

# Biodiversity & the screen industries

A guide for productions

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Biodiversity refers to all the living things that share our planet and we need it to survive

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## Find out more

Links to some useful resources, further info and tools to help you engage on biodiversity

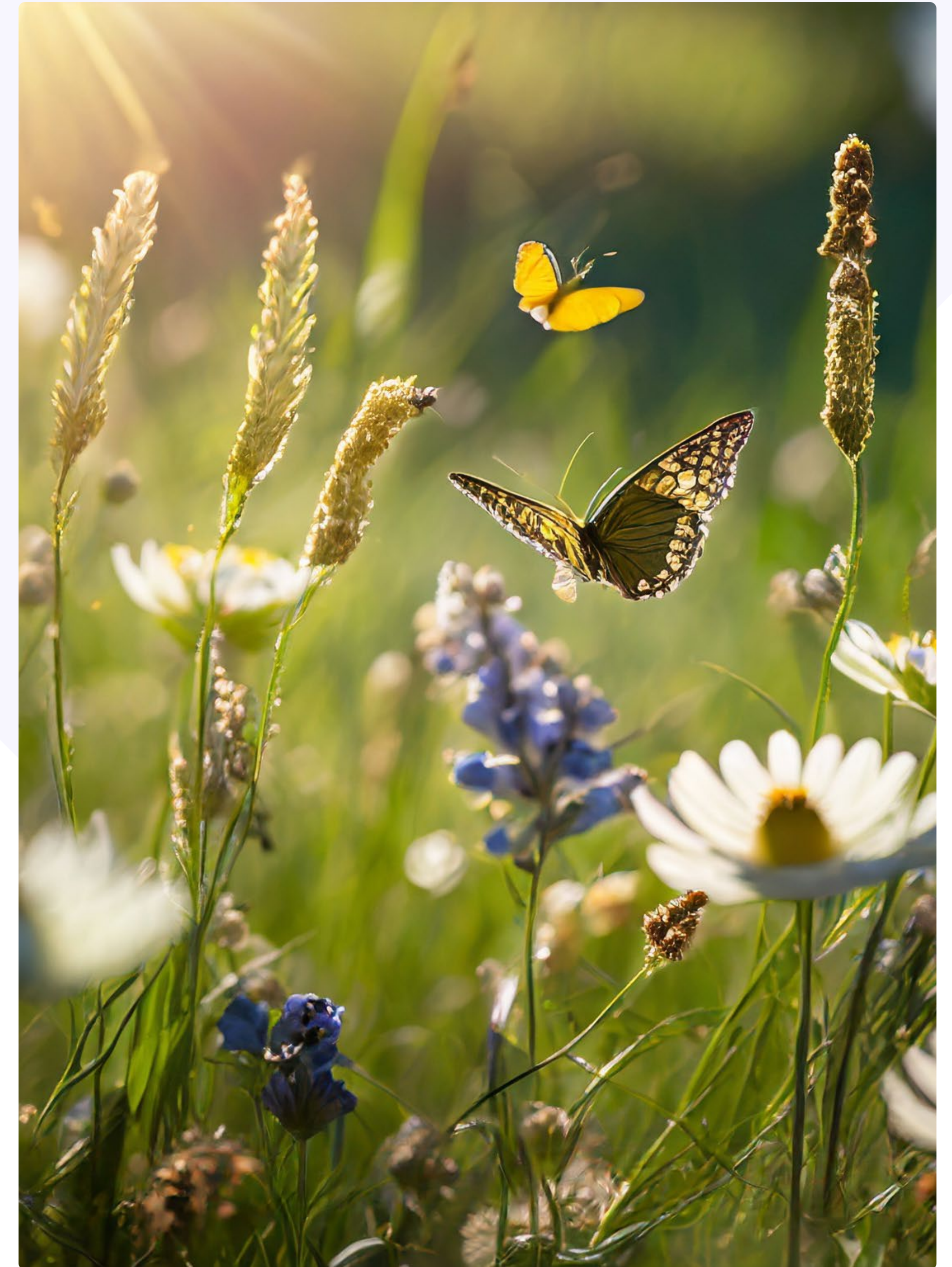
**Biodiversity** refers to all the living things that share our planet, from animals - including ourselves, birds, plants, insects and fungi right down to microorganisms like bacteria

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.<sup>1</sup>

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.

