

**BIRD MONITORING REPORT, 2017-2019**  
**SOUTHERN MARYLAND IMPORTANT BIRD AREAS**  
**SUPPLEMENTAL DATA**

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**Table S1. All Sites Summary**

Total detections and mean relative abundance (detections/point) of each species observed at the four survey sites (combined; forest routes only). Forest Interior Dwelling Birds (FIDS) are denoted in bold font; Species of Greatest Conservation Need (SGCN) are denoted by \*. Count is the number of detections during 5-minute counts. Mean is the mean number of detections per 5-minute count. A mean of P indicates a species that was only detected outside of the 5-minutes count periods.

| Species                         | Habitat Specialist | 2017  |      | 2018  |      | 2019  |      | 2017-2019 |      |
|---------------------------------|--------------------|-------|------|-------|------|-------|------|-----------|------|
|                                 |                    | Count | Mean | Count | Mean | Count | Mean | Count     | Mean |
| <b>Acadian Flycatcher*</b>      | <b>FIDS</b>        | 229   | 1.47 | 306   | 1.29 | 276   | 1.37 | 811       | 1.36 |
| American Crow                   |                    | 76    | 0.44 | 76    | 0.44 | 78    | 0.42 | 230       | 0.43 |
| American Goldfinch              |                    | 39    | 0.23 | 37    | 0.21 | 17    | 0.11 | 93        | 0.17 |
| <b>American Redstart*</b>       | <b>FIDS</b>        | 6     | 0.02 | 6     | 0.02 | 1     | 0.00 | 13        | 0.01 |
| American Robin                  |                    | 4     | 0.02 | 7     | 0.02 | 7     | 0.01 | 18        | 0.02 |
| Bald Eagle*                     |                    | 1     | 0.00 | 5     | 0.09 | 4     | 0.07 | 10        | 0.07 |
| Baltimore Oriole                |                    | 1     | 0.00 | 2     | 0.04 |       |      | 3         | 0.02 |
| <b>Barred Owl</b>               | <b>FIDS</b>        | 1     | 0.00 | 1     | 0.01 | 1     | 0.00 | 3         | 0.01 |
| Belted Kingfisher               |                    | 1     | 0.00 |       |      | 2     | 0.02 | 3         | 0.01 |
| Black Vulture                   |                    |       |      | 1     | 0.02 |       | 0.00 | 1         | 0.01 |
| <b>Black-and-white Warbler*</b> | <b>FIDS</b>        | 1     | 0.00 | 7     | 0.03 | 2     | 0.02 | 10        | 0.02 |
| Blackpoll Warbler               |                    |       |      | 1     | 0.00 |       |      | 1         | 0.00 |
| Blue Grosbeak                   |                    | 2     | 0.01 | 6     | 0.01 |       |      | 8         | 0.01 |
| Blue Jay                        |                    | 27    | 0.18 | 59    | 0.31 | 49    | 0.26 | 135       | 0.26 |
| Blue-gray Gnatcatcher           |                    | 26    | 0.22 | 64    | 0.41 | 78    | 0.51 | 168       | 0.41 |
| <b>Brown Creeper*</b>           | <b>FIDS</b>        |       |      |       |      | 1     | 0.00 | 1         | 0.00 |
| Brown Thrasher                  |                    | 3     | 0.03 | 4     | 0.01 | 3     | 0.01 | 10        | 0.01 |
| Brown-headed Cowbird            |                    | 14    | 0.07 | 60    | 0.26 | 22    | 0.10 | 96        | 0.16 |
| Canada Goose                    |                    |       |      | 1     | 0.01 | 23    | 0.38 | 24        | 0.16 |
| Carolina Chickadee              |                    | 37    | 0.35 | 55    | 0.27 | 54    | 0.39 | 146       | 0.34 |
| Carolina Wren                   |                    | 45    | 0.31 | 131   | 0.85 | 129   | 0.91 | 305       | 0.76 |
| Cedar Waxwing                   |                    | 1     | 0.02 | 1     | 0.01 | 7     | 0.02 | 9         | 0.01 |
| <b>Cerulean Warbler*</b>        | <b>FIDS</b>        | 1     | 0.00 |       |      |       |      | 1         | 0.00 |
| Chimney Swift*                  |                    | 4     | 0.02 | 9     | 0.05 | 13    | 0.07 | 26        | 0.05 |
| Chipping Sparrow                |                    | 8     | 0.03 | 5     | 0.03 | 2     | 0.02 | 15        | 0.03 |
| Common Grackle                  |                    | 5     | 0.04 | 7     | 0.04 | 17    | 0.15 | 29        | 0.08 |
| Common Yellowthroat             |                    | 18    | 0.07 | 18    | 0.07 | 18    | 0.08 | 54        | 0.08 |
| Downy Woodpecker                |                    | 33    | 0.26 | 45    | 0.28 | 36    | 0.22 | 114       | 0.25 |
| Eastern Bluebird                |                    | 1     | 0.00 | 7     | 0.05 | 8     | 0.06 | 16        | 0.05 |
| Eastern Kingbird                |                    | 2     | 0.01 | 2     | 0.00 | 6     | 0.07 | 10        | 0.03 |
| Eastern Phoebe                  |                    |       |      |       |      | 2     | 0.03 | 2         | 0.01 |
| Eastern Towhee                  | SHRUB              | 7     | 0.04 | 7     | 0.03 | 6     | 0.03 | 20        | 0.03 |
| Eastern Wood-Pewee              |                    | 127   | 0.95 | 140   | 0.66 | 152   | 0.78 | 419       | 0.77 |
| European Starling               |                    |       |      |       |      | 1     | 0.01 | 1         | 0.00 |

