

University of Windsor

Scholarship at UWindsor

UWill Discover Undergraduate Conference

UWill Discover 2020

Are carrion resources as scarce as we think?

Madison A. Laprise

University of Windsor, lapri111@uwindsor.ca

Sherah VanLaerhoven Dr.

University of Windsor, vanlaerh@uwindsor.ca

Alice Grgicak-Mannion Ms.

University of Windsor, grgica3@uwindsor.ca

Follow this and additional works at: <https://scholar.uwindsor.ca/uwilldiscover>

Laprise, Madison A.; VanLaerhoven, Sherah Dr.; and Grgicak-Mannion, Alice Ms., "Are carrion resources as scarce as we think?" (2020). *UWill Discover Undergraduate Conference*. 109.

<https://scholar.uwindsor.ca/uwilldiscover/2020/online/109>

This Event is brought to you for free and open access by the Conferences and Conference Proceedings at Scholarship at UWindsor. It has been accepted for inclusion in UWill Discover Undergraduate Conference by an authorized administrator of Scholarship at UWindsor. For more information, please contact scholarship@uwindsor.ca.

Are carrion resources as scarce as we think?

Abstract

As humans, we tend to focus on the greener, living aspects of the environment and often forget the other side filled with death and decay. Carrion, the decaying flesh of dead animals, is a nutrient-rich, spatially patchy ephemeral resource, relied upon as a food by a variety of organisms. As a patchy and finite resource, carrion's availability and distribution are unpredictable. Some factors that can influence the availability and production of carrion include predation, old age, and anthropogenic causes. Feeding on these resources are many scavengers, both facultative and obligate, vertebrate and arthropod. A primary consumer of carrion are blow flies (Diptera: Calliphoridae); often the first organisms to arrive at a decaying carcass. There are at least 11 blow fly species in SW Ontario, all requiring carrion resources for immature larval development yet manage to co-exist on what has been stated to be a rare, patchy ephemeral resource. My thesis will be testing the hypothesis that carrion resources are not as rare as previously considered and may be predicted using land-use attributes. Specifically, I will be using geospatial technology to model land-use attributes in the urban and rural areas of Essex County, Ontario. Some distinct elements of land-use being examined include farm, residential, commercial, and conservation. Following this, sites will be randomly chosen to trap blow flies across the gradient of land-use predicted to influence carrion availability, measuring blow fly species diversity along this gradient. This knowledge furthers our understanding of blow fly co-existence across a spatial and temporal landscape.