# [***Understanding The Impacts Of Biodiversity Loss***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:68TB-HJN1-DY4H-73T5-00000-00&context=1516831)

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**Body**

**By Nicola Kenyon, Head of Insurance Investment & ALM; Kate Fry, Head of Insurance Innovation; Ryan Boldick, Consultant and Steffan Xenios, Associate Consultant from Hymans Robertson**

In this article, we define ***biodiversity***, explain why firms should care about it and suggest several steps that firms can take today to address the threat of ***loss*** posed by ***biodiversity***.

**What is *biodiversity*?**

***Biodiversity*** defines the world around us. It is a measure of the variety and variability of all living organisms within and across ecosystems. At a high level, it considers the evolution of the genetic makeup of a particular species, as well as the variation in life (including animals, plants, fungi and microorganisms) in any geographical area. As the dominant species on earth, humans play a critical role in ***biodiversity***. Human-induced changes to the environment, such as industrialisation or overexploitation, have a major impact on the organisms in an ecosystem.

A notable and well-known example of ***biodiversity*** ***loss*** is the rapid decline in the population of bees. Intensive farming, alternative land use, pollution and deforestation have led to a substantial reduction in suitable habitats for bees to nest, breed and pollinate, with the US Environmental Protection Agency reporting a 28.7% average annual ***loss*** in the number of hives over winter months[1]. This could be problematic for the agricultural sector since crops are highly dependent on bee pollination, and so food supply chains could be challenged. Albert Einstein famously once said 'If the bee disappeared off the face of the Earth, man would only have four years left to live.

**Why should firms care about *biodiversity*?**

In recent COP events, ***biodiversity*** has had a growing focus - a day of COP27 was dedicated to discussing ***biodiversity*** and further progress was made at COP15 as governments committed to increase protection for land and water by 2030. Greater coverage at recent events has highlighted the difficulty in tackling ***biodiversity*** and the need for firms to advance their understanding of the associated risks and costs, so that these can be managed in the future.

Some of these ***biodiversity*** risks may arise from firms taking steps to address their impact on the climate. Whilst being seen as 'climate positive' some actions may negatively impact ***biodiversity***. For example, building solar or wind farms in rural areas may disturb natural habitats and lead to ***biodiversity*** ***loss***. It is essential that firms take a holistic approach in addressing sustainability, taking both climate and ***biodiversity*** considerations into account.

***Biodiversity*** decline impacts our natural world and our economy heavily relies on the range of ecosystems available. Research from the World Economic Forum[2] estimated that $44 trillion - more than half - of the global GDP is moderately or highly dependent on ecosystem services based on natural capital. Trillion-dollar industries such as agriculture & forestry, pharmaceuticals, energy, transportation and infrastructure bear the cost of reversing ***biodiversity***, due to their heavy dependence on land, natural resources and species. This cost was estimated to be around $950 billion each year until 2030, which would clearly hinder the performance of a firms' investment portfolio.

Let's revisit the earlier example of declining bee populations to consider how this could impact firms. The European Commission reports that bees contribute at least (EURO)22 billion each year to the EU's agriculture industry[3] through the pollination and reproduction of many wild plants, crucial for food production. With an estimated 80% of crops and wild plants in Europe dependent on bee pollination, a ***loss*** of bees will have a severe impact on the crops that humans rely on for a balanced and healthy diet, which in turn could lead to worsening mortality. For firms, the physical impact of deteriorating mortality, of not only policyholders, but their own employees could have a long-term cost.

Alongside the physical and transition risks described above come the potential financial disclosure requirements set out in the Taskforce of Nature-related Financial Disclosures (TNFD) and the accounting standards being discussed by the Partnership of ***Biodiversity*** Accounting Financials (PBAF). These provide financial institutions with practical guidance on ***biodiversity*** impacts and dependency assessments. TNFD is due to be launched in September this year and will provide a framework for firms to start to assess these risks. There will be significant challenges due to the lack of reported data available and complexity of nature-related risks, along with the resource required to produce a set of disclosures. TNFD is not planned to be mandatory in the short term, however given these complexities it would make sense for firms to consider the framework when it is published.

**The challenges firms face and the actions**

***Biodiversity*** is one of a whole host of sustainability risks that firms face. A lack of data, metrics, and regulatory incentives for firms to monitor their ***biodiversity*** impact are possible reasons as to why it has not been prioritised.

Nonetheless, the severity of its impact and looming reporting requirements mean that firms should be aware of ***biodiversity*** risk and begin to consider ways in which it can be mitigated.

**Just a few simple steps that firms can take are:**

**Education:** Educate the Board and employees on nature-related risks and the opportunities to reduce the impact and contribute to the restoration of nature.

**Engagement and Collaboration:** By engaging and collaborating with ***biodiversity*** initiatives or those producing frameworks (e.g. TNFD) firms can better understand the risks they face and shape the industry.

**Stakeholder communication:** Communicate with stakeholders early on to help identify firms' exposure and introduce methods to monitor and manage the threat.

**Internal policies:** Publish a ***biodiversity*** policy that includes a set of principles that will inform ***biodiversity*** decision making to get ahead of the curve.

**Investment scorecard:** Research and develop a scorecard to help in understanding the ***biodiversity*** exposures of both new and existing investments.

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