

Supplementary Material

Density dependent refueling of migratory songbirds during stopover within an urbanizing coastal landscape

Emily B. Cohen, Jill M. Lafleur, Frank R. Moore

1.1 Supplementary Tables

Supplementary Table 1. Species and foraging groups detected on transect surveys during 2011 and 2012 spring migration in paired small and large forested habitat patches along the coast of Mississippi, U.S..

| Lai | Large Sites | | Small Sites | |
|------|--|--|---|--|
| | SHE | DON | HEL | Total |
| by | 1 | 2 | | 3 |
| by | 3 | | | 3 |
| by | | 2 | | 2 |
| ру | 2 | | 1 | 3 |
| ру | | | 2 | 2 |
| y 5 | | 2 | 3 | 10 |
| y 30 | 17 | 12 | 13 | 72 |
| 9 | 4 | 5 | 3 | 21 |
| | 1 | 1 | 4 | 6 |
| 1 | | 1 | | 2 |
| by 2 | 1 | 2 | | 5 |
| y 5 | 1 | | 1 | 7 |
| | | 3 | 1 | 4 |
| ру | | 3 | 3 | 6 |
| 2 | 1 | | 2 | 5 |
| ру | | | 1 | 1 |
| y 3 | 4 | 6 | 3 | 16 |
| y 4 | 3 | 1 | | 8 |
| by | | 1 | 2 | 3 |
| oy 1 | 2 | 5 | 7 | 15 |
| ру | 1 | 1 | 1 | 3 |
| | | 3 | | 3 |
| - | 1 | | | 1 |
| | | 1 | 2 | 3 |
| 1 | | 4 | | 5 |
| 3 | 3 | 3 | | 9 |
| | DAV DAV DAV DAV DAV DAV DAV DAV | by 1 by 3 by 3 by 2 by 5 by 30 17 9 4 1 1 by 2 1 by 5 1 by 5 1 by 1 by 5 1 by 1 by 1 by 1 by 1 by 1 by 1 by 1 b | DAV SHE DON Dy 1 2 Dy 3 2 Dy 2 2 Dy 5 2 Dy 30 17 12 9 4 5 1 1 1 1 1 1 1 1 2 Dy 3 3 2 1 3 Dy 1 2 Dy 1 1 Dy 1 1 Dy 3 1 <td< td=""><td>DAV SHE DON HEL Dy 1 2 Dy 2 1 Dy 2 1 Dy 5 2 3 Dy 5 2 3 Dy 30 17 12 13 Dy 3 4 4 Dy 2 1 2 Dy 3 3 3 Dy 3 4 6 3 Dy 1 2 2 Dy 1 2 2 Dy 1 2 3 Dy 1 2 5 Dy 1 1 1 Dy 3 1 1 Dy 3 1 1 Dy 3 1 1 Dy 1 2 5 7</td></td<> | DAV SHE DON HEL Dy 1 2 Dy 2 1 Dy 2 1 Dy 5 2 3 Dy 5 2 3 Dy 30 17 12 13 Dy 3 4 4 Dy 2 1 2 Dy 3 3 3 Dy 3 4 6 3 Dy 1 2 2 Dy 1 2 2 Dy 1 2 3 Dy 1 2 5 Dy 1 1 1 Dy 3 1 1 Dy 3 1 1 Dy 3 1 1 Dy 1 2 5 7 |

| Worm-eating Warbler | Canopy/Subcanopy | 2 | 2 | | 1 | 5 |
|---------------------------|------------------|----|----|----|----|-----|
| Yellow Warbler | Canopy/Subcanopy | 1 | | 2 | 2 | 5 |
| Yellow-bellied Flycatcher | Canopy/Subcanopy | | | 1 | | 1 |
| Yellow-billed Cuckoo | Canopy/Subcanopy | | 2 | 1 | | 3 |
| Yellow-throated Vireo | Canopy/Subcanopy | 2 | 1 | | | 3 |
| Yellow-throated Warbler | Canopy/Subcanopy | 2 | | 1 | | 3 |
| Total | | 73 | 50 | 63 | 52 | 238 |

Supplementary Table 2. Species composition of birds tested for refueling performance during 2011 and 2012 spring migration in paired small and large habitat patches along the coast of Mississippi, U.S..

| | T. G.: | | 0 11 | 0 11 01 | |
|---|-------------|------|------|-------------|-------|
| | Large Sites | | | Small Sites | |
| | DAV | SHE | DON | HEL | |
| Net hours | 999 | 704 | 345 | 642 | |
| Capture Rates | 0.01 | 0.02 | 0.13 | 0.05 | |
| Species | | | | | Total |
| American Redstart (Setophaga ruticilla) | | 1 | | 2 | 3 |
| Black-and-white Warbler (<i>Mniotilta varia</i>) | | | | 1 | 1 |
| Eastern Wood Pewee (Contopus virens) | | | | 1 | 1 |
| Hooded Warbler (Setophaga citrina) | 1 | 2 | 4 | | 7 |
| Great Crested Flycatcher (Myiarchus crinitus) | 2 | | 1 | 1 | 4 |
| Grey-cheeked Thrush (Catharus minimus) | | 1 | 1 | 5 | 7 |
| Indigo Bunting (Passerina cyanea) | 1 | | 4 | | 5 |
| Louisiana Waterthrush (<i>Parkesia motacilla</i>) | 1 | | 3 | | 4 |
| Magnolia Warbler (Setophaga magnolia) | | | | 1 | 1 |
| Northern Parula (Setophaga americana) | | | | 1 | 1 |
| Northern Waterthrush (Parkesia noveboracensis) | | | 2 | 2 | 4 |
| Orchard Oriole (<i>Icterus spurius</i>) | | | 2 | 2 | 4 |
| Ovenbird (Seiurus aurocapilla) | 1 | 4 | 4 | 4 | 13 |
| Painted Bunting (Passerina ciris) | | | 2 | | 2 |
| Prothonotary Warbler (<i>Protonotaria citrea</i>) | | | 3 | 1 | 4 |
| Red-eyed Vireo (Vireo olivaceus) | | 4 | 1 | 1 | 6 |
| Rose-breasted Grosbeak (Pheucticus | | | 1 | 1 | 2 |
| ludovicianus) | | | | | |
| Summer Tanager (Piranga rubra) | | 2 | | 2 | 4 |
| Swainson's Thrush (Catharus ustulatus) | 4 | | 4 | 4 | 12 |
| Veery (Catharus fuscescens) | 1 | | 1 | 3 | 5 |
| Wood Thrush (<i>Hylocichla mustelina</i>) | 2 | | 6 | | 8 |
| Worm-eating Warbler (Helmitheros vermivorum) | 1 | 1 | 2 | | 4 |
| Yellow-breasted Chat (Icteria virens) | | | 2 | 2 | 4 |
| Yellow-billed Cuckoo (Coccyzus americanus) | | 1 | | | 1 |
| Total | 14 | 16 | 43 | 34 | 107 |