| Species                       | Habitat Specialist | 2017  |      | 2018  |      | 2019  |      | 2017-2019 |      |
|-------------------------------|--------------------|-------|------|-------|------|-------|------|-----------|------|
|                               |                    | Count | Mean | Count | Mean | Count | Mean | Count     | Mean |
| Field Sparrow                 |                    | 7     | 0.03 | 11    | 0.02 | 6     | 0.01 | 24        | 0.02 |
| Fish Crow                     |                    |       |      | 3     | 0.01 | 5     | 0.04 | 8         | 0.02 |
| Gray Catbird                  |                    | 7     | 0.03 | 8     | 0.04 | 8     | 0.04 | 23        | 0.04 |
| Great Blue Heron*             |                    | 3     | 0.01 | 1     | 0.01 | 3     | 0.04 | 7         | 0.02 |
| Great Crested Flycatcher      |                    | 18    | 0.13 | 41    | 0.25 | 40    | 0.22 | 99        | 0.21 |
| Green Heron                   |                    |       |      |       |      | 3     | 0.03 | 3         | 0.01 |
| <b>Hairy Woodpecker</b>       | <b>FIDS</b>        | 3     | 0.02 | 11    | 0.09 | 17    | 0.14 | 31        | 0.10 |
| <b>Hooded Warbler*</b>        | <b>FIDS</b>        | 33    | 0.17 | 41    | 0.17 | 35    | 0.12 | 109       | 0.15 |
| <b>House Finch</b>            |                    |       |      |       |      | 1     | 0.00 | 1         | 0.00 |
| House Wren                    |                    |       |      | 2     | 0.00 |       |      | 2         | 0.00 |
| Indigo Bunting                |                    | 20    | 0.11 | 29    | 0.18 | 22    | 0.15 | 71        | 0.15 |
| <b>Kentucky Warbler*</b>      | <b>FIDS</b>        | 11    | 0.09 | 25    | 0.08 | 18    | 0.06 | 54        | 0.07 |
| <b>Louisiana Waterthrush*</b> | <b>FIDS</b>        | 24    | 0.17 | 37    | 0.18 | 32    | 0.18 | 93        | 0.18 |
| Mallard                       |                    |       |      |       |      | 2     | 0.02 | 2         | 0.01 |
| Marsh Wren*                   | MARSH              | 1     | 0.00 |       |      |       |      | 1         | 0.00 |
| Mourning Dove                 |                    | 58    | 0.31 | 51    | 0.19 | 42    | 0.14 | 151       | 0.19 |
| Northern Cardinal             |                    | 81    | 0.61 | 156   | 0.77 | 139   | 0.74 | 376       | 0.73 |
| Northern Flicker              |                    | 5     | 0.05 | 5     | 0.02 | 5     | 0.02 | 15        | 0.03 |
| Northern Mockingbird          |                    | 1     | 0.01 | 1     | 0.01 | 1     | 0.00 | 3         | 0.01 |
| <b>Northern Parula*</b>       | <b>FIDS</b>        | 63    | 0.34 | 80    | 0.48 | 86    | 0.51 | 229       | 0.47 |
| Orchard Oriole                |                    | 1     | 0.00 | 8     | 0.02 | 6     | 0.04 | 15        | 0.02 |
| Osprey                        |                    | 1     | 0.00 | 5     | 0.07 | 8     | 0.14 | 14        | 0.09 |
| <b>Ovenbird*</b>              | <b>FIDS</b>        | 143   | 0.97 | 179   | 0.67 | 149   | 0.65 | 471       | 0.72 |
| <b>Pileated Woodpecker</b>    | <b>FIDS</b>        | 24    | 0.12 | 43    | 0.22 | 31    | 0.14 | 98        | 0.17 |
| Pine Warbler                  |                    | 6     | 0.02 | 6     | 0.02 | 5     | 0.02 | 17        | 0.02 |
| Prairie Warbler*              |                    | 2     | 0.01 |       |      |       |      | 2         | 0.00 |
| <b>Prothonotary Warbler*</b>  | <b>FIDS</b>        | 1     | 0.00 | 4     | 0.05 | 10    | 0.12 | 15        | 0.07 |
| Red-bellied Woodpecker        |                    | 72    | 0.49 | 141   | 0.73 | 93    | 0.62 | 306       | 0.64 |
| <b>Red-eyed Vireo</b>         | <b>FIDS</b>        | 204   | 1.49 | 284   | 1.30 | 262   | 1.25 | 750       | 1.32 |
| Red-headed Woodpecker*        |                    |       | P    | 1     | 0.00 |       | P    | 1         | 0.00 |
| <b>Red-shouldered hawk</b>    | <b>FIDS</b>        | 1     | 0.00 | 4     | 0.02 | 12    | 0.10 | 17        | 0.05 |
| Red-winged Blackbird          |                    | 18    | 0.09 | 46    | 0.57 | 45    | 0.65 | 109       | 0.50 |
| Ruby-throated Hummingbird     |                    | 6     | 0.06 | 4     | 0.02 | 8     | 0.04 | 18        | 0.04 |
| <b>Scarlet Tanager*</b>       | <b>FIDS</b>        | 85    | 0.60 | 77    | 0.33 | 80    | 0.39 | 242       | 0.41 |
| Summer Tanager                |                    | 23    | 0.13 | 22    | 0.07 | 28    | 0.12 | 73        | 0.10 |
| Tufted Titmouse               |                    | 130   | 0.78 | 213   | 1.06 | 131   | 0.72 | 474       | 0.87 |
| Turkey Vulture                |                    |       |      | 3     | 0.05 | 8     | 0.04 | 11        | 0.04 |
| <b>Veery*</b>                 | <b>FIDS</b>        | 1     | 0.00 |       |      |       |      | 1         | 0.00 |
| White-breasted Nuthatch       |                    | 38    | 0.27 | 58    | 0.22 | 32    | 0.16 | 128       | 0.21 |
| White-eyed Vireo              | SHRUB              | 6     | 0.03 | 17    | 0.16 | 9     | 0.10 | 32        | 0.11 |

