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Presentation Title: Urbanization and social antipredator behaviour in American crows

Presentation Abstract:

American crows are the black-clad rulers of a city's skies and can be spotted in most North-American cities. Over the years, the abundance of these city-dwelling birds has increased, suggesting they benefit from living near humans. Recent literature shows that these urbanized species can ~~adapt their behaviours~~ behaviourally adapt to exploit anthropogenic ~~benefits resources~~ and maximize their benefits and fitness in urban areas. Typical adaptations to living in urban areas include changes in foraging behaviour, increased intraspecific aggression, and tameness toward humans. While individual-level behavioural adaptations are an active area of research, adaptations of social behaviours are underexplored. Urban areas have been shown to alter the frequency of social foraging behaviour such as sentinel behaviour. By lowering the risk of predation from natural predators, increasing access to anthropogenic food sources, or providing novel sources of stress (e.g. noise/light pollution, feral/free-roaming pets), urbanization ~~may might~~ shift the balance between foraging efficiency and vigilance against predators. In response, individuals that usually exhibit social foraging behaviour ~~can~~ could choose to forage in a more individualistic manner.

~~Here, we ask if social adaptations might be one of the reasons why American crows, *Corvus brachyrhynchos*, a highly social urbanised bird, seem to thrive in cities.~~

This spring and summer, we will perform experimental trials in popular crow foraging areas selected from a Brock community science initiative (<https://crowkemon.weebly.com/>). The trials will consist of multiple supplemental feedings of varying quantity and quality of food. Sentinel behaviour in American crows will be quantified and compared between urban and rural populations in the Niagara region. Thus, we ask if social adaptations might be one of the reasons why American crows, *Corvus brachyrhynchos*, a highly social urbanized bird, seem to thrive in cities. The expected findings of our experiment could help us predict how other urbanized species might respond to urbanization.

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