

## Conservation and biodiversity: Potential oxymoron and public misunderstanding

In a recent issue of PNAS, Novacek (1) gives a thorough analysis of the complex relationships between the public and biodiversity issues, including potential misunderstandings and ambiguities. Direct appeal to the public in a scientific article is a central issue in biological conservation in the sense that conservation scientists claim to be advocates of norms and values and citizen scientists. In this respect, conservation plans for all kinds of species, subspecies, populations, landscapes, and ecosystems, encompassing the whole of biodiversity, tend to present exhaustive conservation of biodiversity as an absolute obligation. Certain visions of nature, as sacred creation, as precious patrimony, as optimally functioning system, or as aesthetics, all of which are static visions, may justify all-out systematic conservation. On the other hand, evolutionary biology gives a radical lesson of utmost modesty not only to mankind, but also to the concept of nature itself. Chaos, historical haphazards, tinkering, heterogeneity, ran-

dom processes, and erratic fluctuations have resulted in the chemistry of molecular reproduction as a mechanism that has generated a myriad of life forms, known or unknown to us, emerging and disappearing, competing or sharing, essential or redundant for ecosystem functioning. A fundamental consequence of evolutionary biology may be that, *stricto sensu*, biodiversity and conservation are oxymoronic words, which is likely to result in real confusion in the public. Evolutionary biology should therefore be taken into account to a much greater extent in order to be much more cautious with words such as “conservation” and to develop a dynamic approach to biodiversity management.

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1. Novacek MJ (2008) Engaging the public in biodiversity issues. *Proc Natl Acad Sci USA* 105:11571–11578.

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