| Species                           | Habitat Specialist | 2017         |              | 2018         |              | 2019         |              | 2017-2019    |              |
|-----------------------------------|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                   |                    | Count        | Mean         | Count        | Mean         | Count        | Mean         | Count        | Mean         |
| Wild turkey                       |                    | 4            | 0.02         | 1            | 0.01         | 1            | 0.00         | 6            | 0.01         |
| Willow Flycatcher*                |                    |              |              |              |              | 1            | 0.00         | 1            | 0.00         |
| Wood Duck                         |                    |              |              |              |              | 4            | 0.06         | 4            | 0.02         |
| <b>Wood Thrush*</b>               | <b>FIDS</b>        | 189          | 1.31         | 198          | 0.83         | 179          | 0.81         | 566          | 0.92         |
| <b>Worm-eating Warbler*</b>       | <b>FIDS</b>        | 37           | 0.25         | 36           | 0.11         | 53           | 0.15         | 126          | 0.15         |
| Yellow Warbler                    |                    | 2            | 0.02         |              |              | 2            | 0.00         | 4            | 0.01         |
| Yellow-billed Cuckoo              |                    | 12           | 0.06         | 34           | 0.17         | 45           | 0.25         | 91           | 0.18         |
| Yellow-breasted Chat*             |                    | 1            | 0.00         | 3            | 0.01         | 7            | 0.01         | 11           | 0.01         |
| <b>Yellow-throated Vireo*</b>     | <b>FIDS</b>        | 19           | 0.09         | 27           | 0.14         | 30           | 0.26         | 76           | 0.18         |
| Yellow-throated Warbler           |                    | 12           | 0.05         | 9            | 0.03         | 23           | 0.07         | 44           | 0.05         |
| <b>TOTALS</b>                     |                    | <b>2093</b>  | <b>13.77</b> | <b>2994</b>  | <b>14.89</b> | <b>2742</b>  | <b>15.51</b> | <b>7829</b>  | <b>14.92</b> |
| <i># Species</i>                  |                    | <i>69</i>    |              | <i>69</i>    |              | <i>74</i>    |              | <i>83</i>    |              |
| <b>FIDS TOTALS</b>                |                    | <b>1076</b>  | <b>7.12</b>  | <b>1366</b>  | <b>6.01</b>  | <b>1275</b>  | <b>6.28</b>  | <b>3717</b>  | <b>6.34</b>  |
| <i># FIDS Species</i>             |                    | <i>20</i>    |              | <i>18</i>    |              | <i>19</i>    |              | <i>21</i>    |              |
| <b>Proportion FIDS</b>            |                    | <b>51.4%</b> |              | <b>45.6%</b> |              | <b>46.5%</b> | <b>0.84</b>  | <b>47.5%</b> | <b>3.40</b>  |
| <i>Proportion FIDS Species</i>    |                    | <i>29.0%</i> |              | <i>26.1%</i> |              | <i>25.7%</i> |              | <i>25.3%</i> |              |
| <b>SGCN TOTALS</b>                |                    | <b>855</b>   | <b>5.53</b>  | <b>1042</b>  | <b>4.53</b>  | <b>980</b>   | <b>4.83</b>  | <b>2877</b>  | <b>4.85</b>  |
| <i># SGCN Species</i>             |                    | <i>21</i>    |              | <i>18</i>    |              | <i>19</i>    |              | <i>24</i>    |              |
| <b>Proportion SGCN</b>            |                    | <b>40.9%</b> |              | <b>34.8%</b> |              | <b>35.7%</b> |              | <b>36.7%</b> |              |
| <i>Proportion SGCN Species</i>    |                    | <i>30.4%</i> |              | <i>26.1%</i> |              | <i>25.7%</i> |              | <i>28.9%</i> |              |
| <i># FIDS and SGCN</i>            |                    | <i>15</i>    |              | <i>13</i>    |              | <i>14</i>    |              | <i>16</i>    |              |
| <i># FIDS between points only</i> |                    | <i>0</i>     |              | <i>0</i>     |              | <i>0</i>     |              | <i>0</i>     |              |
| <i># SGCN b/w points only</i>     |                    | <i>1</i>     |              | <i>0</i>     |              | <i>1</i>     |              | <i>0</i>     |              |

Single observation (heard singing) of Blackpoll Warbler on 5/24/2018 at Parkers Creek excluded as likely migrant.

