



Coláiste na Tríonóide, Baile Átha Cliath  
Trinity College Dublin

Ollscoil Átha Cliath | The University of Dublin

# What does biodiversity do for us?

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Prof. Jane Stout

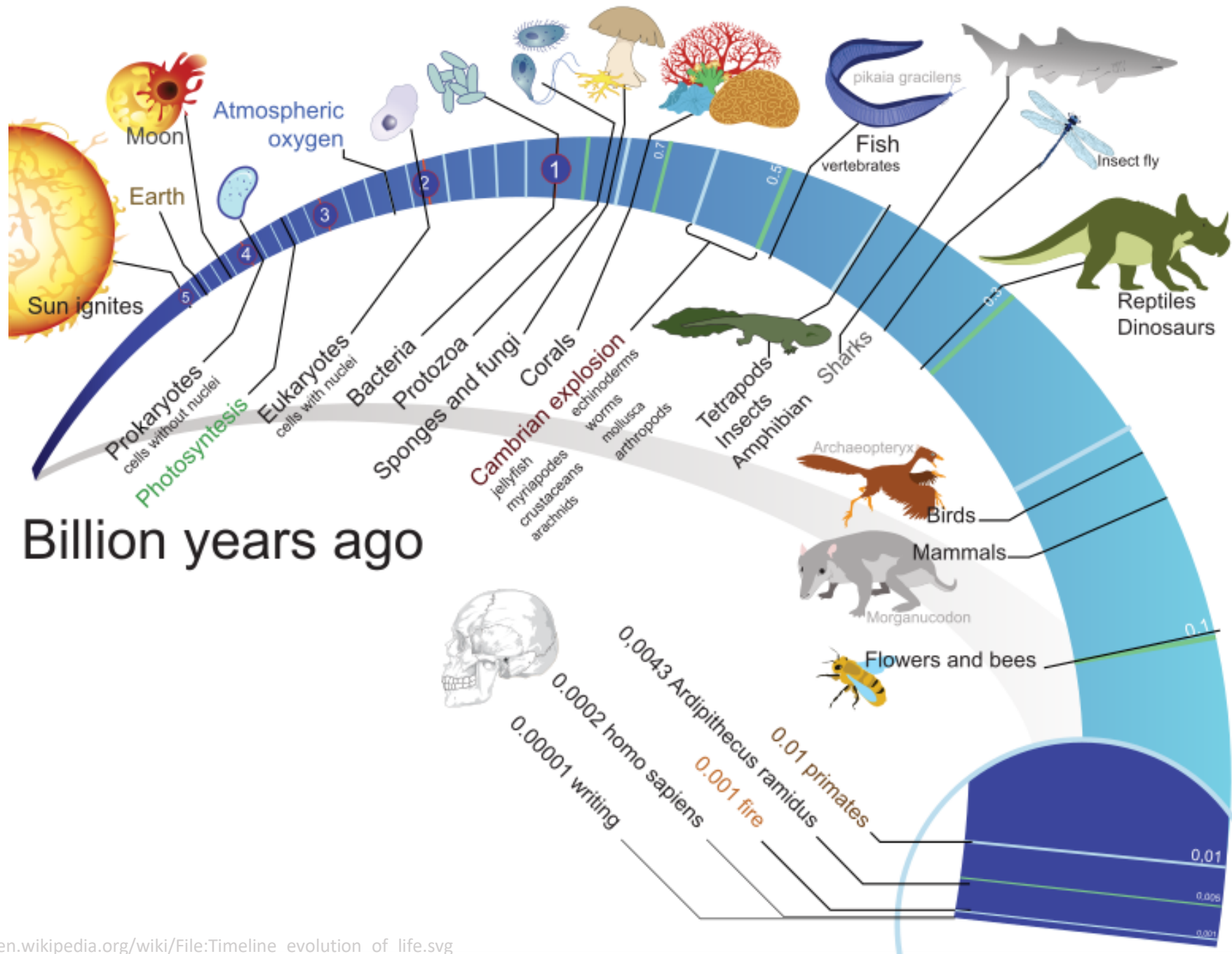
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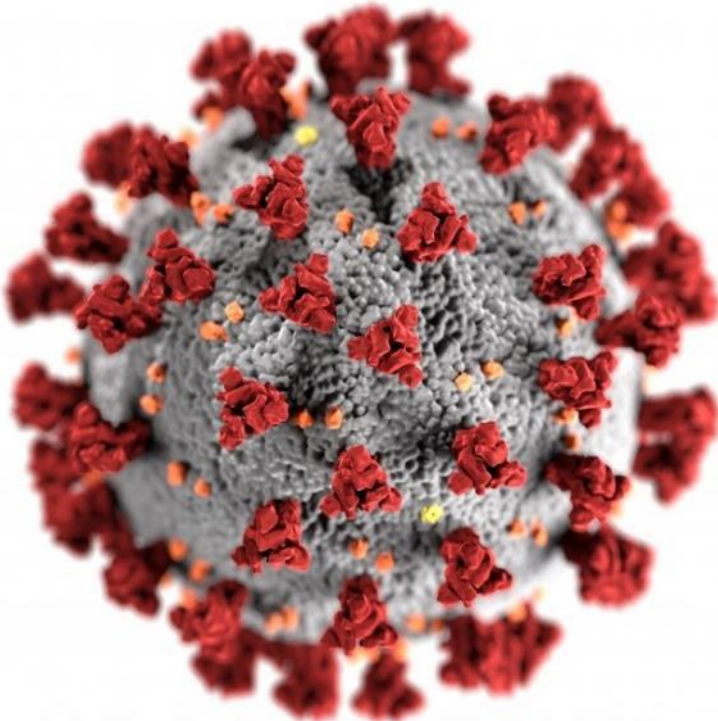
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# Covid-19



Coronavirus 2 (SARS-CoV-2)

## The COVID-19 pandemic is intricately linked to biodiversity loss and ecosystem health



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The ongoing COVID-19 pandemic, caused by zoonotic SARS-CoV-2, has important links to biodiversity loss and ecosystem health. These links range from anthropogenic activities driving zoonotic disease emergence and extend to the pandemic affecting biodiversity conservation, environmental policy, ecosystem services, and multiple conservation facets. Crucially, such effects can exacerbate the risk of future zoonotic disease outbreaks. We explore potential zoonotic disease emergence drivers (eg, climate change), and discuss direct and indirect effects on human health. We stress that responses to COVID-19 must be integrated into broader strategies to avoid future emergence of zoonoses and protect human and societal health. Such responses would benefit from adequate communication, as well as from collaboration among scientists, policymakers, and the public.

Lancet Planet Health 2021; 5: e840-50  
The Biodiversity Research Centre, School of Biological Sciences

### Biodiversity loss and ecosystem health are strongly linked to human health

The emergence of a zoonotic pathogen in humans as SARS-CoV-2, was not unpredicted.<sup>1-3</sup> Of the re-emerging infectious diseases affecting humans in the 21st century, most (75%) have been zoonotic in origin, with their natural reservoirs being other vertebrates. In fact, 70% of these diseases with



Controlling deforestation (shown here, in a tropical rainforest in the Congo Basin) could decrease the risk of future pandemics, experts say.

## WHY DEFORESTATION AND EXTINCTIONS MAKE PANDEMICS MORE LIKELY

Researchers are redoubling efforts to understand links between biodiversity and emerging diseases – and to use that information to predict and stop future outbreaks.

**“We’ve been warning about this for decades. Nobody paid any attention.”**

































human existence



direct contribution to human health



In-direct contribution to human health



goods and services on which we depend



Knowing that it exists



Sacred to us/moral worth