

**Title:**

**Novel urban ecosystems, biodiversity and conservation**

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**Abstract:**

1. Increasing urban growth leads to a profound loss of natural and cultural landscapes. At the same time, novel ecosystems emerge within the urban fabric due to habitat transformation or to ecological processes following habitat destruction. As a consequence, biodiversity patterns are severely altered along urban-rural-gradients.
2. Generally, number of native species appears to decline in urban regions while that of introduced species increases. Cities may become hotspots of plant diversity, but studies on species richness or homogenization of urban floras and faunas yielded varying results. Compositional changes in biota often reflect habitat history and changes in environmental conditions as well as dispersal processes. Here, it is of special interest to which extent species are able to establish self-replacing population at urban sites.
3. Well established conservation strategies mostly aim at preserving native ecosystems or species by (1) curbing urban growth and resulting habitat losses, (2) preserving natural remnants within cities or (3) restoring native species in urban habitats. These approaches are important, but complementary strategies may be needed in the face of recent and future changes in urban environments.
4. Hence, I argue for combining strategies that preserve native ecosystems with those that rely on the acceptance of novel urban ecosystems and of associated changes in species composition. Novel urban ecosystems may be valued as an adaptation to severe habitat transformation and may provide an array of ecosystem services in urban settings.