**Table S2. South River Greenway**

Total detections and mean relative abundance (detections/point) of each species observed. Forest Interior Dwelling Birds (FIDS) are denoted in bold font; Species of Greatest Conservation Need (SGCN) are denoted by \*. *Count* is the number of detections during 5-minute counts. *Mean* is the mean number of detections per 5-minute count. A mean of P indicates a species that was only detected outside of the 5-minutes count periods.

| Species                         | Habitat Specialist | 2017  |          | 2018  |      | 2019  |      | 2017-2019 |      |
|---------------------------------|--------------------|-------|----------|-------|------|-------|------|-----------|------|
|                                 |                    | Total | Mean     | Total | Mean | Total | Mean | Total     | Mean |
| <b>Acadian Flycatcher*</b>      | <b>FIDS</b>        | 31    | 2.01     | 50    | 3.29 | 32    | 2.08 | 113       | 2.46 |
| American Crow                   |                    | 5     | 0.31     | 12    | 0.75 | 5     | 0.31 | 22        | 0.46 |
| American Goldfinch              |                    | 6     | 0.38     | 3     | 0.19 | 6     | 0.38 | 15        | 0.31 |
| <b>American Redstart*</b>       | <b>FIDS</b>        |       |          | 1     | 0.07 |       |      | 1         | 0.02 |
| <b>Black-and-white Warbler*</b> | <b>FIDS</b>        |       |          | 2     | 0.14 |       |      | 2         | 0.05 |
| Blue Jay                        |                    | 3     | 0.21     | 18    | 1.21 | 4     | 0.28 | 25        | 0.56 |
| Blue-gray Gnatcatcher           |                    | 7     | 0.44     | 26    | 1.68 | 10    | 0.65 | 43        | 0.92 |
| Brown Thrasher                  |                    |       |          | 1     | 0.06 |       |      | 1         | 0.02 |
| Brown-headed Cowbird            |                    | 1     | 0.06     | 17    | 1.09 | 1     | 0.06 | 19        | 0.40 |
| Carolina Chickadee              |                    | 15    | 0.97     | 13    | 0.84 | 13    | 0.83 | 41        | 0.88 |
| Carolina Wren                   |                    | 9     | 0.57     | 22    | 1.46 | 16    | 1.07 | 47        | 1.03 |
| Cedar Waxwing                   |                    | 1     | 0.06     | 1     | 0.07 | 1     | 0.06 | 3         | 0.07 |
| Chimney Swift*                  |                    |       |          | 6     | 0.38 | 2     | 0.14 | 8         | 0.17 |
| Chipping Sparrow                |                    |       |          | 1     | 0.06 |       |      | 1         | 0.02 |
| Common Yellowthroat             |                    |       |          | 2     | 0.14 |       |      | 2         | 0.05 |
| Downy Woodpecker                |                    | 8     | 0.54     | 10    | 0.70 | 7     | 0.47 | 25        | 0.57 |
| Eastern Bluebird                |                    |       |          | 1     | 0.07 |       |      | 1         | 0.02 |
| Eastern Towhee                  | SHRUB              | 1     | 0.06     | 2     | 0.14 | 1     | 0.06 | 4         | 0.09 |
| Eastern Wood-Pewee              |                    | 30    | 1.95     | 38    | 2.59 | 33    | 2.16 | 101       | 2.23 |
| Gray Catbird                    |                    |       |          | 4     | 0.25 |       |      | 4         | 0.08 |
| Great Crested Flycatcher        |                    | 2     | 0.13     | 6     | 0.41 | 2     | 0.13 | 10        | 0.22 |
| <b>Hairy Woodpecker</b>         | <b>FIDS</b>        |       |          | 1     | 0.07 |       |      | 1         | 0.02 |
| <b>Hooded Warbler*</b>          | <b>FIDS</b>        |       |          | 5     | 0.36 |       |      | 5         | 0.12 |
| Indigo Bunting                  |                    | 1     | 0.06     | 3     | 0.21 | 2     | 0.13 | 6         | 0.13 |
| <b>Kentucky Warbler*</b>        | <b>FIDS</b>        | 1     | 0.06     | 3     | 0.21 | 1     | 0.06 | 5         | 0.11 |
| <b>Louisiana Waterthrush*</b>   | <b>FIDS</b>        | 3     | 0.21     | 4     | 0.25 | 2     | 0.13 | 9         | 0.20 |
| Mourning Dove                   |                    | 2     | 0.13     | 3     | 0.21 | 2     | 0.13 | 7         | 0.16 |
| Northern Cardinal               |                    | 19    | 1.25     | 26    | 1.72 | 20    | 1.32 | 65        | 1.43 |
| Northern Flicker                |                    | 2     | 0.14     | 2     | 0.13 | 2     | 0.14 | 6         | 0.14 |
| <b>Northern Parula*</b>         | <b>FIDS</b>        | 4     | 0.26     | 10    | 0.65 | 3     | 0.19 | 17        | 0.37 |
| <b>Ovenbird*</b>                | <b>FIDS</b>        | 27    | 1.79     | 49    | 3.30 | 35    | 2.37 | 111       | 2.49 |
| <b>Pileated Woodpecker</b>      | <b>FIDS</b>        |       |          | 5     | 0.34 | 1     | 0.07 | 6         | 0.14 |
| Red-bellied Woodpecker          |                    | 10    | 0.64     | 19    | 1.24 | 12    | 0.79 | 41        | 0.89 |
| <b>Red-eyed Vireo</b>           | <b>FIDS</b>        | 42    | 2.79     | 66    | 4.36 | 39    | 2.57 | 147       | 3.24 |
| <i>Red-headed Woodpecker*</i>   |                    |       | <i>P</i> |       |      |       |      |           |      |
| Red-winged Blackbird            |                    | 1     | 0.06     |       |      | 1     | 0.06 | 2         | 0.04 |
| Ruby-throated Hummingbird       |                    | 3     | 0.19     |       |      | 4     | 0.26 | 7         | 0.15 |

