bird Surveys

Aim: Increase powers of observation. To use identification keys to recognise wildlife. To report on what has been seen in table form. To record observations accurately.

Worksheet Number	Topic	Subject	Key Stage	Attainment Target
8	Bird Surveys	Maths	1	Ma2: 1 – 2; Ma4: 2 – 3
		Maths	2	Ma2: 2 – 3; Ma4: 2 – 5
		Maths	3	Ma4: 3 – 5
		Science	2	Sc1: 2 – 5; Sc2: 4 – 5
		Science	3	Sc1: 3 – 5; Sc2: 4 – 5

Equipment:

Paper	Counter
Pencils	Clock

Method:

See the children in a part of the woods popular with birds and with feeding stations. Make sure they stay quiet or else they will scare the birds away.

Bird Table / The Pond:

- Before you start, agree on the time allotted for the survey. The duration of the survey will depend on the age of the children involved, for example, 10 minutes for young children up to 30 minutes for older children.
- Watch as the birds come to the feeding station. They may come singly, in groups of single species or in mixed groups.
- Using the Bird Identification Chart (Worksheet 8.1) provided, count the number of each type of bird visiting the bird table or coming to the pond.
- Have the students present their findings on what they see. A simple table is provided for this purpose - see Worksheet 8.2.
- To check students' understanding of the table, ask them to answer a set of questions. Sample questions are listed on Worksheet 8.2.
- To do a comparative study, visit at different times of the year to see if the make-up of the bird population changes with the season.
- What educational opportunities would be available?
- What's the environment like? Air quality? Wildlife?

The exercise can be in the form of class discussions.

Result:

The students will have gained knowledge of the birds that inhabit their local environment.

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Worksheet 8.1
Bird Identification Chart

Coal Tit *(Parus ater)*

Blue Tit *(Parus caeruleus)*

Great Tit *(Parus major)*

Chaffinch (male)
(Fringilla coelebs)

Chaffinch (female)
(Fringilla coelebs)

Bullfinch (male)
(Pyrrhula pyrrhula)

Blackbird (male)
(Turdus merula)

Song Thrush
(Turdus philomelos)

Wren
(Troglodytes troglodytes)

Jay
(Garrulus glandarius)

Robin
(Erithacus rubecula)

Nuthatch
(Sitta europaea)

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Worksheet 8.1
Bird Identification Chart (cont.)

Tawny Owl
(Strix aluco)

Greater Spotted Woodpecker (male)
(Dendrocopos major)

Green Woodpecker
(Picus viridis)

Coloured pictures of birds reproduced with kind permission from the RSPB website.

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Worksheet 8.2a
Bird Survey 1

Type of bird	Number of birds	% of birds that visited
Coal Tit		
Blue Tit		
Great Tit		
Chaffinch		
Bullfinch		
Blackbird		
Song Thrush		
Wren		
Jay		
Robin		
Nuthatch		
Greater Spotted Woodpecker		
Green Woodpecker		
Other		
Total		

- Which type of bird visited the bird feeder most often?
- Which bird visited the least?
- How many birds visited in total?
- What percentage of birds that visited were House Sparrows?

