

EXPLORING OUR WILD ISLES: GRASSLANDS

ACTIVITY GUIDE FOR SECONDARY TEACHERS
AND YOUTH GROUP LEADERS



SAVE OUR
WILD
ISLES

AGE 11 – 16 YEAR OLDS





INTRODUCTION

Have you ever taken the time to think about all the amazing landscapes we have in the UK?

Despite being small, the combination of weather, climate and ancient rock formations we have in the UK means that we are lucky enough to have some of the most diverse and beautiful landscapes on Earth.

From our high craggy mountains, boggy moorlands, rushing rivers, dense green forests, tranquil lakes, wildflower meadows, rocky coastlines and wild seas, each of these unique landscapes is packed full of different habitats with a huge variety of plants, animals and fungi.



Because of this, the UK is home to some amazing natural wonders: spectacular murmurations of starlings, dense woodlands sprinkled with bluebells, rutting deer on frosty mornings, glittering blue damselflies dancing over streams, damp forest floors exploding with mushrooms – it's all here, right on our doorstep!

But despite all of this, we have not been protecting our precious nature. We have farmed intensively across almost all of our land, we have expanded towns and cities putting pressure on surrounding countryside

habitats, built miles of roads and trainlines carving up wild habitats and polluted our waters with plastics and pesticides. The UK is now one of the most nature depleted countries in the world and many of our unique habitats are now under pressure. Over the last 50 years we've had huge losses in numbers of wildlife. More than one in seven native species are now facing extinction and more than 40% are in decline including some of our most iconic species like bumblebees and hedgehogs.



GETTING TO KNOW GRASSLANDS

Grasslands cover over 40% of the UK's land - our boggy moorlands, colourful wildflower meadows, areas of farmland, and even grassy verges on the edges of roads. In the distant past, our grasslands existed because they were grazed by herds of wild cows, horses and deer. Over thousands of years, however, they have developed alongside farming and other human activity. Now, they rely on human management to stop them developing into woodland over time – including through the grazing of farmed herbivores like cows and sheep, or cutting back for hay.

These 'semi-natural' grassland habitats are extremely important, and are so much more than just grass. Healthy grasslands are home to a huge variety of plants such as heather, buttercups, knotweed and cowslips, important pollinators like bees and butterflies, tiny rodents like field voles and harvest mice, reptiles like common lizards and slow worms (not a worm or snake but a legless lizard!), and predators such as weasels, stoats, hovering kestrels and silent short-eared owls. Grasslands are also habitats for some of the UK's most precious species including fritillary wildflowers, orchids, large blue butterflies and adders, the UK's only venomous snake!

Grasslands are not just important for our biodiversity, they also provide us with a nature-based solution to climate change. Through complex relationships between grassland plants, fungi and microorganisms beneath the surface, grasslands can suck up huge amounts of carbon dioxide from the atmosphere and lock it up into the soil. Species-rich grasslands can also capture and store pollutants, reducing their impact on our air and fresh water.

But unfortunately, we have not been protecting our UK grasslands. Activities like crop spraying, ploughing, use of fertilisers, overgrazing of animals, building new roads and trainlines, expanding towns and cities, planting conifer trees for wood and human-induced climate change, are all putting our UK grassland habitats under tremendous strain.

We've lost 97% of our wildflower meadows since 1930 and over 90% of lowland grassland habitats. Most of the grassland habitats in the UK have been heavily changed by intensive farming and other land management practices. These modified grasslands are home to much fewer species, compared to the abundance of species that live in the areas of semi-natural grassland habitats we have left.

As more than 70% of our land in the UK is farmed, the biggest opportunity we have to help our grasslands is to support nature-friendly farming methods. We know that most farmers care deeply about nature, recognise the value it holds and want to make space for it to thrive. But at the moment, government policies don't provide enough support for farmers to manage their land for nature and to balance this with the need for affordable, healthy and sustainable food. The good news is, we can change that.

By protecting and restoring our vital grasslands, and supporting farmers to do the same, we can help tackle climate change and create a better future for the many species that depend on our grasslands to survive – including us.