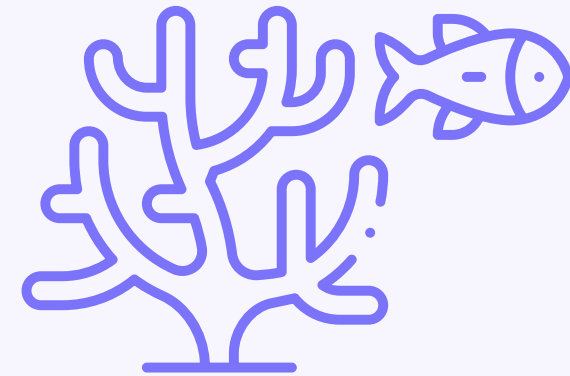


<sup>1</sup> <https://www.pwc.com/gx/en/news-room/press-releases/2023/pwcboosts-global-nature-and-biodiversity-capabilities.html>

# Biodiversity – the facts



**Biodiversity is declining** faster now than at any point in human history.<sup>1</sup>



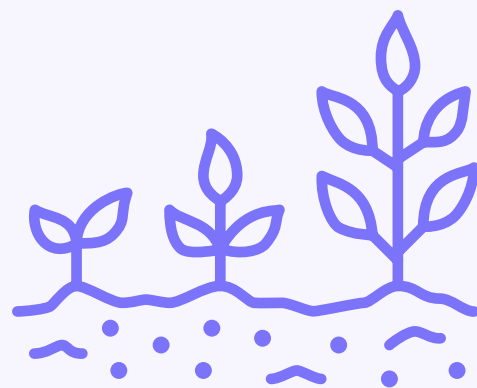
Since 1970, there has been an average **60% decline** in global populations of mammals, fish, birds, reptiles, and amphibians<sup>2</sup>



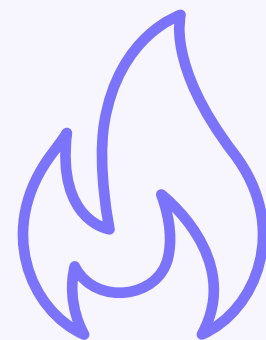
**25%** of all animal and plant species are threatened with extinction<sup>3</sup>



**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, **The Biodiversity Plan** was agreed, promising the **protection of 30% of the planet by 2030**

<sup>1</sup> <https://www.lse.ac.uk/granthaminstitute/explainers/what-are-the-extent-and-causes-of-biodiversity-loss>

<sup>2</sup> <https://www.wwf.org.uk/updates/living-planet-report-2018>

<sup>3</sup> <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**

Potential cost savings from **reducing resource use**

Reputational gain for **taking action** on an issue of growing concern to viewers

**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

Biodiversity fundamentally underpins the **benefits that businesses derive from natural capital**

Opportunity to inform viewers and **help deliver international commitments**

Plus, **existing and forthcoming legislation** means we have to!

