



# Farming, Wildlife and your School Grounds.

## Teacher's notes.

Teaching pupils about habitat creation in their school grounds is valuable from both an educational and environmental perspective.

When pupils have the opportunity to carry out nature studies it allows them to understand the importance of conservation and how human actions can both negatively and positively impact wildlife. Pupils will appreciate that even small efforts such as building bug hotels or placing bird feeders in their school grounds can have a positive impact and attract various species to the area. These activities promote sustainable thinking and nurture a caring mindset for the environment.

This resource uses farms as a starting point to understand habitat creation through real world examples. Farmers work hard to produce food as well as care for the environment. Seeing these examples allows pupils to make connections and start a conversation about sustainability, particularly in relation to food production. Pupils will learn how they can adapt the strategies farmers use and apply them to their school grounds.

LEAF (Linking Environment and Farming) works with farmers and educators to help young people experience sustainable farming, food production and environmental care first-hand and to make these connections part of everyday learning.

To find out more, visit [www.leaf.eco/education](http://www.leaf.eco/education)

## Lesson Plan.

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| <b>Lesson Title:</b>        | <b>Farming, Wildlife and Your School Grounds</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Year Group</b><br>5 and 6 |
| <b>Curriculum</b>           | <ul style="list-style-type: none"> <li>Geography, Science, PSHE</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |
| <b>Additional links</b>     | <ul style="list-style-type: none"> <li>Eco Schools and John Muir Awards</li> <li>Climate Action Planning</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |
| <b>Learning objectives:</b> | <ul style="list-style-type: none"> <li>To understand that farmers grow our food</li> <li>To understand that farmers look after and improve the wildlife habitats on their farms</li> <li>To demonstrate how habitat protection and creation used in farming could be applied on a smaller scale in the school grounds</li> </ul>                                                                                                                                                                                                                                                                                                                                                                    |                              |
| <b>Resources checklist:</b> | <p>PowerPoint presentation, "Farming Wildlife and Your School Grounds" - provided</p> <p>Aerial photos of school</p> <p>Plan/map of school</p> <p>Coloured pencils/markers</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                              |
| <b>Programme:</b>           | <p><b>Starter:</b> Using PowerPoint images discuss the following with your pupils,</p> <p>What do farmers do?</p> <p>What types of farms are there and what food do they produce?</p> <p>What habitats are on farms?</p> <p>How can farmers improve the biodiversity of their farm?</p> <p><b>Main:</b></p> <p>Ask pupils to map existing habitats in their school grounds. There are good links to these activities on the National Education Nature Park website <a href="https://www.educationnaturepark.org.uk/">https://www.educationnaturepark.org.uk/</a></p> <p>Using examples seen on farms can the pupils plan how their school grounds could be improved to encourage more wildlife?</p> |                              |



### Plenary:

Summary and discussion. Plan future activities to enhance wildlife in the school grounds.

### Safety Note

Consult school's policy on working in the school grounds. Don't forget hand washing if children have been handling natural materials and soil.

### Extension Ideas

- As part of the school grounds survey you could include plant and insect surveys - Citizen science projects like the OPAL surveys can support this <https://www.imperial.ac.uk/opal/surveys/>
- Further study of habitats, adaptations and food webs.
- Pupils create their own base map by measuring and surveying the school grounds.
- Map work skills extended to include grid references.
- Invite organisations like Wildlife Trusts, RSPB or Bat groups to help create more habitats with the pupils.
- Work out actual costings to put ideas in place.
- Practical tasks: Make bird feeders, plant flowers, build bug hotels and nest boxes.
- **Go on a farm visit to see how farmers are protecting and enhancing wildlife and biodiversity.**

### Supporting notes for PowerPoint.

#### Slide 1 – Farming and wildlife.

70% of land in the UK managed by farmers, it's easy to see what an important role they play in helping to protect and encourage wildlife and habitats. The work farmers do affects how the countryside looks and how it functions, both for food production and conservation.

#### Slide 2 - What do farmers do?

What do the pupils think? Are any of them connected to farms? Have any of them been to a farm?



### Slide 3 – Farmers grow our food.

If you have eaten some food today it will have come from a farmer somewhere in the world.

In the UK we have different types of farms. Some farmers specialise in one type of farming, others have a mixture of enterprises.

Do the pupils know what food we get from each of these farms?

*Images:*

Arable - farming for crops such as wheat, oats, barley and oilseed rape.

Poultry – rearing hens for meat or eggs. There are two types of chicken, those that are good at laying eggs (layers) and those that grow well to produce meat (broilers)

Livestock – animals reared to produce meat. Sheep, goats, pigs and beef cows.

Dairy – cows that produce milk.

Fruit and Vegetables - Large scale production of fruit and veg.

### Slide 4 – Farmers also look after the wildlife on their farms.

A farmer's business is based on producing a product to sell, but many farmers strive to do this in a wildlife friendly way. Taking a wildlife friendly approach can benefit the farm.

What can the pupils see in this picture of a farm? What type of farm is it? What habitats are on the farm?

