



## What does the future look like for cattle farming?

### About Born Free

An international wildlife charity, we work tirelessly to ensure that all wild animals, whether living in captivity or in the wild, are treated with compassion and respect, and able to live their lives according to their needs. We seek to have a positive impact on animals in the wild and protect their ecosystems in perpetuity, for their own intrinsic value and for the critical roles they play within the natural world.

### Born Free's Great Debate

Our free programme provides teachers with tools to engage school students in meaningful debates about key wildlife or environmental topics. Students will gain knowledge about the debate topic, plus extensive skills to research, frame and deliver an argument.

Debating encourages research, reasoned argument and application of facts, and ingrains 21<sup>st</sup> Century Skills – 12 abilities today's students need to succeed in their careers during the Information Age (namely critical thinking, creativity, collaboration, communication, information literacy, media literacy, technology literacy, flexibility, leadership, initiative, productivity and social skills).

Armed with these skills, young people are more equipped to reduce their impact on biodiversity and the environment by making simple lifestyle changes, and encouraging others to follow. By engaging young people on this topic, we also hope they can develop the skills necessary for each individual to have a voice.

Topic 3: Farming and Wildlife, is linked to the KS2, 3 and 4 National Curriculums in Science, Biology, Chemistry, English, Geography, Citizenship and SMSC. See full list, learning objectives and content notes below. Full resources will be available as a free download via [our website](#) from August 2021.

### Why is livestock farming contentious?

Globally, 15 million square miles are currently used for livestock farming (including meat and dairy) – this is 39% of habitable land on Earth. Yet, animal products only account for 18% of global calory intake and 35% of protein intake<sup>1</sup>. Furthermore, according to the United Nations Environment Programme, one third of global cereal production goes towards feeding livestock. If we used these calories as human food, we could theoretically feed an extra 3.5 billion people<sup>2</sup>.

### What has this got to do with wildlife?

According to the 2019 IPBES\* Global Biodiversity Assessment, 'nature and its vital contributions to people, which together embody biodiversity and ecosystem functions and services, are deteriorating worldwide at a rate unprecedented in human history'. This loss is caused by five main drivers, including changes in land use, climate change and pollution, all of which are interconnected with agriculture and livestock production.

If we, as human beings, do nothing, we are looking at a continuation of the current catastrophic decline in wildlife from which our ecosystem may never recover, with significant implications for wildlife, habitats and people alike.

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<sup>1</sup> [Half of the world's habitable land is used for agriculture – Our World In Data](#)

<sup>2</sup> [Global Agriculture – Meat and Animal Feed](#)

\* Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

## What will Born Free's Great Debate deliver?

Lessons	Learning Objectives	Content	KS2 Curriculum Links	KS3 Curriculum Links	KS4 Curriculum Links
<b>Land conversion &amp; deforestation</b>  (One hour)	<ul style="list-style-type: none"> <li>To understand how animal agriculture has changed over time</li> <li>To understand the impact that cattle farms have on different habitats, including rainforests.</li> </ul>	<ul style="list-style-type: none"> <li>A brief introduction into the history of cattle farming</li> <li>Looking at how demand for beef and dairy products can lead to deforestation and desertification</li> <li>Look into the production of animal feed.</li> </ul>	Science <ul style="list-style-type: none"> <li>Living things and their habitats (Yr. 4)</li> <li>Evolution and inheritance (Yr. 6).</li> </ul>	Biology <ul style="list-style-type: none"> <li>Relationships in an ecosystem</li> <li>Inheritance, chromosomes, DNA and genes.</li> </ul>	Biology <ul style="list-style-type: none"> <li>Ecosystems</li> <li>Evolution, inheritance and variation.</li> </ul>
<b>Pollution &amp; climate change</b>  (One hour)	<ul style="list-style-type: none"> <li>To understand some of the wider environmental costs of intensive cattle farming</li> <li>To understand how cattle farming contributes to climate change.</li> </ul>	<ul style="list-style-type: none"> <li>A look at how intensive cattle farming contributes to the release of greenhouse gases and therefore climate change</li> <li>How intensive cattle farming of cattle can lead to pollution, including runoff and ocean eutrophication</li> <li>To look at the possible impacts that cattle farming can have on earth's natural cycles, such as the nitrogen cycle.</li> </ul>	English <ul style="list-style-type: none"> <li>Reading – comprehension</li> <li>Writing – composition</li> <li>Writing – vocabulary, grammar and punctuation</li> <li>Spoken language.</li> </ul>	Chemistry <ul style="list-style-type: none"> <li>Earth and atmosphere.</li> </ul>	Chemistry <ul style="list-style-type: none"> <li>Earth and atmospheric science.</li> </ul>
<b>Impacts on biodiversity</b>  (One hour)	<ul style="list-style-type: none"> <li>To understand the effect that intensive cattle farms can have on the biodiversity and the health of the planet</li> <li>To understand that different farming techniques can have different impacts on biodiversity and the wider environment.</li> </ul>	<ul style="list-style-type: none"> <li>A look at the different global habitats and wildlife that are under threat from cattle farming and cattle feed production</li> <li>Find out about wildlife species who are suffering as a result of intensive cattle farms</li> <li>Meet experts in the field and hear what they have to say.</li> </ul>	Geography <ul style="list-style-type: none"> <li>Locational knowledge</li> <li>Human and physical geography.</li> </ul>	Geography <ul style="list-style-type: none"> <li>Locational knowledge</li> <li>Place knowledge</li> <li>Human and physical geography.</li> </ul>	Geography <ul style="list-style-type: none"> <li>Locational knowledge</li> <li>People and environment: processes and interactions</li> <li>Physical geography: processes and change</li> <li>Human geography: processes and change</li> <li>Place: processes and relationships</li> <li>Formulating enquiry and argument.</li> </ul>
<b>Researching the issue</b>  (Homework)	<ul style="list-style-type: none"> <li>To analyse a range of arguments</li> <li>To summarise and organise the material to support arguments with factual detail</li> <li>To justify viewpoints.</li> </ul>	<ul style="list-style-type: none"> <li>The class can be divided into three groups, one advocating for each of the following views of the future:               <ul style="list-style-type: none"> <li>Plant-based only diets</li> <li>Small-scale subsistence cattle rearing in rewilded areas</li> <li>Continue to use existing cattle farming methods, without any changes.</li> </ul> </li> <li>The lesson aims to offer the students the opportunity to research and plan their arguments in groups.</li> </ul>	Citizenship <ul style="list-style-type: none"> <li>Developing confidence and responsibility and making the most of their abilities</li> <li>Preparing to play an active role as citizens</li> <li>Developing good relationships and respecting the differences between people</li> <li>Breadth of opportunities.</li> </ul>	Citizenship <ul style="list-style-type: none"> <li>The way in which citizens work together to improve their communities, including opportunities to participate in school-based activities.</li> </ul>	Citizenship <ul style="list-style-type: none"> <li>The different ways in which a citizen can contribute to the improvement of his or her community, to include the opportunity to participate actively in community volunteering, as well as other forms of responsible activity.</li> </ul>
<b>The Great Debate</b>  (One hour +)	<ul style="list-style-type: none"> <li>To speak confidently and effectively by participating in formal debates and structured discussions</li> <li>To listen and learn from others.</li> </ul>	<ul style="list-style-type: none"> <li>To hold a student debate either in class time or to a wider school audience.</li> </ul>	SMSC <ul style="list-style-type: none"> <li>Encourage respect for other people</li> <li>Ensure that all pupils within the school have a voice that is listened to</li> <li>An understanding of how citizens can influence decision-making</li> <li>Consider the role of extracurricular activity, including any run directly by pupils, in promoting fundamental British values.</li> </ul>	SMSC <ul style="list-style-type: none"> <li>Encourage respect for other people</li> <li>Ensure that all pupils within the school have a voice that is listened to</li> <li>An understanding of how citizens can influence decision-making</li> <li>Consider the role of extracurricular activity, including any run directly by pupils, in promoting fundamental British values.</li> </ul>	SMSC <ul style="list-style-type: none"> <li>Encourage respect for other people</li> <li>Ensure that all pupils within the school have a voice that is listened to</li> <li>An understanding of how citizens can influence decision-making</li> <li>Consider the role of extracurricular activity, including any run directly by pupils, in promoting fundamental British Values.</li> </ul>
<b>Action planning – where do we go from here?</b>  (One hour and/or homework)	<ul style="list-style-type: none"> <li>To make sustainable choices</li> <li>To take actions to reduce human impact on local and global environments.</li> </ul>	<ul style="list-style-type: none"> <li>What does sustainability mean?</li> <li>Identify the way in which individual choices and actions can make a difference</li> <li>Develop a take responsibility action plan</li> <li>Share your outcomes, plans and ideas via #BFGreatDebate.</li> </ul>			
<b>KS3/4 extension opportunities</b>  <b>Cattle welfare &amp; water use</b>	<ul style="list-style-type: none"> <li>Look closer at different farm types (including intensive, calf-at-foot and free-range), and the welfare implications of these methods of cattle production</li> <li>Research how supply and demand can drive prices and availability of different products, and change farming practises</li> <li>Review the water cycle and calculate the volume required for the farming of both livestock and plant based agriculture</li> <li>Research the changing patterns of fresh-water availability and drought.</li> </ul>				