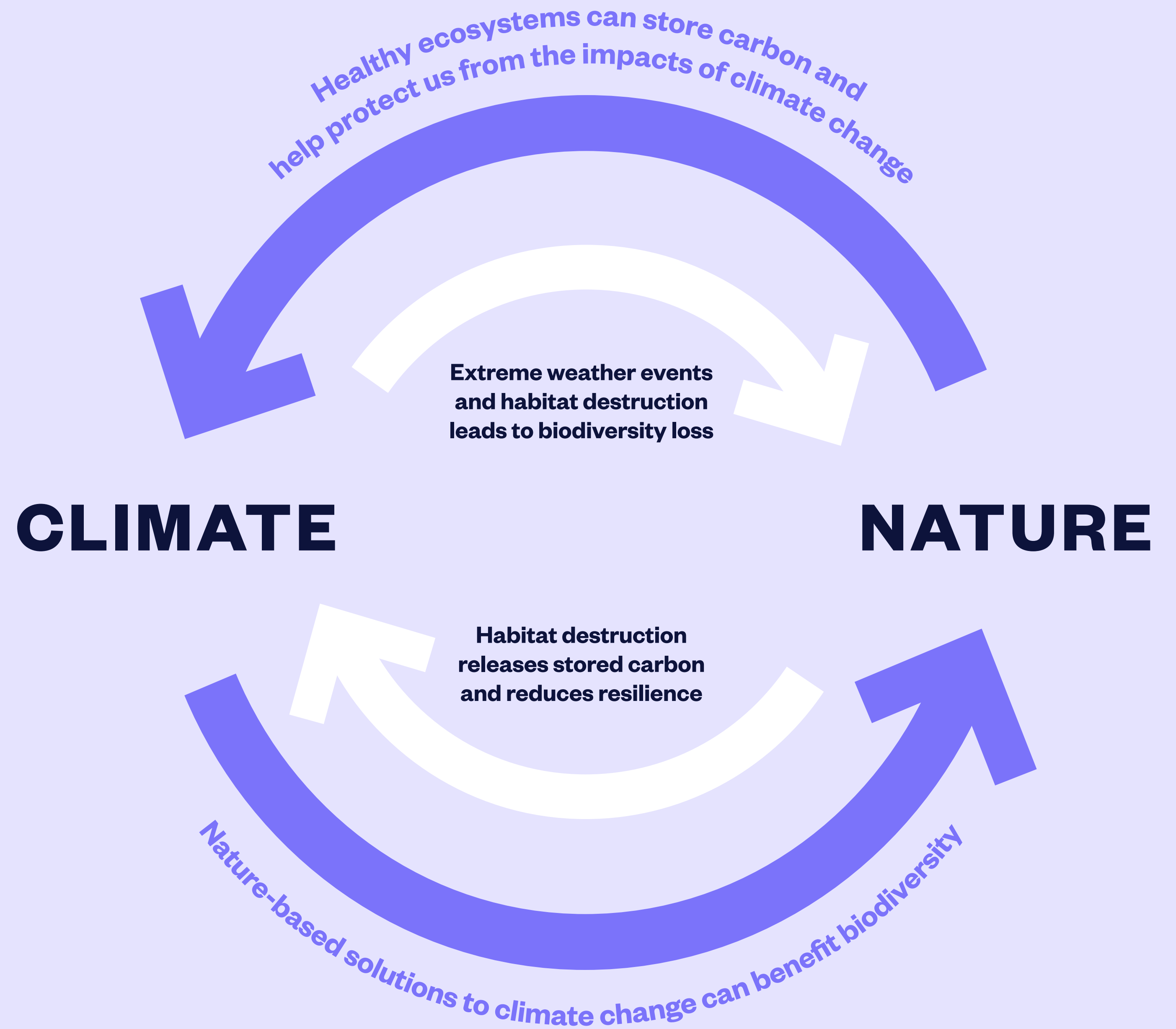


# Biodiversity and Climate change

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.



# Biodiversity: Your legal requirements



## On the ground

Specific areas of land, species and habitats are protected by local, national and international regulations. These regulations may restrict what production activities can take place and/or require permission to be sought to film. Productions need to check if the locations they are filming are protected and ensure all regulations and requirements are complied with. Landowning organisations or individuals may also have their own set of requirements that need to be met. There are also likely to be national laws governing specific aspects of supply chains that will be relevant to the screen industry, around what can be purchased, from where and how it is disposed of.



## Across the sector

The UN's Plan for Biodiversity was agreed at COP15 in 2022, promising the protection of 30% of the planet by 2030. It includes a target on business to monitor, report, and act on biodiversity impacts. As parties to the agreement adopt national legislation to achieve it, all sectors and businesses will be compelled to take action on biodiversity.

albert's useful biodiversity resources page can help signpost you to more information.