Grasslands facts

- Grasslands cover 40% of the UK's landmass.
- We have lost 97% of our wildflower meadows since 1930.
- 40% of pollinating insects are now at risk of extinction.
- All the world's machair is found in UK and Ireland, it's one of the world's most important types of grassland.



WHAT'S IN THIS GUIDE

This guide is designed to be used by teachers and youth group leaders and contains activities suitable for students aged 11 – 16 (Key Stage 3-4, Third-Fourth Level). These activities are all designed to encourage students to connect with UK nature, explore the biodiversity of their local green spaces and learn more about grassland ecosystems. We recommend that you use these activities in combination with our Save Our Wild Isles presentation.

- Activity 1:**
Flower power
- Activity 2:**
Nature inspired art
- Activity 3:**
Persuasive letter writing
- Activity 4:**
Beautiful butterflies
- Activity 5:**
Saving our grasslands
- Activity 6:**
Nature-friendly careers

Sustainable development goals

The activities in this guide link to the following Sustainable Development Goal:



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.



ACTIVITY 1 FLOWER POWER

Time: 1 hour

(but will require time outside of this for preparation and completion)

Curriculum links: England: English, Maths, Science, Scotland: Literacy and English, Numeracy and mathematics, Sciences, Wales: English, Mathematics and numeracy, Science and technology, Northern Ireland: Language and literacy, Mathematics and numeracy, Science and technology.

UK wildflower meadows can be home to over 150 different grasses and flowering plants and can contain up to 45 species per square metre. This activity asks students to think about the different layers of a grassland and wildflower meadow.

You will need

- Wildflower seeds (native to the UK).
- Spades (if earth needs clearing).
- **Seek app** and/or **Our Planet LAB Toolkit**.

Instructions

Survey your school grounds

1. Walk around the school grounds and identify areas where there are already wildflowers or where wildflowers could be planted (either in the ground or in planters).
2. Divide the class into small groups and assign each group to one of the areas identified.
3. Each group can survey their area using the Seek app or the Our Planet LAB Toolkit.
4. Discuss the results of your findings in class. How many species of plant and animal did they find? Was it different in different parts of the school grounds?



seek 
by iNaturalist

Seek app

You can download the free Seek app by iNaturalist on a phone or tablet to unlock a whole world of grasslands nature on your doorstep! From buttercups to orchids and field voles to common lizards and everything in between, Seek's smart image recognition technology will identify what you've found and encourage you to discover the hidden natural treasures in your local surroundings.

www.wwf.org.uk/discover-nature-seek-app

Planting

5. Discuss where would be the best place/s to plant your wildflower seeds.
6. Scatter the seeds - account for any eaten by birds in the meantime.
7. When your seeds have grown, you can use the Seek App or Our Planet LAB Toolkit to run a second survey. Did you find new species of wildlife and/or more of the same? Compare results from the two surveys and draw up conclusions.

ACTIVITY 2

NATURE INSPIRED ART

Time: 40 minutes

Curriculum links: England: Art and design, Scotland: Technologies, Wales: Expressive arts, Northern Ireland: Arts.

Nature can inspire us in many ways. If you look closely, you will see an abundance of shapes, sizes, colours and textures in everything.



You will need

- Art materials.
- Items from nature or photos.
- Optional: magnifying glass or microscope.



Instructions

1. Ask students to go outside and look for inspiration in nature in their school grounds.
2. They can use an object (be careful what you take from nature) or a photo of their chosen plant or animal.
3. Magnifying glasses or microscopes can be useful to see the detail of an object.
4. Ask students to sketch, sculpt, paint or model their chosen focus, either in its entirety or a section that is particularly interesting i.e. the wings of a fly, the veins of a leaf.
5. Create a display of the artwork to showcase the amazing nature in your school grounds!

Questions

- What inspired students to choose the object they chose?
- Is there a reason their object might be that shape, colour, texture? i.e. camouflage, attracting prey or a mate.



