# Article information:

Frontiers | Urbanization Effects on Biodiversity Revealed by a Two-Scale Analysis of Species Functional Uniqueness vs. Redundancy
<https://www.frontiersin.org/articles/10.3389/fevo.2020.00073/full>

# Article summary:

1. Urbanization has a complex mix of changes that increase pressure on local remnant species diversity and induce the assembly of novel ecological communities.

2. The analysis of the diversity of functional traits in cities is particularly important as functional traits influence the way species respond to environmental conditions or contribute to ecosystem properties.

3. Originality metrics can be used to evaluate species-specific responses to urbanization, accounting for ecological differences between coexisting species at multiple spatial scales.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article "Urbanization Effects on Biodiversity Revealed by a Two-Scale Analysis of Species Functional Uniqueness vs. Redundancy" provides an overview of the impact of urbanization on biodiversity, with a focus on functional diversity. The article highlights the need for a comprehensive analysis of species responses to urbanization and their contribution to community functional diversity across spatial scales.

One potential bias in the article is that it focuses primarily on plant and animal species, without considering other forms of biodiversity such as microbial communities or ecosystem processes. This narrow focus may limit the scope of the analysis and overlook important aspects of urban biodiversity.

Another potential bias is that the article assumes that urbanization has a negative impact on biodiversity, without considering potential positive effects such as increased habitat heterogeneity or conservation efforts in urban areas. While it is true that urbanization can have negative impacts on biodiversity, it is important to consider both positive and negative effects when evaluating its overall impact.

The article also makes some unsupported claims, such as the assertion that cities play an important role in biodiversity conservation without providing evidence to support this claim. Additionally, while the article acknowledges contradictory effects of urbanization on species and functional diversity at smaller spatial scales, it does not explore these contradictions in depth or consider potential explanations for them.

Overall, while the article provides a useful overview of the impact of urbanization on biodiversity, it could benefit from a more nuanced analysis that considers both positive and negative effects and explores potential explanations for contradictory findings.

# Topics for further research:

* Impact of urbanization on microbial communities and ecosystem processes
* Positive effects of urbanization on biodiversity
* Evidence for cities playing a role in biodiversity conservation
* Contradictory effects of urbanization on species and functional diversity at smaller spatial scales
* Explanations for contradictory findings in urban biodiversity research
* Comprehensive analysis of urban biodiversity beyond plant and animal species

# Report location:

<https://www.fullpicture.app/item/43386e32c78de4261eb7f6abd77e9364>