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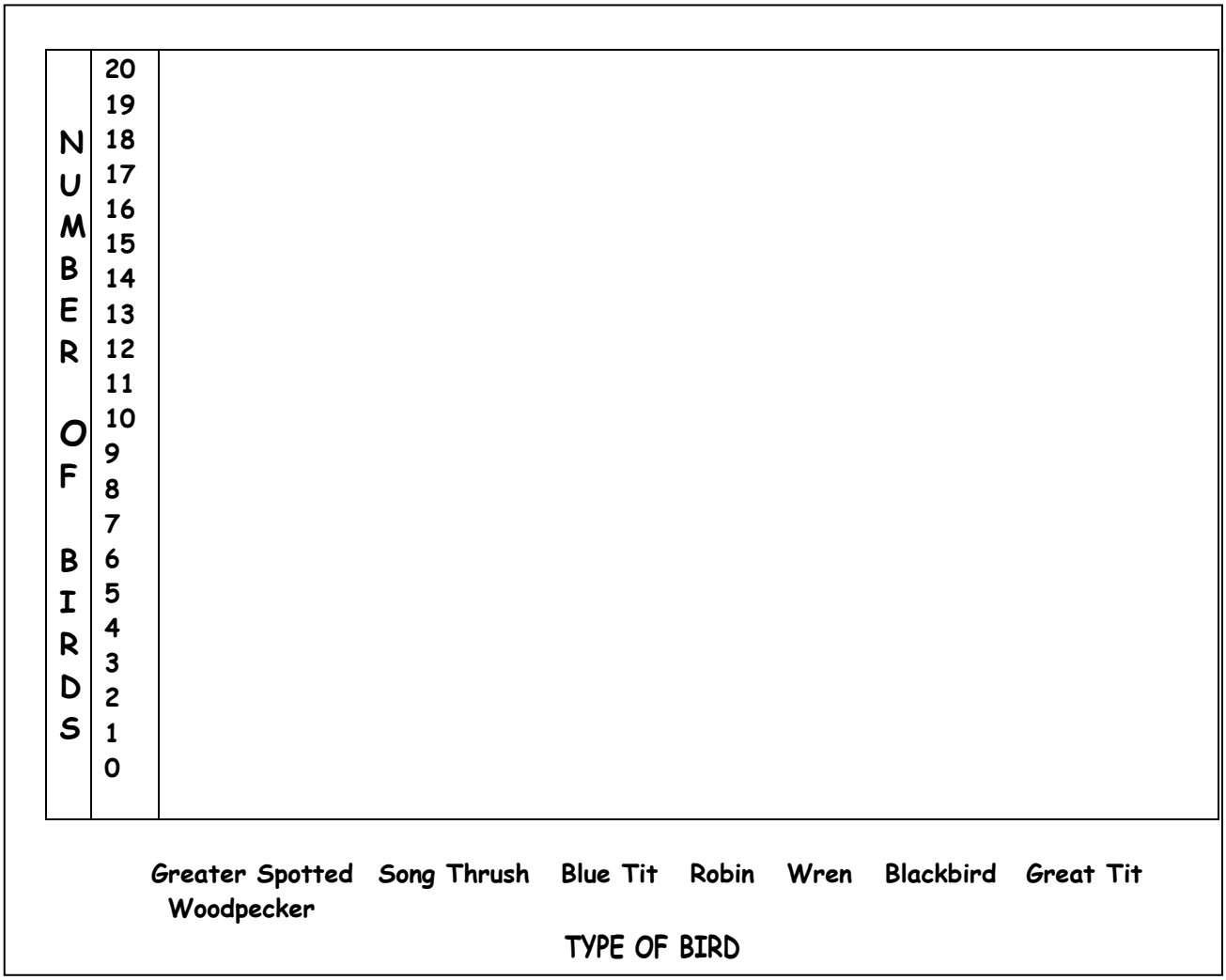
Worksheet 8.2b
Bird Survey 2

Type of bird	Number of birds	% of birds that visited
Total		

Use this information to fill in the following bar chart:



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9. Create a Creature

Aim: Show an understanding of how creatures are a product of their environment.

Work-sheet Number	Topic	Subject	Key Stage	Attainment Target
9	Create a Creature	Art Art Science Science	2 3 2 3	2 – 5 3 – 5 Sc2: 2 – 3 Sc2: 3 – 4

Equipment:

Paper
Pencils – lead and coloured
Card
Wax crayons

Method:

- Create a creature – this may be a sculpture, collage or a drawing.
- Discuss how animals adapt to the environment that they live in.
- Ask some of the students to create a creature that would thrive at Judy Woods.
- Ask other students to create a creature that could only succeed somewhere else.
- When finished, the students explain why they have given their creature certain features.

Look at how animals adapt to the environment that they live in. Think of a number of ways that animals adapt and what that entails. Please refer to Worksheet 10 – page

Result:

Children will have used their knowledge of existing creatures and their imagination to design a new creature that is ideally suited to a particular environment/ habitat.

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Worksheet 9.1
'Create a Creature' Adaptation Chart

Adaptation	Feature				
Movement	Walking Swinging Digging	Running Crawling	Swimming Climbing	Flying Sliding	Paddling Slithering
Diet	Carnivore	Herbivore	Omnivore	Fish	
Skin	Skin	Feathers	Fur	Scales	
Climate	Hot Warm	Cold	Wet	Dry	Cool
Shelter	Under- ground Cave	Water Nest	Leaves Rocks	Trees Web	Set
Survival	Hunt Cold blooded	Prey Claws	Predator	Camou- flage	Warm blooded

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10. Life Cycles

Aim: For students to learn how creatures change through their life cycle.