| Species                        | Habitat Specialist | 2017         |              | 2018         |              | 2019         |              | 2017-2019    |              |
|--------------------------------|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                |                    | Total        | Mean         | Total        | Mean         | Total        | Mean         | Total        | Mean         |
| Scarlet Tanager*               | FIDS               | 17           | 1.17         | 20           | 1.36         | 12           | 0.81         | 49           | 1.11         |
| Tufted Titmouse                |                    | 16           | 1.04         | 41           | 2.70         | 13           | 0.83         | 70           | 1.52         |
| White-breasted Nuthatch        |                    | 7            | 0.46         | 9            | 0.59         | 6            | 0.38         | 22           | 0.48         |
| White-eyed Vireo               | SHRUB              |              |              | 1            | 0.07         |              |              | 1            | 0.02         |
| Wild Turkey                    |                    |              |              | 1            | 0.07         |              |              | 1            | 0.02         |
| Wood Thrush*                   | FIDS               | 32           | 2.18         | 45           | 2.81         | 27           | 1.82         | 104          | 2.27         |
| Worm-eating Warbler*           | FIDS               | 6            | 0.38         | 9            | 0.61         | 7            | 0.45         | 22           | 0.48         |
| Yellow-billed Cuckoo           |                    |              |              | 3            | 0.21         | 4            | 0.29         | 7            | 0.17         |
| Yellow-throated Vireo*         | FIDS               |              |              | 6            | 0.42         | 4            | 0.29         | 10           | 0.24         |
| <b>TOTALS</b>                  |                    | <b>312</b>   | <b>20.50</b> | <b>567</b>   | <b>37.47</b> | <b>330</b>   | <b>21.79</b> | <b>1209</b>  | <b>26.59</b> |
| <i># Species</i>               |                    | 30           |              | 43           |              | 34           |              | 45           |              |
| <b>FIDS TOTALS</b>             |                    | <b>163</b>   | <b>10.84</b> | <b>276</b>   | <b>18.24</b> | <b>163</b>   | <b>10.84</b> | <b>602</b>   | <b>13.31</b> |
| <i># FIDS Species</i>          |                    | 9            |              | 15           |              | 11           |              | 15           |              |
| <b>Proportion FIDS</b>         |                    | <b>52.2%</b> |              | <b>48.7%</b> |              | <b>49.4%</b> |              | <b>49.8%</b> |              |
| <i>Proportion FIDS Species</i> |                    | 30.0%        |              | 34.9%        |              | 32.4%        |              | 33.3%        |              |
| <b>SGCN TOTALS</b>             |                    | <b>121</b>   | <b>8.05</b>  | <b>210</b>   | <b>13.85</b> | <b>125</b>   | <b>8.34</b>  | <b>456</b>   | <b>10.08</b> |
| <i># SGCN Species</i>          |                    | 8            |              | 13           |              | 10           |              | 13           |              |
| <b>Proportion SGCN</b>         |                    | <b>38.8%</b> |              | <b>37.0%</b> |              | <b>37.9%</b> |              | <b>37.7%</b> |              |
| <i>Proportion SGCN Species</i> |                    | 26.7%        |              | 30.2%        |              | 29.4%        |              | 28.9%        |              |
| <i># FIDS and SGCN</i>         |                    | 8            |              | 12           |              | 9            |              | 12           |              |

**Table S3. Parkers Creek**

Total detections and mean relative abundance (detections/point) of each species observed. Forest Interior Dwelling Birds (FIDS) are denoted in bold font; Species of Greatest Conservation Need (SGCN) are denoted by \*. *Count* is the number of detections during 5-minute counts. *Mean* is the mean number of detections per 5-minute count. A mean of P indicates a species that was only detected outside of the 5-minutes count periods.

