
Biodiversity and recreational values of urban brownfields: The case of Tallinn, Estonia

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Résumé

Green areas are important part of the urban ecosystem as through ecosystem services they increase human well-being, regulate and habitat several ecological functions. The biodiversity in Tallinn, the capital of Estonia, is influenced by the abundance of mosaic-like landscapes and communities that were developed together with a strong and diverse anthropogenic impact. Tallinn became an industrial city in the second half of 20th century. Today, most of these industrial elements are demolished, trans-formed into other purposes or remained brownfields, which cover about 7% of the city territory.

Recently, some former brownfields have been transformed into residential green spaces with Pae Park, a former limestone quarry in Lasnamäe district, being the most prominent example. While in this case the re-development of the area into a park has added ecological value, other brownfield developments of Lasnamäe, Tallinn's largest post-socialist housing estate, are more ambivalent as they include the construction of several modern residential developments. In this process, however, these brownfields are likely to lose their ecological value – which is even more relevant considering that the districts is among those with least access to public green spaces in the city. As the case of Paevälja brownfield in Lasnamäe shows, where the number of residents is expected to rise in the next decade, there are no plans for significantly improving green space quantity and quality. This points to a more general clash of interest surrounding the topic of biodiversity, as biodiversity is often weighed against issues of green space usability for human recreational needs and landscape aesthetics. While biodiversity preservation would often call for more 'wild' natural habitats, concerns for usability and aesthetics often result in rather 'polished' green spaces that could inhibit biodiversity. This indicates a crucial environmental awareness paradox: while decision-makers are increasingly aware about the importance of biodiversity, environmental degradation in urban space continues.

A collection of pilot studies from Paevälja brownfield, linking ecological and sociological approaches, will provide valuable insight into the value of the area as a recreational brownfield and potential future developments. These highlight the importance of developing green space quality and quantity in line with environmental awareness and emphasise ecological planning principles as a part of building city developments.

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