



Bathing Crow
Photo Credit (all): Kaeli Swift

THE CITY OF CROWS

By Kaeli Swift

It's a river of red lights ahead of me as my bus sits on a Seattle freeway during rush hour. The seemingly endless merging traffic continues to choke our progress, and I settle further into my seat, resigned to my stifling crawl home. I press my face to the window to get a better look at the sky. High above our heads a different commute is taking place. In contrast to mine, this commute moves freely, even acrobatically, as evidenced by the dips, dives and flips of its participants. Rather than rubber and hard

surfaces, these commuters need no manufactured aids to get to their destination; their soft black feathers will carry them where they are going. I attempt to count them, but cannot keep pace with their progress from my vantage point. There are thousands of them at least. Their wings beating against the sky, calling out to one another with caws, rattles and squawks, as they make their way to their nightly place of rest. My body may be trapped among my human commuters, but my mind is in the sky with the crows, as it

generally is.

As a doctoral candidate at the University of Washington, my job over the last five years has been to think deeply about the funeral behaviors of American crows, but they are undoubtedly on my mind even when I am away from the office. In contrast to some of my colleagues who travel great distances to access remote field sites, I can see my subjects or reach my areas of study simply by looking out the window or walking out the door. With our

industrial lawns, fondness for trees, and our ability to produce profuse amounts of garbage, metropolitan areas like Seattle are magnets for crows, and they thrive among us. These are not animals that have adapted to living in the anthropocene, these are animals that have exploited it. In Seattle, there is probably no better illustration of this than the great river of crows that flows above our heads at dawn and dusk.

Unlike my peers and I who are now heading towards our individual territories, these crows are just departing theirs. Soon they will join the many other thousands of commuters at their destination to form a black, cacophonous cloud before settling into the willow and alder trees to rest for the night in one of Seattle's mass roosts. There is still much we don't know about the functions of these communal roosts, but

we suspect they aid in predator aversion, warmth, and may provide social opportunities.

As I scan the flock, I can't help but wonder if my path has crossed with any of these birds before. Having interacted with hundreds of crows across Seattle in the course of my graduate work, it seems possible that at least one would show a sign of recognition. That such a feat is possible—a wild animal recognizing and remembering a person with whom it had a substantive experience—was the focus of my Principal Investigator, Dr. John Marzluff's, work a decade ago ([Marzluff et al. 2010](#)). By wearing masks while trapping and banding individual crows, his team was able to test how the banded birds would later react to seeing the masked person again. They quickly discovered the answer was, "not warmly." They were met with

a chorus of harsh alarm calls and threatening dive bombs. Perhaps more surprising was that this reaction was not limited to the birds they had captured. Indeed, the masked person found that their reputation was being passed to unmarked adult crows and even the offspring of the original subjects. It's been over a decade since that study, and still the sight of that masked person stirs up a response. Although there's been no published work, there's no doubt that something similar can be said about people who feed them, but of course in that case their reaction is positive. How many people does each member of this flock know, I wonder? We still have no idea what the limits to their memories of us are, though we are beginning to understand all the contexts in which they might learn about us.



People have known for a long time that corvids seem to recognize and respond to dead crows. Konrad Lorenz described the behavior in 1949 in his seminal book, *King Solomon's Ring*. But why they engage in this behavior—alarm calling and gathering around dead crows—remained mysterious until only recently. Through my work and the work of others looking at ravens and jays, we are starting to see what role danger learning and avoidance may play in motivating these funerals (Swift and Marzluff, 2015; Iglesias et al. 2012). In my study, we confronted wild crows with a person holding a dead crow, and found that they learned and remembered that face just as they had done in John's original study. Furthermore, they remain wary of the location where the body was held for days following the event. This impact to their spatial use and evidence of novel predator learning suggests that dead crows are used, at least in part, as a way of assessing and avoiding danger. Whether this more utilitarian motivation is complimented with an emotive one remains unknown, but certainly crows possess the mental hardware for such emotionally intelligent lives.

Looking around my bus, I wonder how many of my fellow passengers feel either in awe of or aghast at the mighty flock above our heads. Given their ubiquity and propensity for eating garbage, too many people write crows off, or simply hate them, without giving a second thought to depth of



character and brainpower that lies under those glossy feathers.

Crows share a similar relative brain size to primates, elephants and dolphins, and rival primates with respect to complex thinking such as insight, mental time travel, and hints of consciousness. Couple that with their territoriality and fifteen-year lifespan, and the average city dweller has access to a profound opportunity to learn about one of the planet's most intelligent creatures. Crows' desire to extract food from us makes them willing participants in efforts to befriend the specific pair that shares your yard, a relationship that you can maintain for a decade or more. In that time, you can learn about their family life, witness instances of play and turmoil, or offer them challenges designed to test their cognition, or at the very least test their willingness to work for peanuts. There are few other wild animals for which the same can be said; especially for people living in some of our most densely populated urban areas.

As darkness falls, the crows fade into the night and I can no longer make out their silhouettes. My attention turns to

ones from experiments past and future. There is so much left to understand about these birds, from decoding their dozens of unique vocalizations, to further exploring their funeral behaviors, and testing the limits of their mental abilities. For me, watching crows will never grow old. After all, what other animal can we say so closely watches us back?

Resources:

Iglesias, T.L., McElreath, R., & Patricelli, G.L. (2012). Western scrub-jay funerals: cacophonous aggregations in response to dead conspecifics. *Animal Behaviour*, 84, 1103–1111. <https://www.sciencedirect.com/science/article/pii/S0003347212003569>.

Marzluff JM., Walls J., Cornell HN., Withey JC., Craig DP. (2010) Lasting recognition of threatening people by wild American crows. *Animal Behaviour* 79: 699-707. <https://www.sciencedirect.com/science/article/pii/S0003347209005806>.

Swift, KN., and Marzluff JM. (2015) Wild American crows gather around their dead to learn about danger. *Animal Behaviour* 109: 187-197. <https://www.sciencedirect.com/science/article/pii/S0003347215003188>.



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For more on Kaeli Swift's work please visit: Corvid Research. <https://corvidresearch.blog>.

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