| Species                         | Habitat Specialist | 2017  |       | 2018  |       | 2019  |       | 2017-2019 |       |
|---------------------------------|--------------------|-------|-------|-------|-------|-------|-------|-----------|-------|
|                                 |                    | Total | Mean  | Total | Mean  | Total | Mean  | Total     | Mean  |
| <b>Acadian Flycatcher*</b>      | <b>FIDS</b>        | 198   | 14.38 | 213   | 13.49 | 181   | 10.21 | 592       | 12.35 |
| American Crow                   |                    | 71    | 5.68  | 39    | 2.56  | 45    | 2.63  | 155       | 3.43  |
| American Goldfinch              |                    | 33    | 1.96  | 18    | 1.11  | 5     | 0.27  | 56        | 1.05  |
| <b>American Redstart*</b>       | <b>FIDS</b>        | 6     | 0.40  | 4     | 0.23  | 1     | 0.06  | 11        | 0.21  |
| American Robin                  |                    | 4     | 0.25  | 7     | 0.44  | 7     | 0.38  | 18        | 0.36  |
| Bald Eagle*                     |                    | 1     | 0.06  |       |       |       |       | 1         | 0.02  |
| Baltimore Oriole                |                    | 1     | 0.06  |       |       |       |       | 1         | 0.02  |
| <b>Barred Owl</b>               | <b>FIDS</b>        | 1     | 0.06  |       |       | 1     | 0.06  | 2         | 0.04  |
| Belted Kingfisher               |                    | 1     | 0.06  |       |       |       |       | 1         | 0.02  |
| <b>Black-and-white Warbler*</b> | <b>FIDS</b>        | 1     | 0.06  | 4     | 0.24  |       |       | 5         | 0.08  |
| Blackpoll Warbler               |                    |       |       | 1     | 0.06  |       |       | 1         | 0.02  |
| Blue Grosbeak                   |                    | 2     | 0.12  | 6     | 0.33  |       |       | 8         | 0.11  |
| Blue Jay                        |                    | 24    | 1.79  | 31    | 2.06  | 35    | 2.12  | 90        | 1.94  |
| Blue-gray Gnatcatcher           |                    | 19    | 1.60  | 14    | 0.93  | 29    | 1.58  | 62        | 1.37  |
| <b>Brown Creeper*</b>           | <b>FIDS</b>        |       |       |       |       | 1     | 0.06  | 1         | 0.02  |
| Brown Thrasher                  |                    | 3     | 0.38  | 3     | 0.17  | 3     | 0.16  | 9         | 0.22  |
| Brown-headed Cowbird            |                    | 13    | 0.82  | 35    | 2.08  | 16    | 0.95  | 64        | 1.15  |
| Carolina Chickadee              |                    | 22    | 1.61  | 28    | 1.72  | 19    | 1.03  | 69        | 1.41  |
| Carolina Chickadee              |                    |       |       | 1     | 0.06  |       |       | 1         | 3.14  |
| <b>Carolina Wren</b>            |                    | 36    | 2.67  | 58    | 3.85  | 56    | 3.36  | 150       | 0.12  |
| Cedar Waxwing                   |                    |       |       |       |       | 6     | 0.35  | 6         | 0.02  |
| <b>Cerulean Warbler*</b>        | <b>FIDS</b>        | 1     | 0.06  |       |       |       |       | 1         | 0.25  |
| Chimney Swift*                  |                    | 4     | 0.22  | 2     | 0.13  | 7     | 0.41  | 13        | 0.24  |
| Chipping Sparrow                |                    | 8     | 0.47  | 3     | 0.19  | 1     | 0.06  | 12        | 0.39  |
| Common Grackle                  |                    | 5     | 0.56  | 3     | 0.18  | 7     | 0.44  | 15        | 0.72  |
| Common Yellowthroat             |                    | 18    | 1.18  | 13    | 0.77  | 10    | 0.46  | 41        | 1.31  |
| Downy Woodpecker                |                    | 25    | 1.73  | 20    | 1.22  | 16    | 0.97  | 61        | 0.13  |
| Eastern Bluebird                |                    | 1     | 0.06  | 4     | 0.25  | 1     | 0.06  | 6         | 0.09  |
| Eastern Kingbird                |                    | 2     | 0.11  | 2     | 0.11  | 2     | 0.07  | 6         | 0.27  |
| Eastern Towhee                  | SHRUB              | 6     | 0.41  | 4     | 0.23  | 4     | 0.22  | 14        | 5.60  |
| Eastern Wood-Pewee              |                    | 97    | 6.99  | 79    | 5.11  | 91    | 5.20  | 267       | 0.34  |
| Field sparrow                   |                    | 7     | 0.39  | 11    | 0.61  | 6     | 0.22  | 24        | 0.10  |
| Fish Crow                       |                    |       |       | 3     | 0.25  | 1     | 0.06  | 4         | 0.31  |
| Gray Catbird                    |                    | 7     | 0.42  | 3     | 0.19  | 5     | 0.30  | 15        | 0.06  |