[Click here for more resources](#)

# 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

## 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

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



# 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: Part 1<sup>1</sup>

## Potential production impacts

### Catering



#### How impacts contribute to biodiversity loss

Agriculture alone has been identified as the main threat to 86% of species at risk of extinction.<sup>2</sup>  
Around 80% of all agricultural land is used for meat and dairy production<sup>3</sup>

#### What productions can do?

- Avoid** 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
- Avoid** other biodiversity damaging ingredients such as palm oil or use sustainably sourced alternatives
- Reduce** Ensure your sustainable procurement policy includes biodiversity standards for suppliers
- Transform** by providing crew with information on why biodiversity-friendly menus have been adopted

## Potential production impacts

### Vehicles & structures



#### How impacts contribute to biodiversity loss

Damage to habitats through access and structures built plus potential for diesel/petrol spills and pollution

#### What productions can do?

- Avoid** 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
- Reduce** 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
- Reduce** Seek advice/input from local experts. Working with fixers from the start could help minimise negative impacts
- Reduce** vehicular and people traffic across sensitive ground
- Regenerate & Restore** Ensure that any actions that have to be taken can be remedied or even improved
- Transform** by using your on-site resources to improve the biodiversity of a location - consult with local experts and landowners to ask what would be most useful/effective and factor this into your budget from the start

<sup>1</sup> <https://royalsociety.org/topics-policy/projects/biodiversity/human-impact-on-biodiversity/>

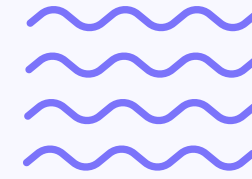
<sup>2</sup> <https://www.unep.org/news-and-stories/press-release/our-global-food-system-primary-driver-biodiversity-loss>

<sup>3</sup> 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>

# Land use change is responsible for 30% of biodiversity decline: Part 2 <sup>1</sup>

## Potential production impacts

### Damaging land features or water courses



#### How impacts contribute to biodiversity loss

Altering water bodies or removing sediment affects freshwater habitats and fish

#### What productions can do?

- Avoid** damaging protected soils and the productivity of top soils through compaction or disturbing streams or ponds with equipment, vehicles, or personnel
- Reduce** Ensure any changes made comply with any permissions or guidance
- Regenerate & restore** Only carry out changes that can be remediated
- Transform** your on-site resources to improve the biodiversity of a location e.g., creating wildlife ponds where appropriate - consult with local experts and landowners to ask what would be most useful/effective

## Potential production impacts

### Costume & clothing



#### How impacts contribute to biodiversity loss

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

#### What productions can do?

- Avoid** impacts by using repurposed or recycled material for clothing, costumes and material. Hire over buy.
- Reduce** waste impacts by implementing policies that ensure costumes are bought from companies that genuinely sell returned stock
- 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
- Reduce** impacts by using filters when washing costumes and fabrics to prevent synthetic microfibres and microplastics entering the water stream
- Transform** biodiversity by supporting schemes that repurpose clothing and donating your costumes and fabric at the end of the shoot

## Potential production impacts

### Removing vegetation and other landscape features



#### How impacts contribute to biodiversity loss

Chopping back or damaging vegetation such as trees, hedgerows or bushes can lead to loss of habitats

#### What productions can do?

- Avoid** chopping back greenery especially mature trees, native species, hedgerows or wild-flower rich meadows
- Avoid** Be aware of seasons and avoid hedge cutting during the main breeding season for nesting birds
- Reduce** disturbance or loss of habitats by returning any rocks, logpiles or other features in the landscape to their original location
- Transform** through additional planting as appropriate – consult with local experts and landowners

<sup>1</sup> <https://royalsociety.org/topics-policy/projects/biodiversity/human-impact-on-biodiversity/>

# Over-exploitation is responsible for 20% of biodiversity decline

## Potential production impacts

### Materials used on location and in set construction



#### How impacts contribute to biodiversity loss

A single soundstage can lead to 4,000 hectares of deforestation - the equivalent to about 9,000 sports fields<sup>4</sup>

