

Publication

Owners' perceptions do not match actual ground-dwelling invertebrate diversity in their gardens

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

ID 4619494

Author(s) Braschler, Brigitte; Zwahlen, Valerie; Gilgado, José D.; Rusterholz, Hans-Peter; Baur, Bruno

Author(s) at UniBasel [Braschler, Brigitte](#) ; [Zwahlen, Valerie](#) ; [Gilgado Hormaechea, José Domingo](#) ; [Rusterholz, Hans-Peter](#) ; [Baur, Bruno](#) ;

Year 2021

Title Owners' perceptions do not match actual ground-dwelling invertebrate diversity in their gardens

Journal Diversity

Volume 13

Number 5

Pages / Article-Number 189

Keywords ants, beetles, biodiversity, ecological knowledge, gastropods, millipedes, private domestic gardens, spiders, urbanization, woodlice

Urban gardens are important for human well-being, biodiversity and other ecosystem functions. Biodiversity-promoting initiatives would benefit from their owners being aware of the state of biodiversity in their gardens. We examined whether garden owners' perceptions match actual biodiversity in their gardens and whether perceptions are influenced by the owners' ecological knowledge. We used a structured interview to assess the motivations and biodiversity knowledge of owners of 33 domestic gardens in the city of Basel (Switzerland) and related them to a survey of native plants and several groups of ground-dwelling invertebrates in their gardens. Owners showed different priorities, with promotion of habitat for biodiversity, receiving, on average, higher scores than cultivation, recreation and garden designing. Owners prioritizing biodiversity promotion had gardens with high habitat richness. The garden owners' perceptions of both native plant and overall invertebrate diversity were not correlated with actual diversity data for native plants and ground-dwelling invertebrates. The perceptions of the abundance of invertebrate groups by garden owners with good biodiversity knowledge were not more accurate than those from owners with less knowledge. Despite their willingness, many owners do not know all the opportunities to promote biodiversity. Initiatives to further biodiversity-friendly gardening should thus transfer knowledge.

Publisher MDPI

ISSN/ISBN 1424-2818

edoc-URL <https://edoc.unibas.ch/83054/>

Full Text on edoc Available;

Digital Object Identifier DOI 10.3390/d13050189