SUPPLEMENT

TO

**Building façade-level correlates of bird-window collisions**

**in a small urban area**

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**Figure S1**. Residuals plotted against dependent variables (adjusted carcass counts) for multi-season (A & B), spring (C & D), and summer models (E & F). For plots A, C, and E, n=235 and the 4 façades of building OS12 are highlighted in red. For plots B, D, and F, n=231 and building OS12 is excluded.

**Table S1**. Results for spring models of relationship between façade variables and bias-adjusted carcass counts based on Akaike’s Information Criterion (ΔAICc).

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **ΔAICc** | **K** | **ωi** |
| Glass, Height, Length, Type | 0.0 | 10 | 1.000 |
| Glass, Height, Length | 89.4 | 6 | <0.001 |
| Glass, Length, Type | 96.0 | 9 | <0.001 |
| Glass, Height, Type | 96.4 | 9 | <0.001 |
| Glass, Height | 100.6 | 5 | <0.001 |
| Height, Length, Type | 107.5 | 9 | <0.001 |
| Length, Type | 116.9 | 8 | <0.001 |
| Glass, Length | 118.5 | 5 | <0.001 |
| Glass, Type | 123.3 | 8 | <0.001 |
| Height, Length | 125.4 | 5 | <0.001 |
| Null | 147.6 | 3 | <0.001 |

**Table S2**. Results for summer models of relationship between façade variables and bias-adjusted carcass counts based on Akaike’s Information Criterion (ΔAICc).

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **ΔAICc** | **K** | **ωi** |
| Glass, Height, Length, Lawn | 0.0 | 7 | 1.000 |
| Glass, Height, Length | 5.6 | 6 | <0.001 |
| Glass, Height, Lawn | 6.7 | 6 | <0.001 |
| Glass, Height | 8.3 | 5 | <0.001 |
| Glass, Length, Type, Lawn | 15.8 | 10 | <0.001 |
| Glass, Length, Lawn | 19.8 | 6 | <0.001 |
| Glass, Length, Type | 22.7 | 9 | <0.001 |
| Glass, Length | 28.6 | 5 | <0.001 |
| Glass, Type, Lawn | 28.7 | 9 | <0.001 |
| Glass, Type | 30.6 | 8 | <0.001 |
| Glass, Lawn | 33.7 | 5 | <0.001 |
| Height, Length | 34.3 | 5 | <0.001 |
| Null | 50.9 | 3 | <0.001 |

**Table S3**. Results for fall models of relationship between façade variables and bias-adjusted carcass counts based on Akaike’s Information Criterion (ΔAICc). This analysis excluded the class ‘corner’ from the façade type variable, and thus n = 215.

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **ΔAICc** | **K** | **ωi** |
| Glass, Height, Type, Tree, Lawn | 0.0 | 10 | 0.382 |
| Glass, Height, Tree, Lawn | 2.4 | 7 | 0.116 |
| Glass, Height, Tree | 2.6 | 6 | 0.106 |
| Glass, Type, Tree, Lawn | 2.6 | 9 | 0.104 |
| Glass, Type, Tree | 3.0 | 8 | 0.084 |
| Glass, Height, Type, Lawn | 3.6 | 9 | 0.062 |
| Glass, Height, Type | 3.7 | 8 | 0.060 |
| Glass, Type, Lawn | 5.2 | 8 | 0.028 |
| Glass, Type | 5.4 | 7 | 0.025 |
| Glass, Tree, Lawn | 6.4 | 6 | 0.015 |
| Glass, Tree | 7.4 | 5 | 0.009 |
| Glass, Height, Lawn | 9.7 | 6 | 0.003 |
| Glass, Height | 9.8 | 5 | 0.003 |
| Glass, Lawn | 11.5 | 5 | 0.001 |
| Glass, Length | 11.8 | 5 | 0.001 |
| Null | 38.7 | 3 | <0.001 |

**Table S4**. Results for Lincoln’s Sparrow models of relationship between façade variables and bias-adjusted carcass counts based on Akaike’s Information Criterion (ΔAICc).

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **ΔAICc** | **K** | **ωi** |
| Glass, Tree, Flower | 0.0 | 6 | 0.55 |
| Glass, Tree | 0.4 | 5 | 0.45 |
| Glass, Length, Flower | 44.3 | 9 | <0.001 |
| Glass, Flower | 45.1 | 5 | <0.001 |
| Glass | 45.3 | 4 | <0.001 |
| Null | 61.7 | 3 | <0.001 |

**Table S5**. Results for American Robin models of relationship between façade variables and bias-adjusted carcass counts based on Akaike’s Information Criterion (ΔAICc).

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **ΔAICc** | **K** | **ωi** |
| Length, Impervious | 0.0 | 5 | 0.432 |
| Length, Lawn | 0.6 | 5 | 0.318 |
| Tree, Impervious | 2.7 | 5 | 0.113 |
| Length | 2.7 | 4 | 0.110 |
| Null | 5.5 | 3 | 0.027 |

**Table S6**. Results for European Starling models of relationship between façade variables and bias-adjusted carcass counts based on Akaike’s Information Criterion (ΔAICc). This analysis excluded the classes ‘corner’ and ‘portico’ from the façade type variable, and thus n = 176.

