



## BIODIVERSITY



The technical term for life on Earth, 'biodiversity', is a scientific measure of the variety of species, habitats, and ecosystems across the planet.

Biodiversity allows us to live healthy and happy lives; it provides us with food directly or through pollination, medical discoveries and ecosystem services. The latter includes everything from cleaning water and absorbing chemicals, which wetlands do, to providing oxygen for us to breathe. Biodiversity also provides aesthetic and cultural value to our lives and has been shown to increase mental well-being. **The National Trust** <https://www.nationaltrust.org.uk/features/what-is-biodiversity>

### The Living Planet Index (LPI)

LPI measures trends in thousands of populations of mammals, birds, reptiles, amphibians and fish across the globe and has shown a decline of 58 per cent between 1970 and 2012. If current trends continue, the decline could reach two-thirds by 2020.

The main threats to these populations are **habitat loss and degradation**, for example conversion of natural areas for agricultural expansion, followed by overexploitation of species, such as unsustainable fishing. The LPI for freshwater species shows the greatest decline, falling 81 per cent between 1970 and 2012. **WWF**

[https://wwf.panda.org/knowledge\\_hub/all\\_publications/living\\_planet\\_index2/](https://wwf.panda.org/knowledge_hub/all_publications/living_planet_index2/)

### Medicine

When developing new medicines. Modern researchers are looking more and more towards our natural biological resources. Many animal and plant species have been useful in the past for finding new treatments and cures. One of the most famous examples is **digitalin** which is derived from the foxglove and is used to treat heart conditions. Another is **vincristine**, taken from the rosy periwinkle of Madagascar and used to treat childhood leukaemia. Many more medicines have been derived from species found in rainforest areas and it is possible that many species could hold the answer to future medical cures – so the more species that are conserved, the more chance there is of discovering something of medical value. **The Young People's Trust for the Environment (YPTE)** [http://yppte.org.uk/factsheets/biodiversity/why-do-we-need-to- conserve-biodiversity?gclid=EAIaIQobChMIu5umwqDd4wIVgrHtCh1b6wloEAAYAiAAEgI53\\_D\\_BwE](http://yppte.org.uk/factsheets/biodiversity/why-do-we-need-to- conserve-biodiversity?gclid=EAIaIQobChMIu5umwqDd4wIVgrHtCh1b6wloEAAYAiAAEgI53_D_BwE)

### Land loss

The majority of Earth's land area is now modified by humans, which has had a large impact on biodiversity. Land degradation, such as the loss of healthy soils, has now reached critical levels and threatens the livelihoods of 3.2 billion people, according to one [IPBES assessment](#). Ecosystem destruction will limit the products and services, such as food and medicines, that people can draw from the environment in future. Wetland ecosystems are among the most harmed, with nearly 50% lost since 1900. Global crop yields are expected to fall by 10% on average over the next 30 years as a result of land degradation and climate change. **Nature** <https://www.nature.com/articles/d41586-018-03891-1>



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### Rewilding

Today there is a growing movement for 'rewilding'. That is, leaving habitats to develop naturally - without human management, control or intervention. Rewilding also calls for the reintroduction of species that were hunted or pushed to the side and made extinct. **The Young People's Trust for the Environment (YPTE)**

[http://yppte.org.uk/factsheets/biodiversity/why-do-we-need-to- conserve-biodiversity?gclid=EAIaIQobChMIu5umwqDd4wIVgrHtCh1b6wloEAAYAiAAEgI53\\_D\\_BwE](http://yppte.org.uk/factsheets/biodiversity/why-do-we-need-to- conserve-biodiversity?gclid=EAIaIQobChMIu5umwqDd4wIVgrHtCh1b6wloEAAYAiAAEgI53_D_BwE)

### Church Teaching

**Caring for ecosystems demands far-sightedness**, since no one looking for quick and easy profit is truly interested in their preservation. [Laudato Si, Chapter III, Paragraph 36](#)

**The Church has a responsibility towards creation** and she must assert this responsibility in the public sphere. In so doing, she must defend not only earth, water and air as gifts of creation that belong to everyone. She must above all protect mankind from self-destruction. [Caritas In Veritate. Chapter Four para 51.](#)

**We must recognize our grave duty to hand the earth on to future generations** in such a condition that they too can worthily inhabit it and continue to cultivate it. [Caritas In Veritate. Chapter Four, para 50.](#)

### Ideas For Action

- [Encourage bees into your garden by planting a bee-friendly garden with native wildflowers and plants](#)
- [Bring The Bees Back](#)
- [52 tips for biodiversity](#)
- [The Scottish Wildlife Trust - lots of tips on how to help wildlife at home](#)
- [Use your purchasing power to help protect biodiversity by consuming products that do not harm the environment. Certified ecolabels](#)

### Liturgical Resources

- [Australian Catholic](#) Liturgical Resources
- [Sisters of Mercy](#) Laudato Si and Sisters of Mercy's Critical Concerns
- [Peacemeal](#). Liturgy ideas for sharing a meal
- [Season of Creation](#). An excellent booklet containing liturgies on the environment, including biodiversity
- [Caring for God's Creation](#). A downloadable booklet produced by the United States Conference of Catholic Bishops with suggestions for liturgies



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- [Greening Worship](#). A web page from EcoCongregation with lots of useful suggestions for worship.
- [Liturgical, Prayer and Spiritual Resources](#). Splendid resources page from the Global Catholic Climate Movement