Biodiversity & the screen industries
A guide for productions
Summary & contents

**What is biodiversity?**
Biodiversity refers to all the living things that share our planet and we need it to survive.

**Legal requirements**
In the UK we already need to comply with laws around protected species, habitats and waste. There is now a target to reverse nature loss by 2030 and international frameworks are forthcoming.

**Biodiversity - the facts**
We need to halt biodiversity loss and restore healthy ecosystems to protect our planet.

**The screen industry impacts**
Biodiversity impacts on biodiversity through production practices, supply chains and through the portrayal of biodiversity on screen.

**Why the screen industry cares?**
To comply with the law, secure our supply chain, gain trust and inform viewers.

**Biodiversity checklist**
Productions may contribute to the main drivers of biodiversity loss but a handy checklist shows the ways to avoid, minimise & restore these impacts.

**Biodiversity and climate change**
Climate change and biodiversity loss each make the other worse - we need to tackle both.

**Find out more**
Links to some useful resources, further info and tools to help you engage on biodiversity.
**Biodiversity** refers to all the living things that share our planet, from animals - including ourselves, birds, plants, insects and fungi right down to microorganisms like bacteria.

Biodiversity is essential for human life, wellbeing, and diverse cultures – we depend on it for our survival, not only the air we breathe, food we eat, and water we drink but also for health & medicines, fuel & materials, and livelihoods. More than half of global GDP is dependent on nature.¹

Declining biodiversity disrupts & degrades the intricate web of life, making it more vulnerable to shocks like floods, fire, and drought.

The film & TV industry impacts on biodiversity through its production practices, supply chain, and through its portrayal of biodiversity on screen.

There is great potential, however, for the impact of the industry to be positive and support biodiversity and nature recovery.

Biodiversity – the facts

- Biodiversity is declining faster now than at any point in human history.¹
- Since 1970, there has been an average 60% decline in global populations of mammals, fish, birds, reptiles, and amphibians²
- 25% of all animal and plant species are threatened with extinction³
- Biodiversity is essential for human life – for air, food & water, but also for health & medicines, fuel & materials, and livelihoods
- Healthy ecosystems can store carbon and help protect us from the impacts of climate change
- Climate change impacts on biodiversity in numerous ways including through temperature rises, flooding, wildfires and drought.
- It will not be possible to achieve net zero climate targets without considering biodiversity
- At the UN’s COP15 in 2022, a new Global Framework for Biodiversity was agreed, promising the protection of 30% of the planet by 2030

¹ https://www.lse.ac.uk/granthaminstitute/explainers/what-are-the-extent-and-causes-of-biodiversity-loss
² https://www.wwf.org.uk/updates/living-planet-report-2018
³ https://www.iucnredlist.org/
Why does the screen industry care about biodiversity?

- We’re in the middle of an urgent climate and biodiversity crisis. We need all hands on deck.
- The interlinkage between climate and biodiversity means it will not be possible to achieve net zero targets without considering biodiversity.
- Biodiversity fundamentally underpins the benefits that businesses derive from natural capital.
- Supply chains rely on biodiversity for natural resources, whether that be as subjects for filming, for precious minerals for cameras, or water for cooling systems.
- Potential cost savings from reducing resource use.
- Reputational gain for taking action on an issue of growing concern to viewers.
- Opportunity to inform viewers and help deliver international commitments.
- Plus, existing and forthcoming legislation means we have to!
Climate change and biodiversity are interlinked. We can’t tackle one without tackling the other.

Productions can use albert’s Production Handbook to reduce their climate impact. Many of the actions proposed there will also benefit biodiversity but potential impacts on biodiversity need to be considered and additional actions taken.

1 https://www.cbd.int/article/biodiversityloss-climatechange

# Biodiversity – your legal requirements

Existing UK legislation that protects biodiversity includes:

- **Wildlife and Countryside Act 1981** – protects wild birds from disturbance while they are nesting
- **Waste legislation** in England & Wales and [Scotland](#)
- **Conservation of Habitats and Species Regulations 2017 (E&W)**
- **Habitats Regulations (Scotland)**

The new UK [Environment Act](#) became law on 10 November 2021 and includes the world’s first legally binding target to end nature’s decline by 2030. The Act will also bring in the Biodiversity Net Gain regulations.

In Scotland, the [Scottish Government’s Biodiversity Strategy](#) aims for Scotland to become 'nature positive' by 2030

Government agencies, Natural England, NatureScot, Natural Resources Wales and NI Environment Agency manage Sites of Special Scientific Interest (SSSI), Areas of Special Scientific Interest (ASSI), and activities that could disrupt these sites require consent from these agencies. Specific landowners, particularly public bodies and heritage organisations, also have specific restrictions and requirements that productions’ must meet in order to gain permission to film.

The UN’s new [Global Framework for Biodiversity](#) commits all parties, including the UK, to setting targets to meet it and includes a target on business to monitor, report, and act on biodiversity impacts.

This increasingly means businesses will be compelled to take action on biodiversity.
# Impact of the screen industry

The film & TV industry can impact on biodiversity through its production practices, supply chain, and through its portrayal of biodiversity on screen.