A good habitat will provide food, shelter and water for the creatures that live there.

*Image: Mixed arable and livestock farm.*

### Slide 5 – Walls and hedges.

Hedges and walls are wildlife corridors linking larger habitats. They also provide great sources of food and shelter for insects, small mammals and birds.

For the farmer, walls and hedges provide secure boundaries between fields and shelter for livestock.

*Images: mature hedge, drystone wall, robin and stoat.*



### Slide 6 – The edges of fields.

This farmer has added to the wildlife value of their farm by allowing long grass and shorter grass to grow alongside the crop. Different lengths of grass attract different creatures. Voles and shrews like long grass; owls like to eat voles and shrews! Many of our food crops require pollination by insects so providing habitats for pollinators is important.

These strips of grass are called headlands. They provide homes for beneficial insects that help reduce the pest insects in the crop. They also act as buffers to help reduce run off or drift of products applied to help the crop grow.

*Images: Grass headland, rabbits, ladybird, field mouse*

### Slide 7 – Wet Areas and Ponds.

These are fantastic habitats for insects, mammals and birds, providing a wealth of food supplies and shelter for creatures adapted to live in and around water.

For the farmer, ponds provide water for animals and crops. Some farmers save huge lagoons of water for crops.

*Images: Wetland area, ponds, kingfisher, frog*

### Slide 8 – Trees and Woodlands.

Are another super habitat for wildlife. As well as the creatures that live in the trees, rotting wood provides a home for minibeasts and fungi.

For the farmer, trees and woodland provide shelter for animals, wind breaks for crops and a supply of timber. They also help with drainage and flood control.

*Images: woodland, mature in field tree, tawny owl, deer*

### Slide 9 – Grazing land and hay meadows.

Dung beetles live in the droppings from farm animals and they in turn attract insect-eating birds and mammals. A hay meadow with a good variety of plants and flowers will also attract lots of different insects, birds and mammals.

Grazing land provides food for livestock. In hay meadows the grass grows long in the summer. It is then cut and dried, making hay. The farm animals eat hay in the winter when the grass is not growing. Having grazing animals as part of a crop rotation can improve the quality of soil. The animal dung adds nutrients and helps to improve soil structure.

*Images: hay meadows, buzzard, ox eye daisy with a pollinator, butterfly*

### Slide 10 – Areas created for wildlife.

Many farmers use less productive parts of their farms as special places for wildlife. For example, a wet corner of a field or a steep slope that makes cultivation tricky, may be a good place to plant wild bird food mixes. Headlands can also be sown with special seed mixtures for wildlife e.g. pollen and nectar mix.

Tussocky grass strips in the middle of crops are called beetle banks: these provide homes for beetles and other beneficial insects that eat the pest insects in the crop. They also provide more corridors to link up habitats around the farm.

Some farmers are using agro-forestry as a way of farming in a wildlife friendly way. The crops are grown in strips between rows of trees. This system can also work for grazing livestock between trees.

*Images: grass headland, beetle banks and pollen and nectar area.*

### Slide 11 – Design your wildlife friendly school.

How could pupils use some of these ideas in their school grounds? Good aerial images can be found on [www.magic.defra.gov.uk](http://www.magic.defra.gov.uk) or pupils can draw maps of the areas they would like to develop.

Just like a farmer you must start by recording on your base map the features you already have. You might have lots of space for wildlife or you may think you haven't got much. Either way, with a bit of thought there are always ways of attracting more wildlife.

After you have worked out what is already there you can then start to plan features to connect larger habitats – your wildlife corridors.

Finally think of any new features you would like to add.

### Slides 12, 13 and 14 - Some suggestions

Imagine school has just won the lottery and you can spend as much money as you like. Really let the children use their imaginations (meadows on roofs, fish tanks instead of windows, bird boxes all around the roof, swimming lakes and huge willow labyrinths are some of more expensive suggestions children have come up with!)

After the initial sharing of ideas, you may like to work out some costs or try a few low-cost DIY solutions so the children can do something for the wildlife at school straight away.



*Images: Plant hedges and trees, wildflower meadows, plants for pollinators, long grass areas. Make minibeast hotels, hedgehog houses and bird feeders. Maybe even build a pond.*

*But don't forget to allow space for you all to enjoy the wildlife, include places to sit and places to explore and play.*

### **Planning a farm visit**

To inspire your pupils, you could take them to a farm to learn more about what farmers are doing to farm with nature.

You may have organised farm visits for your pupils before, but if you feel you need a little bit of help have a look at this guide on the Countryside Classroom website,

**“How to plan curriculum linked and safe visits to farms: A handbook for teachers”**

<https://www.countrysideclassroom.org.uk/resources/1416>

This document should give you all the information you need. But, if you would like further support, don't hesitate to contact your LEAF Education Specialist who will be more than happy to help you <https://leaf.eco/about-leaf/meet-the-team>

To find out more about LEAF and how we work with farmers and schools please visit [www.leaf.eco/education](http://www.leaf.eco/education)