

## Changing perspectives on biodiversity conservation: from species protection to regional sustainability

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**摘要** Biodiversity is the basis for ecosystem goods and services that provide for human survival and prosperity. With a rapidly increasing human population and its demands for natural resources, landscapes are being fragmented, habitats are being destroyed, and biodiversity is declining. How can biodiversity be effectively conserved in the face of increasing human pressures? In this paper, I review changing perspectives on biodiversity conservation, and discuss their relevance to the practice of biodiversity conservation. The major points include: The notion of balance of nature is a myth rather than a scientific concept; the theory of island biogeography is useful heuristically but flawed practically; the SLOSS debate is intriguing in theory but ir-relevant in reality; the concept of minimum viable population and population viability analysis are useful, but technically inefficient and conceptually inadequate; metapopulation theory is mathematically elegant but ecologically oversimplistic; and integrative perspectives and approaches for biodiversity conservation are needed that incorporate insights from landscape ecology and sustainability science. I further discuss some key principles for regional conservation planning, and argue that the long-term success of biodiversity conservation in any region will ultimately depend on the economic and social sustainability of that region. Both research and practice in biodiversity conservation, therefore, need to adopt a broader perspective of sustainability

**关键词** [biodiversity](#) [conservation biology](#) [landscape ecology](#) [sustainability science](#)

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