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Journal Article**Biodiversity and Ecosystem Function: Do Species Matter?**

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Abstract

Biological communities perform a variety of functions within ecosystems, including regulation of climatic processes, breakdown of waste, recycling of nutrients, maintenance of soil fertility and provision of natural resources. Although exact numbers and timescales are difficult to determine, it is clear that biodiversity (species and habitat richness, genetic diversity and community complexity) is declining. Studies of biodiversity are thus assuming greater significance as ecologists try desperately to document global biodiversity in the face of unprecedented perturbations, habitat loss and extinction rates. How will such decline in biodiversity affect the biosphere and the quality of human life on the planet? Does biodiversity matter? Internationally, research has begun to investigate whether the current unprecedented losses in biodiversity will damage the functioning of ecosystems. This paper reviews this work and highlights the general patterns identified. Scientific evidence continues to show that, in general, biodiversity does influence the rates or nature of ecosystem processes, and a majority of studies have found that a reduction in biodiversity does have a negative effect on ecosystem function. The paper also considers the potential indirect effects of biodiversity losses on conservation, particularly in relation to

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