ACTIVITY 3 PERSUASIVE LETTER WRITING

Time: 40 minutes

Writing a letter can be a great way of letting someone know how you feel about nature or asking for someone's help to protect it. It can also help you practise your persuasive writing skills! Use the template below to write your own persuasive letter to help make your school grounds or local grassy area better for nature.

Who should I write to?

- Head teacher.
- Class teacher or group leader.
- Family member.
- MP/MS/MSP.
- Local council member.
- Local business owner.

Key topic words

Nature	Planting	Habitats
Grass	Flowers	Protect
Soil	Improve	Biodiversity
Wild	Pollinators	Bug hotel
Butterflies	Insects	Bees
Planet	Earth	World

Grassland facts

- The UK has lost over 97% of our wildflower meadows since 1970.
- Nearly 1,400 species of pollinators and other insects rely on plants in wildflower meadows for their survival.
- There are over 250 species of bee in the UK.
- In June, one acre of UK wildflower meadows can contain over 2.3 million flowers.
- UK wildflower meadows can be home to over 150 different grasses and flowering plants and can contain up to 45 species per square metre.

Curriculum links: England: English, Scotland: Literacy and English, Wales: English, Northern Ireland: Language and literacy.

What am I persuading them to do?

There are lots of things you could try to persuade someone to do to help local grassland nature. Here are a few ideas:

- To plant an area of wildflowers in your school field or local community space.
- To plan a lesson or activity on making a bee hotel or wildflower seed balls.
- To ask ground maintenance staff to leave an area of grass long for wildflowers and plants to grow.
- To put plants and wildflowers outside shops and businesses to create a street long wildlife corridor.
- To not mow the lawn for one month in May.

Persuasive words and phrases

Insist	Firstly	Finally
Urge	Furthermore	Likewise
Ask	Surely	Certainly
Plead	Moreover	Again
Encourage	I argue that...	For example...
Important	You can see that...	For instance...
Crucial	Without a doubt...	Because
Vital	Secondly	So that



LETTER WRITING TEMPLATE



Address of who you are writing to:

Your address / school address:

Date

Introduction – explain your opinion, with an opening sentence that hooks the reader.

Dear _____

I am writing to you _____

Make your point – here you need to list your reasons to explain your opinion. A good place to use scientific facts and other evidence to support your points.

Ending – summary of your main point/s and any action you would like them to take.

Yours sincerely

ACTIVITY 4 BEAUTIFUL BUTTERFLIES

Time: 30 minutes

Curriculum links: England: Art and design,
Scotland: Technologies, Wales: Expressive arts,
Northern Ireland: Arts.

Butterflies are not only beautiful to look at, they also help with pollinating flowers. The UK has lost around half of its overall butterfly numbers since 1976 and half of the UK's butterfly species are at risk of extinction.

You will need

- Bamboo cane.
- Recycled bottle top.
- Recycled wrapping paper or bright coloured thin card.
- Colouring pens.
- Laminator.
- Tack/drawing pin or similar.
- Cotton wool.
- Sugar and water syrup.
- Blu Tack.
- **Seek App** or butterfly spotter guide.



Instructions

1. Create a large flower shape with your card or paper and laminate. Decorate with pens if needed.
2. Place the bottle top in the middle of the laminated flower shape and push the tack through both the bottle top and the flower shape so the point of the tack comes through.
3. Place a small ball of Blu Tack at one end of the bamboo cane to keep the top from falling off.
4. Push the laminated shape and bottle top point first into the Blu Tack.
5. Place your feeder in full sun, add a small amount of cotton wool and drip some of the sugar syrup onto the cotton wool.
6. Observe how many and what types of butterflies you attract. Use the Seek App or a spotter guide to help.
7. Top up the feeder regularly with sugar syrup and change the cotton wool as needed.

Some butterflies also like fruit like oranges, grapefruits, strawberries, peaches, and apples. Chop them up and put them in a hanging feeder or table. Don't forget to keep it clean.



Top Tip!

Attract more butterflies by making your feeder colourful! Blues and yellows are especially good.