Worksheet Number	Topic	Subject	Key Stage	Attainment Target
10	Life Cycles	Science	1 2 3	Sc2: 1 – 2 Sc2: 2 – 3 Sc2: 3

Equipment:
Paper
Pencils

Method:
Minibeast Hunts and Pond Dipping activities focus pupil's attention on the identification of creatures found in a particular habitat and how they are adapted to it. Many of the creatures found, especially when pond dipping, will be the immature form of adults. This provides a starting point for the discussion of life cycles.

A variety of activities can be offered to encourage pupils to link the identification of immature forms with the identification of adult forms.

This activity can be limited to one of the following or encompass them all:

1. Pond-based larva to pond-based adult
2. Pond-based lymph to adult with flying capability
3. Pond-based tadpole to frog/toad

Examples of each are provided on Worksheet 10.1

Methodology

1. Life cycles begin with eggs/spawn. Spawn will be the easiest to discover. Older children can be trained to search for eggs or butterflies/moths, ladybirds, etc. Otherwise, reference books or computer software can be consulted to draw them.
2. When pupils are looking at immature form, if possible, ask them if they can see the same creature in adult form. Point it out to them if necessary.
3. Lead discussion on terms such as, tadpole, larva, nymph, instar, moulting, pupa/chrysalis, metamorphosis.
4. The simplest activity would be to draw pictures to show the link between the two forms. Pictorial representations could be in the form of diagrams, posters or mobiles.

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5. Older or more advanced students can study the changes to creatures and make conclusions about them.
6. Have children complete Worksheet 10.2 so that they have an understanding of how creature exists in both its immature and adult form. Encourage pupils to realise what must be involved in changing from one form to another.
7. Findings for different creatures can be compared to learn which creatures undergo the most radical or complex changes.

Result:

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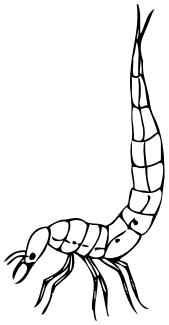
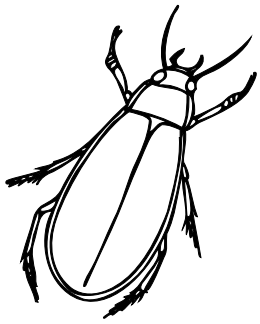
Worksheet 10.1
Immature and Adult Forms

1. Pond-based Larva to Pond-based Adult

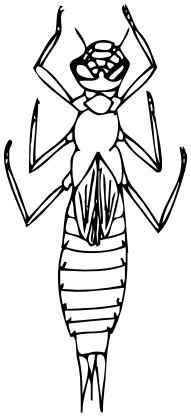


Larva

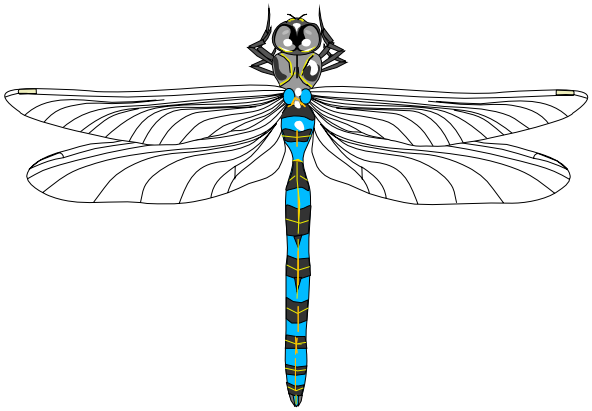


Great Diving Beetle

2. Pond-based Nymph to Adult with Flying Capability



Dragonfly Nymph

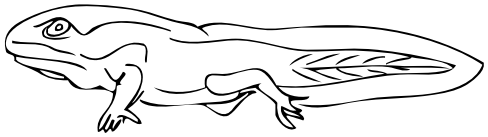


Dragonfly

3. Pond-based Tadpole to Frog or Toad

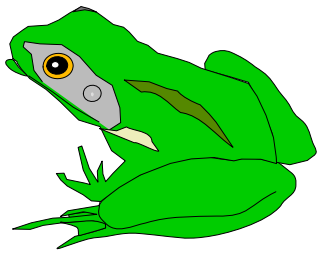
Stage 1

Stage 2



Stage 3

Tadpole



Frog

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Worksheet 10.2
Life Cycles

Draw a creature in both its immature and adult forms.

