

Habitats KS2

Spring 2016 - Swans Y4

Arrive about 9.30

Intro to MG at entrance – what do they remember? Safety

(9.45 to 10.15)

Walk round part of first field and identify different habitats:

wood (copse), stream, grassland (notice board), wetland, hedge, scrub, treestump(fungus), pond.

discuss characteristics of each site as we get there finishing at pond 2

Divide into 2 groups:

(10.20 to 10.55 and 11.00 to 11.35)

1. Pond dipping – identify pond life including some plants
2. Wildflower grassland – 'bug' hunting, sheep, hay, wild flowers.

School to supply clipboards, pencils, hand lenses.

1. Ponds

We provide equipment and identification keys etc.

Will cover adaptation to aquatic environment, invertebrates and anything else found! and plants. Information sheet with guided questions for adults leading the group so no need for children to spend time recording.

2. Wildflower grassland

Information sheet supplied for adults with spaces for recording extra children's answers to questions.

Will cover soil, light, air, water. How many grasses, what flowers, bug hunting and why this sort of grassland is better for biodiversity.

Bees and pollination, ant hills, and ridge and furrow. Grassland management.

Wildflower grassland information sheet

This sheet to be used by accompanying adult for children's guided answers.
Questions shown in **bold**

Inkberrow Millennium Green is a LWS –Local Wildlife Site - for its remnant lowland neutral grassland classified as MG5. These wildflower grasslands were once common but most have now been lost. Worcestershire has more remnants of this sort of grassland than any other county.

Look at new board

How and why was this grassland lost?

Ploughed up.

Built on,

Re seeded with single grass species good for cattle etc.

Sprayed to get rid of 'weeds'

What do we mean by good grassland?

Farmers view v conservationists view

Farmer	Nature lover
<i>fertile, rich grass good for fattening animals</i>	<i>Lots of different flowers and grasses</i>
<i>no flowers (weeds)</i>	<i>No fertilizer added.</i>
	<i>Managed for hay crop or grazed</i>
	<i>Not ploughed for a long time</i>

Some farmers have an agreement to look after this sort of grassland – it is called Stewardship.

Why is it good to have lots of different grasses and other flowers?

Good for bio-diversity

lots of flowers – lots of insects feed on them. Other insects and birds feed on insects

Looks nice for people to enjoy. Bees need pollen and they pollinate other crops.

Look around at the grassland habitat. What does the grass need to grow well?

Light, soil, air, water/rain

What made the humps?

Ant hills

What is ridge and furrow?

How the land was ploughed in Medieval times

Board near pond – look at on changeover

Both these are characteristic of this sort of old wildflower grassland.

Wildflower grassland information sheet

This sheet to be filled in by accompanying adult from children's guided answers.

Inkberrow Millennium Green is a SWS – Special Wildlife Site - for its remnant lowland neutral grassland classified as MG5. These wildflower grasslands were once common but most have now been lost. Worcestershire has more remnants of this sort of grassland than any other county.

How and why was this grassland lost?

What do we mean by good grassland?

Farmers view v conservationists view

Farmer	Nature lover

Some farmers have an agreement to look after this sort of grassland – it is called Stewardship.

Why is it good to have lots of different grasses and other flowers?

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Recording sheet for Invertebrates

Name	Tick if found	How many legs (none, 6,8,lots)	Anything you want to say about it
Slug			
Snail			
Worm			
Woodlouse			
Millipede			
Centipede			
Spider			
Harvestman			
Insects			
Crane fly			
Grasshopper			
Ant			
Lacewing			
Bluebottle / fly			
Aphid			
Frog hopper			
Butterfly			
Beetle			
Hoverfly			
Ladybird			
Shield bug			
Moth			
Earwig			
Bee			
Wasp			

Ponds information sheet

Ponds - care is needed going down banks. We will use the bigger pond for this habitat study. Children need to treat the creatures that they catch from the pond with care, make sure they have plenty of water and please ensure that when the dipping trays are emptied they are tipped gently back into the water and not dropped in from the top of the bank.

What sort of habitat is a pond? - Watery or Aquatic

Plants in and around the pond form part of the habitat in which the animals live.

What do plants need to grow? - water, air, light, soil
Obviously water is there - more than in other habitats

Where is the soil? Banks and mud in bottom.

How do plants get their nutrients/food? Through their roots.

Some plants grow on the banks – point out examples
Some root in the bottom but some float and get their food from the nutrients in the water – look when they are pond dipping.

How do the water plants get light? Most send leaves up to float on surface eg the pond fringe (like a small water lilly) and some are just under it eg hornwort.

How do they get air? From leaves at the surface but some can get what they need from the water and give out oxygen (may be able to see little bubbles around the hornwort) – these are important for keeping the water oxygenated which helps the animals which live in the pond.

What do the animals that live in the pond feed on? Plants and each other!

Could you live in a pond? They are adapted to breath under water with gills or come up to breath (eg newts) every so often or live on surface (eg pond skaters)

What do you expect to find? Explain mostly invertebrates but may find tadpoles. Also that many are stages in the **life cycle** and that they may emerge from the pond eg dragonflies and midges.

POND DIPPING

warn of danger and not to poke each other with nets handles!

Work in two's or three's.

Each group should have a tray, net, viewer/lens, spoon, small container/pot, recording form, pencil, key to pond animals.

Pond recording form

place a tick (or the number found) in the box next to each animal

Invertebrate name	Tick or number	Any comment
Pond snail		
Ramshorn snail		
Midge larva		
Water flea		
Leech		
Freshwater hoglouse		
Freshwater shrimp		
Pond skater		
Water boatman		
Diving beetle		
Beetle larva		
Water scorpion		
Dragonfly nymph		
Mayfly nymph		
Damselfly nymph		
Other		
Vertebrates		
Tadpole		
Frog		
Frog spawn		
Newt		
Newt tadpole		
Other		