| Species                       | Habitat Specialist | 2017  |       | 2018  |          | 2019  |      | 2017-2019 |       |
|-------------------------------|--------------------|-------|-------|-------|----------|-------|------|-----------|-------|
|                               |                    | Total | Mean  | Total | Mean     | Total | Mean | Total     | Mean  |
| Great Blue Heron*             |                    | 3     | 0.17  |       |          |       |      | 3         | 1.35  |
| Great Crested Flycatcher      |                    | 16    | 1.45  | 20    | 1.25     | 26    | 1.49 | 62        | 0.37  |
| <b>Hairy Woodpecker</b>       | <b>FIDS</b>        | 3     | 0.25  | 6     | 0.35     | 9     | 0.53 | 18        | 2.19  |
| <b>Hooded Warbler*</b>        | <b>FIDS</b>        | 33    | 2.66  | 33    | 2.37     | 32    | 1.94 | 98        | 0.02  |
| House Finch                   |                    |       |       |       |          | 1     | 0.06 | 1         | 0.04  |
| House Wren                    |                    |       |       | 2     | 0.13     |       |      | 2         | 0.87  |
| Indigo Bunting                |                    | 19    | 1.31  | 17    | 1.00     | 10    | 0.47 | 46        | 1.01  |
| <b>Kentucky Warbler*</b>      | <b>FIDS</b>        | 10    | 1.04  | 20    | 1.22     | 16    | 0.88 | 46        | 1.55  |
| <b>Louisiana Waterthrush*</b> | <b>FIDS</b>        | 21    | 1.84  | 27    | 1.76     | 22    | 1.29 | 70        | 0.02  |
| Marsh Wren*                   |                    | 1     | 0.06  |       |          |       |      | 1         | 2.77  |
| Mourning Dove                 |                    | 56    | 3.97  | 40    | 2.56     | 35    | 1.86 | 131       | 4.54  |
| Northern Cardinal             |                    | 62    | 4.41  | 86    | 5.17     | 75    | 4.32 | 223       | 0.18  |
| Northern Flicker              |                    | 3     | 0.17  | 2     | 0.13     | 3     | 0.19 | 8         | 0.06  |
| Northern Mockingbird          |                    | 1     | 0.13  |       |          | 1     | 0.06 | 2         | 3.10  |
| <b>Northern Parula*</b>       | <b>FIDS</b>        | 59    | 4.06  | 43    | 2.77     | 49    | 2.63 | 151       | 0.18  |
| Orchard Oriole                |                    | 1     | 0.06  | 8     | 0.44     | 4     | 0.15 | 13        | 0.04  |
| Osprey                        |                    | 1     | 0.06  | 1     | 0.06     |       |      | 2         | 6.62  |
| <b>Ovenbird*</b>              | <b>FIDS</b>        | 116   | 7.62  | 117   | 7.24     | 103   | 5.54 | 336       | 1.35  |
| <b>Pileated Woodpecker</b>    | <b>FIDS</b>        | 24    | 1.68  | 25    | 1.44     | 20    | 1.15 | 69        | 0.24  |
| Pine Warbler                  |                    | 6     | 0.33  | 4     | 0.22     | 4     | 0.22 | 14        | 0.04  |
| Prairie Warbler*              |                    | 2     | 0.11  |       |          |       |      | 2         | 0.04  |
| <b>Prothonotary Warbler*</b>  | <b>FIDS</b>        | 1     | 0.06  |       | <i>P</i> | 1     | 0.06 | 2         | 4.13  |
| Red-bellied Woodpecker        |                    | 62    | 4.98  | 72    | 4.67     | 42    | 2.52 | 176       | 10.54 |
| Red-breasted Woodpecker       |                    |       |       | 13    | 0.72     |       |      | 13        | 0.02  |
| <b>Red-eyed Vireo</b>         | <b>FIDS</b>        | 162   | 11.97 | 168   | 10.81    | 173   | 9.82 | 503       | 0.08  |
| Red-headed Woodpecker*        |                    |       |       | 1     | 0.06     |       |      | 1         | 0.73  |
| <b>Red-shouldered hawk</b>    | <b>FIDS</b>        | 1     | 0.06  | 2     | 0.13     | 1     | 0.06 | 4         | 0.21  |
| Red-winged Blackbird          |                    | 17    | 1.03  | 13    | 0.75     | 7     | 0.42 | 37        | 3.34  |
| Ruby-throated Hummingbird     |                    | 3     | 0.25  | 3     | 0.17     | 4     | 0.23 | 10        | 1.53  |
| <b>Scarlet Tanager*</b>       | <b>FIDS</b>        | 68    | 4.58  | 46    | 2.87     | 54    | 2.88 | 168       | 6.55  |
| Summer Tanager                |                    | 23    | 1.85  | 19    | 1.28     | 24    | 1.40 | 66        | 0.07  |
| Tufted Titmouse               |                    | 114   | 7.78  | 121   | 7.92     | 77    | 4.35 | 312       | 0.02  |
| Turkey Vulture                |                    |       |       |       |          | 6     | 0.22 | 6         | 1.89  |
| <b>Veery*</b>                 | <b>FIDS</b>        | 1     | 0.06  |       |          |       |      | 1         | 0.16  |
| White-breasted Nuthatch       |                    | 31    | 2.27  | 40    | 2.53     | 18    | 1.03 | 89        | 0.09  |
| White-eyed Vireo              | SHRUB              | 6     | 0.42  |       |          | 1     | 0.06 | 7         | 0.01  |
| Wild Turkey                   |                    | 4     | 0.28  |       |          | 1     | 0.06 | 5         | 8.54  |
| Willow Flycatcher*            |                    |       |       |       |          | 1     | 0.04 | 1         | 2.21  |



| Species                         | Habitat Specialist | 2017         |               | 2018         |               | 2019         |              | 2017-2019    |               |
|---------------------------------|--------------------|--------------|---------------|--------------|---------------|--------------|--------------|--------------|---------------|
|                                 |                    | Total        | Mean          | Total        | Mean          | Total        | Mean         | Total        | Mean          |
| Wood Thrush*                    | FIDS               | 157          | 11.28         | 129          | 8.37          | 121          | 6.69         | 407          | 0.13          |
| Worm-eating Warbler*            | FIDS               | 31           | 2.24          | 27           | 1.81          | 46           | 2.59         | 104          | 1.20          |
| Yellow Warbler                  |                    | 2            | 0.25          |              |               | 2            | 0.13         | 4            | 0.17          |
| Yellow-billed Cuckoo            |                    | 12           | 0.84          | 22           | 1.29          | 27           | 1.51         | 61           | 1.11          |
| Yellow-breasted Chat*           |                    | 1            | 0.06          | 3            | 0.18          | 7            | 0.28         | 11           | 0.70          |
| Yellow-throated Vireo*          | FIDS               | 19           | 1.39          | 17           | 1.17          | 14           | 0.84         | 50           | 1.13          |
| Yellow-throated Warbler         |                    | 12           | 0.70          | 7            | 0.47          | 21           | 0.97         | 40           | 0.71          |
| <b>TOTALS</b>                   |                    | <b>1781</b>  | <b>128.24</b> | <b>1763</b>  | <b>111.83</b> | <b>1614</b>  | <b>90.66</b> | <b>5157</b>  | <b>108.75</b> |
| <i># Species</i>                |                    | 68           |               | 60           |               | 63           |              | 79           |               |
| <b>FIDS TOTALS</b>              |                    | <b>913</b>   | <b>65.73</b>  | <b>881</b>   | <b>56.25</b>  | <b>845</b>   | <b>47.30</b> | <b>2639</b>  | <b>56.43</b>  |
| <i># FIDS Species</i>           |                    | 20           |               | 16           |               | 18           |              | 21           |               |
| <b>Proportion FIDS</b>          |                    | <b>51.3%</b> |               | <b>50.0%</b> |               | <b>52.4%</b> | <b>0.84</b>  | 0.51         | 3.40          |
| <i>Proportion FIDS Species</i>  |                    | 29.4%        |               | 26.7%        |               | 28.6%        |              | 0.27         |               |
| <b>SGCN TOTALS</b>              |                    | <b>734</b>   | <b>52.39</b>  | <b>686</b>   | <b>43.89</b>  | <b>656</b>   | <b>36.42</b> | <b>2076</b>  | <b>44.23</b>  |
| <i># SGCN Species</i>           |                    | 21           |               | 15           |               | 16           |              | 24           |               |
| <b>Proportion SGCN</b>          |                    | <b>41.2%</b> |               | <b>38.9%</b> |               | <b>40.7%</b> |              | <b>40.3%</b> |               |
| <i>Proportion SGCN Species</i>  |                    | 30.9%        |               | 25.0%        |               | 25.4%        |              | 30.4%        |               |
| <i># FIDS and SGCN</i>          |                    | 15           |               | 12           |               | 13           |              | 16           |               |
| <i>FIDS between points only</i> |                    | 0            |               | 1            |               | 0            |              | 0            |               |