Habitat in which it lives:

Immature	Adult

How does it breathe?

Immature	Adult

What does it eat?

Immature	Adult

Findings:

_____

_____

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11. Habitats

Aim: To learn basic survey skills by looking at the different natural areas in the woods, i.e. grasslands, meadows, wetlands, woodlands and recording the plants and animals associated with them. To describe how these habitats in Judy Woods differ.

Work-sheet Number	Topic	Subject	Key Stage	Attainment Target
12	Habitats	Geography Geography Science Science	2 3 2 3	2 – 5 3 – 7 Sc1: 2 – 5 Sc1: 3 - 5

Equipment:

Paper	Pen or pencils
Index cards	Coloured pencils

Method:

A Definition of Habitat: A place in which a particular plant or animal lives. Often in the wider sense referring to major assemblages of plants and animals found together.

Some of the activities outlined in earlier worksheets, such as Leaf Trees, Picture Frames, Minibeast Hunts and Soils, can be included as part of this project so that students can develop a fuller understanding of the inter-relationship between the soil, plants and animals that create the habitat they see at Judy Woods.

Have the students catalogue the plants and animals they find in the woods.

- Vegetation index: to describe plants found
- Animal index: to describe creatures found

An index entry should include:

- Location of find
- Habitat of find
- Date of find
- Description of find
- Drawing of find
- Identity of find

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Please refer to Worksheet 11.1 – page 51.

The cards can be kept in a box for reference. The information on these cards and the observations drawn from the other activity worksheets suggested above can then be used by the students to write up an analysis of the constituents of a particular habitat.

If allowed to visit the woods at different times of the year, students will be able to note what changes take place and their analysis of a particular habitat can take that into account.

Once students have described different habitats, they can compare one habitat with another. They will be able to make conclusions on what the principal differences are between the habitats at Judy Woods, line graphs can be used to compare the variety of and quantities of species that live in different woodland habitats.

Result: To have produced a catalogue of the biodiversity of Judy Woods. To have defined habitats by the soil, plants and animals associated with them. To have compared the distinguishing features of different habitats.

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Worksheet 11.1
Animal/Vegetation Index Card

Description:-	Drawing:-
Name of Pupil: _____ Name of Find: _____ Location of Find: _____ Habitat of Find: _____ Description of Find: _____ _____ Identity of Find: _____	

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12. How Green is My Wyke ……

Aim: To express feelings about local area in a poem

Work-sheet Number	Topic	Subject	Key Stage	Attainment Target
13	How Green is My Wyke ……	English English English Geography Geography	1 2 3 2 3	2 - 3 2 – 5 3 – 7 2 - 5 3 – 7

Equipment:
A4 paper
Pen

Method:

Class discussion about Wyke could include learning about the etymology of its name.

The name Wyke is derived from the following Saxon origin:

Wyke = name for Witch

Discussion could then turn to how Wyke has changed over the centuries with specific reference to the scenery and the environment.

Have students write their own poems describing what it is like and how they would like it to be.

Result:
Students will have learnt about the significance of place names and been able to express in written words how they feel about the area that they live in.

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Appendix 1: Health & Safety

. A risk assessment should be undertaken for each exercise.

. A first aid kit and first aider should be available at each outside session.

. May be useful to take some antiseptic liquid that can be used to clean hands and for emergency use.

Using Tools:

- Before the task carefully explain to the children the work that will be undertaken and how to use the tools.
- The children should feel able to ask, if they are unsure.
- Make sure before the session that there will be adequate supervision for the number of children involved.

Other Potential Hazards:

- When it is hot make sure that the children have adequate drinks, so that they do not become dehydrated. Also that they wear suitable clothing to avoid heat exhaustion, sunstroke and sunburn.
- When it is cold, ensure that the children are warmly clothed, to avoid hypothermia.
- Make sure that they children are aware that they should avoid any type of contact with dog faeces, as it can cause blindness.

