

Habitats KS2

Intro to MG at entrance

Look round first field and identify different habitats – wood (copse), grassland, hedges, scrub, stream, wetland, pond.

Stop by **Flower-rich Grassland information board**

Grassland management.

'Do' wildflower grassland information sheet (as below) with adults recording children's answers. This can lead onto *'recognise that environments can change and that this can sometimes pose dangers to living things'*:

Farming – intensive arable, high yield, use of fertilisers, soil nutrients used up, break down of soil structure, and herbicides and pesticides, loss of wild plants (monoculture) and insects (**bees** affected – important pollinators, plant pests such as aphids are bird food)

Gardens – fences and hedgehogs,

Buildings – loss of habitats for wildlife, but we need more houses.....Don't use special places where threatened species live eg great crested newts

Roads and railways – good for business and quicker journeys but general loss of habitat eg ancient woodlands and HS2

Litter – small mammals can get trapped in cans and bottles, animals may eat plastic....

Move on to pond 2 and 'do' pond information sheet (as below).

Then divide into 2 groups:

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? etc.

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. Children use keys and complete tick sheet of what they found.

2. Wildflower grassland

Information sheet supplied for adults with spaces for recording extra children's answers to questions. We provide equipment and identification keys etc.

Will cover soil, light, air, water. How many grasses, what flowers, bug hunting and why this sort of grassland is better for biodiversity. Children will use keys to identify invertebrates and complete tick sheet. Also wildflower sheet if time.

Timing

Intro at entrance and discuss habitats	9.30 - 9.40
Go via new bridge to Wildflower grassland by info board	9.45 - 10.00
By pond 2	10.00 - 10.10
2 groups for pond dipping and grassland habitats	10.15-10.45 and 10.50-11.20
Summing up	11.25 - 11.35

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 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. Do they remember visit of Debs Bull from Wildlife Trust and the seeds they sowed?

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

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?

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

What made the humps?

What is ridge and furrow?

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

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			
Cranefly			
Grasshopper			
Ant			
Lacewing			
Bluebottle / fly			
Aphid			
Froghopper			
Butterfly			
Beetle			
Hoverfly			
Ladybird			
Shield bug			
Moth			
Earwig			
Bee			
Wasp			

Ponds information sheet

Ponds are very low at the moment so extra care is needed going down banks and getting stuck in mud. Although we will use the bigger pond for this habitat study it is not ideal for either children or the creatures that live in the pond – 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		