### Upstream - Supply chain

All materials sourced for a production could have an impact from costumes to catering, props & paint.

Examples include the use of lauan plywood in sets and biodiversity damaging ingredients in catering.

Plus impacts at an organisational level through, for example, investments, pensions and planning developments.

### Directly - On location

- Damage or disturbance of habitats and species through noise, lighting, and access.
- Waste & pollution of waterways.
- Introduction of non-native species or disease from plant material and animals on set.

### Downstream - On screen

- Increasing demand for biodiversity damaging products or ingredients.
- Increasing visitors to sensitive locations.
- Impact on individual species.
Mitigating biodiversity impacts

As shown, there are already laws that productions must follow in relation to biodiversity and, with increasing national and international commitments to protecting nature, new legislation and frameworks that will place requirements on our industry are forthcoming.

In advance of new requirements, the checklist below sets out some of the ways productions could be contributing to the main drivers of biodiversity loss and presents ideas for actions to take.

These actions follow the AR3T version of the mitigation hierarchy, demonstrating the priority of avoiding and reducing impacts, regenerating and restoring any unavoidable impacts, and carrying out transformative actions when appropriate and possible.
**Land use change** is responsible for 30% of biodiversity decline (1)

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<th>Potential production impacts</th>
<th>How impacts contribute to biodiversity loss</th>
<th>What productions can do?</th>
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<tr>
<td>Catering</td>
<td>Agriculture alone has been identified as the main threat to 86% of species at risk of extinction. Around 80% of all agricultural land is used for meat and dairy production.</td>
<td><strong>Avoid</strong> high levels of meat consumption by providing a good variety of appealing plant-based options and fewer meat-based ones. Where meat is included try to avoid beef and lamb and source sustainably. <strong>Avoid</strong> other biodiversity damaging ingredients such as palm oil or use sustainably sourced alternatives. <strong>Reduce</strong> Ensure your sustainable procurement policy includes biodiversity standards for suppliers. <strong>Transform</strong> by providing crew with information on why biodiversity-friendly menus have been adopted.</td>
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<td>Vehicles &amp; structures</td>
<td>Damage to habitats through access and structures built plus potential for diesel/petrol spills and pollution</td>
<td><strong>Avoid</strong> Check if filming location is on, or near, a local, national or internationally designated site of conservation, and if so, consider alternative locations or ensure appropriate permits/permissions are in place and all guidelines/requirements are met. <strong>Reduce</strong> your impact on wider habitats that are not protected including woodland, meadows, coastlines, peatland, rivers and wetlands. Put location guidance in place and ensure crew are trained. <strong>Reduce</strong> Seek advice/input from local experts. Working with fixers from the start could help minimise negative impacts. <strong>Reduce</strong> vehicular and people traffic across sensitive ground. <strong>Regenerate &amp; Restore</strong> Ensure that any actions that have to be taken can be remedied or even improved. <strong>Transform</strong> by using your on-site resources to improve the biodiversity of a location - consult with local experts to ask what would be most useful/effective and factor this into your budget from the start.</td>
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**Land use change** is responsible for 30% of biodiversity decline

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<td>Damaging land features or water courses</td>
<td>Altering water bodies or removing sediment affects freshwater habitats and fish.</td>
<td>Avoid damaging protected soils and the productivity of top soils through compaction or disturbing streams or ponds with equipment, vehicles, or personnel.</td>
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<td>Regenerate and restore Only carry out changes that can be remediated.</td>
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<td>Transform your on-site resources to improve the biodiversity of a location e.g., creating wildlife ponds where appropriate - consult with local experts to ask what would be most useful/effective.</td>
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<td>Costume &amp; clothing</td>
<td>Cotton is the most widespread profitable non-food crop in the world but its production is very damaging to biodiversity through habitat change, over-consumption of water and pesticide use.</td>
<td>Avoid impacts by using repurposed or recycled material for clothing, costumes and material. Hire over buy.</td>
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<td>Reduce impacts by implementing policies that focus buying from brands with sustainable fabric/procurement/dyeing/ethical supply chain and working standards policies that are audited and publicly declared and adhere to certified standards such as the Global Organic Textile Standard (GOTS) or Better Cotton Initiative.</td>
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<td>Transform biodiversity by supporting schemes that repurpose clothing and donating your costumes and fabric at the end of the shoot.</td>
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<td>Removing Vegetation and other landscape features</td>
<td>Chopping back or damaging vegetation such as trees, hedgerows or bushes can lead to loss of habitats.</td>
<td>Avoid chopping back greenery especially mature trees, native species, hedgerows or wild-flower rich meadows.</td>
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<td>Reduce disturbance or loss of habitats by returning any rocks, logpiles or other features in the landscape to their original location.</td>
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<td>Transform through additional planting as appropriate – consult with local experts.</td>
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<td>Materials used on location and in set construction</td>
<td>A single soundstage can lead to 4,000 hectares of deforestation - the equivalent to about 9,000 sports fields</td>
<td>Avoid deforestation by using recognised sustainable (e.g. FSC), recycled, reclaimed or reused wood. Make use of your local reuse hubs to return materials for reuse again. Avoid using disposable cutlery or tableware. Reduce impacts by designing sets for planning set build for deconstruction – i.e. not using glues etc, avoiding materials that blend biobased materials &amp; technical materials, using natural finishes or no finishes. Reduce impacts by switching to alternatives to wooden sets such as VR or cardboard sets</td>
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<td>Batteries</td>
<td>The mining and extraction of raw materials for batteries can lead to local water, soil and air pollution, and ecosystem and landscape degradation</td>
<td>Avoid the need for batteries by connecting to mains power wherever possible (and ensure mains is on a renewable tariff) Reduce impacts by running battery operated equipment on rechargeable batteries – do not use single use batteries Reduce impacts by committing to reducing the use of rare minerals and metals</td>
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Pollution combined with climate change is responsible for 14% of biodiversity decline