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Appendix 2: Acknowledgements:

Sal Bullimore, Community & Environmental Programme Manager, Royds Community Association

Mary Twentyman, Treasurer of The Friends of Judy Woods and Local Historian

Irene Moore, local resident, for typing up some old work sheets.

Nina McCormack, volunteer, for making some adjustments.

Sue Thompson, Royds Community Association for typing up some of the amendments at the beginning.

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Appendix 3: References:

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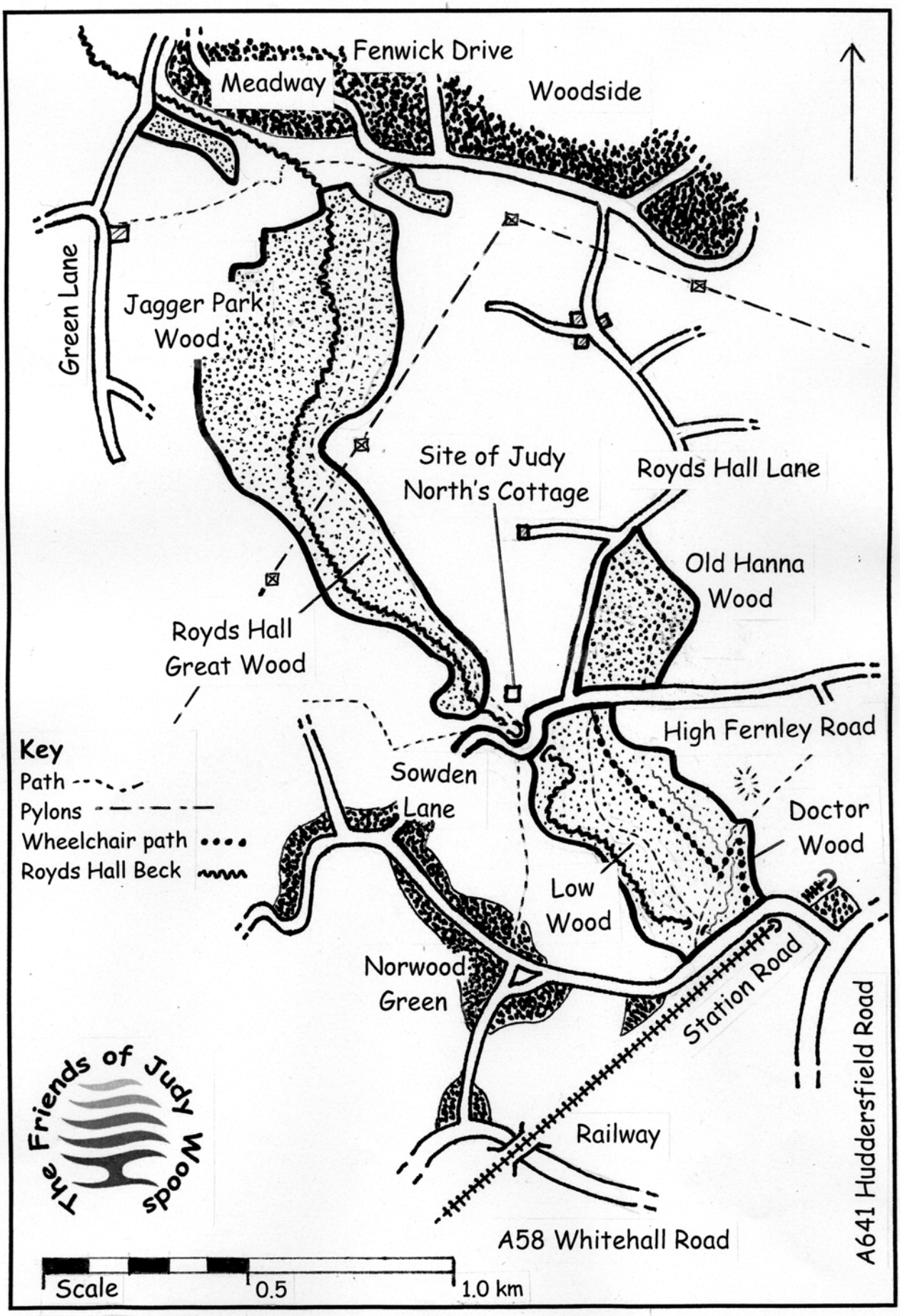
Appendix 4: Map of Judy Woods



Judy Woods

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