Microbial communities in green infrastructure across New York City: spatial and temporal patterns

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“Recent urban sustainability efforts include the expansion of green infrastructure such as green roofs, tree pits, and medians. The microbial communities in these constructed ecosystems facilitate many of the benefits that green infrastructure is valued for, yet few studies have assessed the composition and function of soil microbes in the urban environment. In our lab, we are addressing questions related to the ecology of green infrastructure microbial communities, including how they are assembled spatially and temporally and how they are functioning in urban nutrient cycling processes. Through comparative analyses we have found diverse fungal and bacterial communities in these novel urban ecosystems and that microsite conditions and infrastructure-specific biotic and abiotic factors influence their composition and function. Together, these results have implications for the design and management of urban green infrastructure and provide insight into the ecological factors involved in urban microbial community assembly.”

As always, pizza for $2/slice will be available for all.