#### What productions can do?

- 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<sup>5</sup>
- Reduce** impacts by designing sets for deconstruction – i.e. not using glues etc, avoiding materials that blend biobased materials & technical materials, using natural finishes or no finishes.
- Reduce** impacts by switching to alternatives to wooden sets such as VR or [cardboard sets](#)

## Potential production impacts

### Fossil-fuel extraction



#### How impacts contribute to biodiversity loss

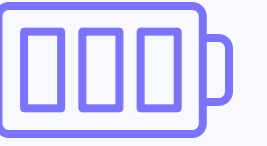
Fossil fuel extraction processes, especially surface mining as in the case of tar sands, can lead to loss of habitat and major damage to ecosystems through contamination.

#### What productions can do?

- Avoid** using fossil fuels by using mains electricity from a 100% renewable sourced energy tariff wherever possible. Where generators are required ensure these are zero or low carbon (e.g. fuel cells, solar, electric, biofuel from waste or renewable fuel)
- Reduce** fossil fuel usage from travel through travel reductions and using low-carbon emitting vehicles

## Potential production impacts

### Batteries



#### How impacts contribute to biodiversity loss

While battery operated equipment is far better than fossil fuel powered, the mining and extraction of raw materials for batteries can lead to local water, soil and air pollution, and ecosystem and landscape degradation<sup>6</sup>

#### What productions can do?

- Avoid** the need for new batteries by connecting to mains power wherever possible (and ensure mains is on a renewable tariff) or by using rechargeable batteries where mains power is unavailable.
- 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

<sup>4</sup> <https://www.cbd.int/article/film-industry-and-sustainability>

<sup>5</sup> Green Alliance [report](#) on the use of disposable paper and wooden packaging

<sup>6</sup> [https://knowledge4policy.ec.europa.eu/biodiversity/batteries-mining\\_en](https://knowledge4policy.ec.europa.eu/biodiversity/batteries-mining_en)

# Pollution combined with climate change is responsible for 14% of biodiversity decline

## Potential production impacts

### Waterways



#### How impacts contribute to biodiversity loss

Plastic and synthetic chemical pollution undermines the health and resilience of freshwater ecosystems and the species that live in and around them<sup>7</sup>

#### What productions can do?

- 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** impacts by having in place a policy to prevent and respond to any oil/diesel spills
- Reduce** Have a water management plan in place to identify risks and responsibilities relating to surface water and water bodies

## Potential production impacts

### Light



#### How impacts contribute to biodiversity loss

Night-time lighting can disrupt the feeding patterns of bats and disorient nocturnal-flying migrating birds

#### What productions can do?

- 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

## Potential production impacts

### Sound



#### How impacts contribute to biodiversity loss

Noise pollution can interfere with animal migration, behaviour, communication and feeding

#### What productions can do?

- 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

## Potential production impacts

### Waste



#### How impacts contribute to biodiversity loss

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

#### What productions can do?

- 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

<sup>7</sup> <https://committees.parliament.uk/committee/62/environmental-audit-committee/news/160246/chemical-cocktail-of-sewage-slurry-and-plastic-polluting-english-rivers-puts-public-health-and-nature-at-risk/>

# Alien species are responsible for 11% of biodiversity decline

## Potential production impacts

### Greenery



#### How impacts contribute to biodiversity loss

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.<sup>8</sup>

#### What productions can do?

- 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 renting rather than purchasing any greens needed.
- Reduce** impacts by ensuring all living plant material brought on site is traceable, disease-free and grown locally. Check any international stock has been quarantined before bringing on site. Consider using alternative, more sustainable varieties instead of more popular, disease-prone ones such as box hedge.
- Reduce** impacts by asking suppliers for species that have been grown without the use of peat or pesticides.
- Regenerate & restore** by supporting suppliers that post-production re-use greens in planting and rewilding schemes
- Transform** biodiversity by supporting local schemes to remove non-native invasive species



