

# LEARN TO LOVE NATURE

## BIODIVERSITY EDUCATOR GUIDE

### INSTRUCTIONS

1. Direct students to watch the [Our Planet One Planet episode](#) on YouTube.  
**OR** discuss the Earth's habitats on a class call and show some of the different biome tours on ourplanet.com to fuel a class discussion on the characteristics and importance of diverse ecosystems to people, the wildlife and the planet. Tips for using videos to prompt constructive discussions can be found in the [Our Planet Their Future Educator's Guide \(PDF\)](#).
2. Direct students to watch '[What is Biodiversity?](#)' on ourplanet.com, narrated by Sir David Attenborough.
3. Direct students to watch '[How to Save Our Planet?](#)' on ourplanet.com, narrated by Sir David Attenborough.
4. Direct students to look at the information under 'One Planet' on our [explorable globe](#). Students should then use the information in the video above and collected from the interactive globe ('How did we get here' to 'Managing a Planet') to complete the questions and tasks below. Suggested answers are included in this version.

1. Use the 'What is Biodiversity' video to help you answer these questions.

**Define the term 'Biodiversity':**

Biodiversity is a term that represents the total variety of all life on Earth.

2. Why is greater biodiversity a good thing?

The more biodiversity, the more secure all life on Earth is – including ourselves.

3. Complete the examples below to demonstrate how diversity of life benefits our everyday lives:

**We need...**

Towering forests across one third of the land's surface...

**To...**

**To lock away carbon and keep the climate stable.**

Millions of pollinator and billions of soil organisms and megatons of plankton...	To keep the food we eat in supply.
Strange plants deep in jungles...	To create our medicines
Coral reefs and mangrove swamps...	<b>To protect the coasts we depend upon</b>
<p><b>4. Our planet's biodiversity provides all the things we need for free, but only if there's lots of it. Complete the statistics below to show some examples of how mankind has dramatically impacted Earth's biodiversity:</b></p>	
<ul style="list-style-type: none"> <li>• We've reduced populations of wild animals by <b>60%</b>.</li> <li>• We've driven whole species <b>extinct</b>.</li> <li>• The number of lions in Africa has dropped by <b>65%</b>.</li> <li>• The number of individual flying insects in Europe has dropped by <b>75%</b>.</li> <li>• The number of Blue Fin tuna in the Pacific has dropped by <b>95%</b>.</li> </ul>	
<p><b>5. Use the One Planet information on the explorable globe to help you answer these questions.</b></p> <p><b>The habitats that make up our planet are connected and reliant upon each other. The astonishing diversity of life on earth depends on these global connections. List seven different biomes that can be found on Planet Earth:</b></p> <p><b>(Bonus task: try and list as many different species you can think of that you might find in each biome).</b></p>	
<ul style="list-style-type: none"> <li>• Frozen Worlds</li> <li>• Jungles</li> <li>• Forests</li> <li>• Grasslands</li> <li>• Fresh Water</li> <li>• Coastal Seas</li> <li>• High seas</li> </ul>	
<p><b>6. Why do scientists say the Earth has entered a new age? What has this new age been called and what does it mean?</b></p>	
<p>We have changed the world so profoundly that scientists say Earth has entered a new age called the "Anthropocene". This means 'The Age of Humans'.</p>	
<p><b>7. What impact have humans had on our planet? Why is this a problem?</b></p>	
<p>Our Planet is becoming less wild. This loss of biodiversity is a big problem because a less wild world is a less stable world. It is less able to provide for our needs, less able to maintain dependable weather and seasons and it's less able to absorb our impact.</p>	
<p><b>8. We need to regain our balance with Nature but this will be difficult to do if our population and demands keep growing. The faster we invest in education and women's rights, the faster we have a chance of stabilising our population before it is unsustainable. Click 'See More to watch the clip 'Peak Human' and then answer these questions.</b></p> <p>a) Our impact =</p> <p>b) What is Peak Human? What is the number that the UN predicts?</p> <p>c) How can we help to lower that number?</p>	

- a) Our impact = (number of people) x (resources we each consume)
- b) Peak Human is when the global population of humans reaches it's highest before stabilising. The UN says it could happen at about 11.2 billion people.
- c) By investing in Health and Education for all as fast as we can.

*Use the 'How to Save Our Planet' video to help you answer these questions.*

**9. Complete the statistics below to demonstrate the impact humans have had on our planet's biodiversity:**

Mankind has:

- Cleared **three-trillion** trees
- Cultivated **half** its fertile land
- Fished across **most** of the ocean
- In the last **50** years the populations of wild animals have reduced by **60%**.
- Today, we and the animals we farm account for **96%** of the mass of mammals and **70%** of the birds on Earth.

**10. Complete the table below to show how focusing on four key goals can help to reduce our impact on the planet and build a sustainable, plentiful future.**

Goal	Impact
<b>Energy Revolution: Phasing out fossil fuels and replacing them with renewables.</b>	This will not only slow the warming of the planet and the acidification of the ocean, but it will lead to clean air for all of us.
<b>A Food Revolution: Upgrading to efficient food production and reducing our consumption of meat.</b>	This will mean we'll require far less space to provide for ourselves, leaving more for grasslands, reducing deforestation and our demand for freshwater. It will feed more people with healthier, more affordable food.
<b>Manage the ocean: working together to properly manage our ocean.</b>	A global network of no-fish zones and a treaty on the use of international waters would restore the health of the ocean so it actually produces more fish for us all to eat.
<b>Rewild the world:</b>	Working to keep hold of the wild populations we still have and encouraging nature wherever we can. If we make these changes, we'll be a long way to becoming a species in balance with nature once again

## EXTENSION ACTIVITY IDEAS

Activity Idea	Subjects
<p><b>Design an A4 poster detailing what Biodiversity is and why it is so vital to our planet's health and mankind.</b></p> <p><b>You may want to include:</b></p> <ul style="list-style-type: none"> <li>• Examples of the different habitats found around the globe</li> <li>• Examples of the different species found around the world and how they interact with one another.</li> <li>• Human impact on global biodiversity to date, could you include some facts and statistics?</li> <li>• The four ways we can help our planet to recover.</li> </ul>	<p><b>Art and Design Media</b></p>
<p><b>Biodiversity on your doorstep! Create a local species guide using Seek:</b> Your garden, local park, street tree, window box or the verge alongside a local footpath are rich ecosystems filled with species that live alongside us. With the free Seek app you'll be able to identify any living thing in your patch - plants, flowers, insects, fungi, birds and animals.</p> <p><b>Go for a walk in your local area, or explore your back-garden, every day for a week using our Seek App, keep a note of what you find and create a biodiversity guide for your local spot! See how many different species of animal, plant, insect and bird you can identify.</b></p>	<p><b>Biology Ecology</b></p>