

*Flock of Gulls: A case of urban wildlife impact on water quality from urban green roofs*

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Green infrastructure is becoming more popular in urban planning efforts to make urbanization more sustainable. This study was conducted in one of the largest green roofs in New York City, located on top of the Jacob K. Javits Convention Center in New York City. In addition to its role in mitigating the volume and peak flow of stormwater runoff, the green roof is becoming an urban wildlife refuge to birds, bats, and arthropods. Herring Gulls are notorious for nesting on roofs in coastal cities, such as New York City. Since the installation of the green roof in 2014 at the Javits Center, a colony of nesting Herring Gulls has grown by approximately 50% a year, with at least 150 nesting pairs on the roof in 2019. The impact of the nesting Herring Gulls on the water quality of the green roof's runoff water, however, has been largely unstudied. In this talk we will describe how the presence of the Herring Gulls has potentially impacted the chemical composition and fecal contamination of the runoff water from the green roof.