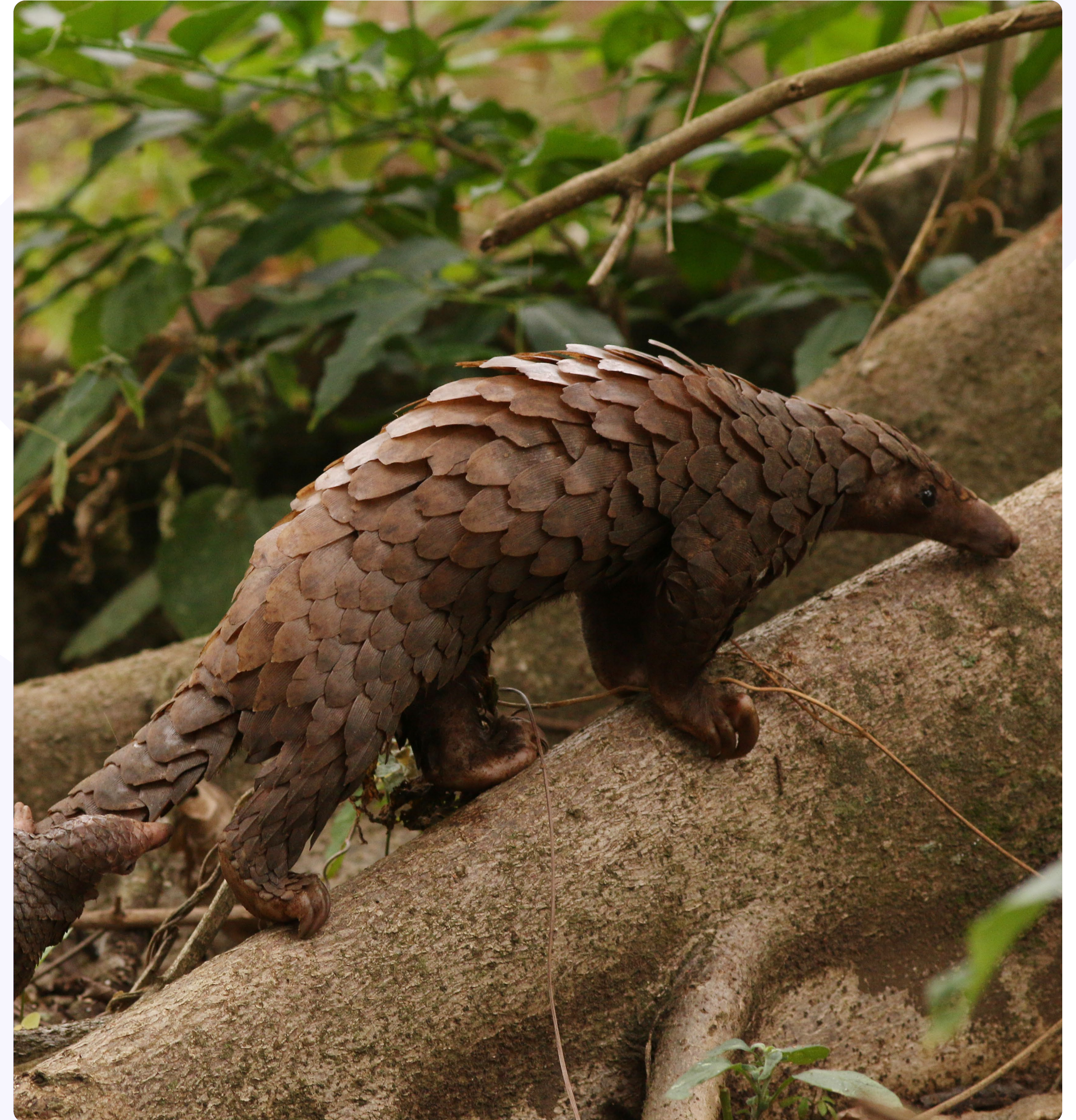
<sup>8</sup> <https://www.cbd.int/invasive/doc/toolkit-prototype-en.pdf>

## 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



To find out more about biodiversity  
visit our resources page

[Click here for more resources](#)