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **ΔAICc** | **K** | **ωi** |
| Type, Flower | 0.0 | 6 | 0.484 |
| Height, Type | 2.0 | 6 | 0.182 |
| Glass, Tree | 2.3 | 6 | 0.151 |
| Length, Glass, Flower | 2.4 | 6 | 0.146 |
| Null | 5.1 | 3 | 0.038 |

**Table S7**. Results for Mourning Dove models of relationship between façade variables and bias-adjusted carcass counts based on Akaike’s Information Criterion (ΔAICc).

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **ΔAICc** | **K** | **ωi** |
| Glass, Height, Length | 0.0 | 6 | 0.817 |
| Glass, Height, Impervious | 5.4 | 6 | 0.055 |
| Glass, Height | 6.3 | 5 | 0.035 |
| Glass, Length | 6.4 | 5 | 0.034 |
| Height, Length, Impervious | 7.0 | 6 | 0.025 |
| Height, Length | 7.1 | 5 | 0.024 |
| Length, Impervious | 8.8 | 5 | 0.010 |
| Null | 16.8 | 3 | <0.001 |

**Table S8**. Results for Indigo Bunting models of relationship between façade variables and bias-adjusted carcass counts based on Akaike’s Information Criterion (ΔAICc). This analysis excluded the class ‘portico’ from the façade type variable, and thus n = 196.

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **ΔAICc** | **K** | **ωi** |
| Length, Height, Type | 0.0 | 8 | 0.582 |
| Length, Type | 0.9 | 7 | 0.372 |
| Glass, Length, Type | 6.7 | 8 | 0.021 |
| Height, Type | 7.2 | 7 | 0.016 |
| Type, Lawn | 10.1 | 7 | 0.004 |
| Glass, Height | 10.4 | 5 | 0.003 |
| Type | 11.4 | 6 | 0.002 |
| Glass, Lawn | 17.0 | 5 | <0.001 |
| Null | 37.6 | 3 | <0.001 |

**Table S9**. Results for Swainson’s Thrush models of relationship between façade variables and bias-adjusted carcass counts based on Akaike’s Information Criterion (ΔAICc). This analysis excluded the class ‘corner’ from the façade type variable, and thus n = 215.

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **ΔAICc** | **K** | **ωi** |
| Glass, Type, Height, Length | 0.0 | 9 | 0.649 |
| Glass, Type, Height | 1.2 | 8 | 0.349 |
| Glass, Type, Length | 11.0 | 8 | 0.003 |
| Glass, Height | 30.8 | 5 | <0.001 |
| Glass, Type | 365.0 | 7 | <0.001 |
| Glass | 43.7 | 4 | <0.001 |
| Glass, Length | 43.7 | 5 | <0.001 |
| Null | 60.0 | 3 | <0.001 |

**Table S10**. Results for House Finch models of relationship between façade variables and bias-adjusted carcass counts based on Akaike’s Information Criterion (ΔAICc). This analysis excluded the class ‘corner’ from the façade type variable, and thus n = 215.

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **ΔAICc** | **K** | **ωi** |
| Glass, Height, Length, Tree, Impervious | 0.0 | 8 | 0.327 |
| Glass, Height, Type | 0.6 | 8 | 0.244 |
| Glass, Height, Length, Impervious | 0.8 | 7 | 0.215 |
| Glass, Height, Impervious | 3.2 | 6 | 0.066 |
| Glass, Type | 4.1 | 7 | 0.042 |
| Glass, Height | 4.3 | 5 | 0.037 |
| Height, Length, Tree, Impervious | 4.9 | 7 | 0.028 |
| Height, Type | 5.5 | 7 | 0.021 |
| Type | 5.7 | 6 | 0.019 |
| Null | 21.2 | 3 | <0.001 |

**Table S11**. Results for Painted Bunting models of relationship between façade variables and bias-adjusted carcass counts based on Akaike’s Information Criterion (ΔAICc). This analysis excluded the class ‘corner’ from the façade type variable, and thus n = 215.

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **ΔAICc** | **K** | **ωi** |
| Glass, Height, Impervious | 0.0 | 6 | 0.348 |
| Glass, Height, Type | 0.7 | 8 | 0.242 |
| Height, Type | 2.2 | 7 | 0.113 |
| Glass, Height, Length, Flower | 2.5 | 7 | 0.101 |
| Glass, Height, Flower | 2.6 | 6 | 0.093 |
| Glass, Height | 2.7 | 5 | 0.092 |
| Height, Impervious | 8.1 | 5 | 0.006 |
| Height, Flower | 9.1 | 5 | 0.004 |
| Height | 11.4 | 4 | 0.001 |
| Null | 25.9 | 3 | <0.001 |