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Increasing Threats to Biodiversity: How can Urban Sprawl and Its Drivers be Addressed?

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Abstract

Urban sprawl is an important threat to biodiversity and it has strongly increased in many parts of the world in recent decades. Natural and semi-natural landscapes are increasingly built over and fragmented, which potentially reduces the resilience of ecosystems and enhances the risk of invasive species. Due to the dramatic loss and homogenization of biodiversity in urbanized landscapes, ecosystem services are also negatively affected. Monitoring systems of biodiversity should include pressure indicators, and therefore, urban sprawl should be included in monitoring systems of biodiversity. For the first time, we provide data about urban sprawl on a continental scale using the novel method of Weighted Urban Proliferation (WUP) and evaluate socio-economic, cultural, geophysical, and demographical drivers of urban sprawl. In order to protect biodiversity from the threat of urban sprawl, we need to identify the relevant drivers of urban sprawl and study their relative importance.

Bio

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