ACTIVITY 5

SAVING OUR GRASSLANDS

Time: Flexible

Curriculum links: England: English, Scotland: Literacy and English, Wales: English, Northern Ireland: Language and literacy.

Grasslands rich with species were once found throughout much of the UK, creating a haven for wildlife. Today our grasslands look very different. The fields we see in the countryside may still look green and vibrant, but many have lost much of their former nature. Most species of farmland birds are declining, 97% of our wildflower meadows have been lost since the 1930s, and 40% of pollinating insects are now at risk of extinction.



You will need

- Powerpoint or materials to make posters.
- Access to the internet for research.

Instructions

1. Put students into groups to create a presentation which should cover the following:

Section One – give an overview of the current state of UK grasslands (including statistics).

Section Two – Highlight three threats to grasslands (e.g. use of chemical fertilisers and pesticides, conversion to intensive farming, water pollution, habitat fragmentation).

Section Three – Propose three ideas as solutions to these threats and how to help our grasslands (for example, support farmers to set aside more land for wildlife, farmers and scientists working together towards nature-friendly farming).

2. Students deliver their presentations to the class.

Questions

- Which of the suggestions do you like, and which do you think would work?
- Which of the suggestions do you think won't work and why?



ACTIVITY 6

NATURE-FRIENDLY CAREERS

We can all do what we can to give nature a helping hand in our own homes, gardens and communities. However, we may be able to have a bigger impact on nature through the job we have after we finish education. We can aim to have a 'sustainable career', which means making choices about what we do that are good for the planet as well as good for us.

Industries and big organisations can have a much bigger impact – for good or bad – on a landscape than a single person, and we can make career choices that allow us to be a force for nature in our working lives.

1. Think, pair and share activity (5 mins)

- Consider the issues that are affecting grasslands and list the human activities that are causing problems for wildlife or helping it to thrive.
- What jobs can you think of that are linked to the problems or solutions?

Some ideas that can be introduced and discussed are listed below.

Examples: Farmer, golf course, local authority planner, beekeeper, gardener, groundskeeper, any business with lots of land, property developer, planner, politician, chef, gardener, stable manager, politician.

2. Whole class discussion (10 mins)

- Go round and hear from each pair, building up a list of the jobs that could influence the health of grasslands.
- Pick on one or two and discuss the ways they have impact, and what choices they can make about how they go about their job.



3. Think, pair and share activity (5 mins)

- Ask each pair to select one or two of the jobs on the list (you may wish to allocate them to ensure the pairs do not all discuss the same).
- What choices do we think someone following this career could make that could ensure they are doing good for nature?

4. Whole class discussion (10 mins)

Feedback from pairs.

See if the choices highlighted can be grouped at all.

Key points to emphasise:

- Choosing to work for a company that is acting responsibly (making sure they understand their impact on nature and then seeking to minimise it).
- Changing a company while working for it by ensuring it prioritises nature and reduces impact.
- Innovating (finding new ways to do things or exploring new technologies to do a job without impact on nature).
- Doing good (e.g. conservation).

For more information and free resources on sustainable careers visit

www.sustainable-futures.org.uk

USEFUL LINKS AND RESOURCES



LearnToLoveNature grasslands activities
www.wwf.org.uk/learn/love-nature/grasslands

Our grasslands information sheet
[Our_Planet_ourgrasslands.pdf \(wwf.org.uk\)](#)

Our grasslands presentation
[Our_Grasslands_Slides.pptx \(live.com\)](#)



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Schools' Wild Challenge Minibeast safari activity
(experience nature)

**Minibeast Safari | School Wild Challenge -
The RSPB**

Make a mini meadow
[make-a-mini-meadow.pdf \(rspb.org.uk\)](#)

Make equipment to catch your minibeasts?
[make-a-sweep-net.pdf \(rspb.org.uk\)](#)
[make-a-pooter.pdf \(rspb.org.uk\)](#)
[make-a-bottle-bug-catcher.pdf \(rspb.org.uk\)](#)



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