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<td>Waterways</td>
<td>Plastic and synthetic chemical pollution undermines the health and resilience of freshwater ecosystems and the species that live in and around them.                                                                                                                                                                                                                                                                                                                                                                                                                                                                }</td>
<td>Avoid using paints or chemicals with high VOCs and store all such liquids safely and away from water courses. Avoid extracting water from any water-stressed sources. Reduce Have a water management plan in place to identify risks and responsibilities relating to surface water and water bodies.</td>
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<td>Light</td>
<td>Night-time lighting can disrupt the feeding patterns of bats and disorient nocturnal-flying migrating birds.</td>
<td>Reduce Be aware of any vulnerable species present and likely effects upon them. Reduce Ensure you have sought expert advice and are following any relevant guidance. Reduce Switch-off lighting when not in use.</td>
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<tr>
<td>Sound</td>
<td>Noise pollution can interfere with animal migration, behaviour, communication and feeding.</td>
<td>Reduce Switch off generators and equipment when not in use. Reduce Power equipment and trailers that cannot be connected to the grid with solar or electric batteries. Reduce Use LED lighting to reduce need for generators. Reduce the use of drones in sensitive habitats and use smaller, quieter models, wherever possible.</td>
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<td>Waste</td>
<td>Landfill sites lead to leachates and pollution that damage local habitats and contribute to climate change. Plastic waste and pollutants can also be ingested by birds and marine life.</td>
<td>Avoid impacts by adopting a zero-waste strategy. Avoid single-use products, plastic or otherwise. Avoid discharges into the air, land and water e.g. smoke, glitter, confetti etc. Where discharges are used follow best practice guidance and use non-toxic biodegradable materials. Reduce impacts by having in place a policy to prevent and respond to any oil/diesel spills. Reduce impacts with a plan for recycling and removing all litter and waste from site. Ensure everyone on set knows the plan/understands what to put where with good signage.</td>
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**Alien species** are responsible for 11% of biodiversity decline

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| **Greenery**                | Invasive non-native species have been known as a major and direct cause of biodiversity loss as well as imposing major costs on agriculture, forestry and fisheries. | **Avoid** introducing non-native or invasive seed or plant species to a site where there is a risk of contamination  
**Reduce** impacts by ensuring greensperson or staff responsible are informed and trained  
**Reduce** impacts by ensuring all living plant material brought on site has a Plant Passport  
**Reduce** impacts by asking suppliers for native species that have been grown without the use of pesticides  
**Transform** biodiversity by supporting local schemes to remove non-native invasive species |

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3. If we combine pastures and cropland for animal feed, around 80% of all agricultural land is used for meat and dairy [https://ourworldindata.org/land-use-diets](https://ourworldindata.org/land-use-diets)
Biodiversity on screen

While this guide focuses on production it’s important not to forget the biodiversity impacts of editorial decisions. Productions can:

- Avoid filming at sites that may be impacted negatively by increased visitors and try not to disclose filming locations
- Avoid featuring biodiversity damaging products on screen
- Consider your portrayal of particular species or habitats - ensure accuracy and avoid encouraging damaging human interactions with them
- Look for opportunities to promote biodiversity, its protection, recovery and restoration (the inclusion of a pangolin in The Jungle Book positively increased interest in this endangered animal)
- Consult experts on how best to represent biodiversity and on its social context, including Indigenous/First Nations knowledge holders and local communities
Useful resources

Check whether locations you want to film at are home to protected species using DEFRA's Magic Map.

Find out if you need a licence to film particular birds or animals in the UK and how to get a licence if so.

Find out more about the Taskforce on Nature-related Financial Disclosures framework for assessing and reporting biodiversity impacts.

Find suppliers who prioritise sustainable costumes in the Costume Directory created by Sinéad Kidao.

Watch the Save Our Wild Isles films for business here.

albert's template procurement policy includes biodiversity requests you might want to make of your suppliers.

Demonstrate your company’s commitment to biodiversity by signing up to the UN's Convention on Biological Diversity Action Agenda.

Learn more about measuring your biodiversity impacts and setting targets at the Science Based Targets Network.

Read about the Planetary Health Diet.

Find out more about biodiversity with the BBC’s topic guide.