**Table S4. Chapman State Park**

Total detections and mean relative abundance (detections/point) of each species observed. Forest Interior Dwelling Birds (FIDS) are denoted in bold font; Species of Greatest Conservation Need (SGCN) are denoted by \*. *Count* is the number of detections during 5-minute counts. *Mean* is the mean number of detections per 5-minute count. A mean of P indicates a species that was only detected outside of the 5-minutes count periods.

| Species                       | Habitat Specialist | 2018  |      | 2019  |      | 2018-2019 |      |
|-------------------------------|--------------------|-------|------|-------|------|-----------|------|
|                               |                    | Total | Mean | Total | Mean | Total     | Mean |
| <b>Acadian Flycatcher*</b>    | <b>FIDS</b>        | 16    | 1.14 | 23    | 1.64 | 39        | 1.39 |
| American Crow                 |                    | 7     | 0.50 | 6     | 0.43 | 13        | 0.46 |
| American Goldfinch            |                    | 2     | 0.14 |       |      | 2         | 0.07 |
| Bald Eagle*                   |                    | 5     | 0.36 | 4     | 0.29 | 9         | 0.32 |
| Baltimore Oriole              |                    | 2     | 0.14 |       |      | 2         | 0.07 |
| Black Vulture                 |                    | 1     | 0.07 |       |      | 1         | 0.04 |
| Blue Jay                      |                    | 5     | 0.36 | 6     | 0.43 | 11        | 0.39 |
| Blue-gray Gnatcatcher         |                    | 2     | 0.14 | 5     | 0.36 | 7         | 0.25 |
| Brown-headed Cowbird          |                    | 2     | 0.14 | 2     | 0.14 | 4         | 0.14 |
| Canada Goose                  |                    |       |      | 20    | 1.43 | 20        | 0.71 |
| Carolina Chickadee            |                    | 2     | 0.14 | 7     | 0.50 | 9         | 0.32 |
| Carolina Wren                 |                    | 16    | 1.14 | 19    | 1.36 | 35        | 1.25 |
| Chipping Sparrow              |                    | 1     | 0.07 | 1     | 0.07 | 2         | 0.07 |
| Common Grackle                |                    |       |      | 5     | 0.36 | 5         | 0.18 |
| Common Yellowthroat           |                    | 1     | 0.07 |       |      | 1         | 0.04 |
| Downy Woodpecker              |                    | 5     | 0.36 | 2     | 0.14 | 7         | 0.25 |
| Eastern Bluebird              |                    | 2     | 0.14 |       |      | 2         | 0.07 |
| Eastern Kingbird              |                    |       |      | 4     | 0.29 | 4         | 0.14 |
| Eastern Phoebe                |                    |       |      | 1     | 0.07 | 1         | 0.04 |
| Eastern Towhee                | SHRUB              |       |      | 1     | 0.07 | 1         | 0.04 |
| Eastern Wood-Pewee            |                    | 6     | 0.43 | 10    | 0.71 | 16        | 0.57 |
| Great Blue Heron*             |                    |       |      | 2     | 0.14 | 2         | 0.07 |
| Great Crested Flycatcher      |                    | 5     | 0.36 | 5     | 0.36 | 10        | 0.36 |
| <b>Hairy Woodpecker</b>       | <b>FIDS</b>        | 4     | 0.29 | 6     | 0.43 | 10        | 0.36 |
| <b>Hooded Warbler*</b>        | <b>FIDS</b>        | 3     | 0.21 | 3     | 0.21 | 6         | 0.21 |
| Indigo Bunting                |                    | 5     | 0.36 | 3     | 0.21 | 8         | 0.29 |
| <b>Kentucky Warbler*</b>      | <b>FIDS</b>        |       |      | 1     | 0.07 | 1         | 0.04 |
| <b>Louisiana Waterthrush*</b> | <b>FIDS</b>        | 5     | 0.36 | 5     | 0.36 | 10        | 0.36 |
| Mourning Dove                 |                    | 1     | 0.07 | 2     | 0.14 | 3         | 0.11 |
| Northern Cardinal             |                    | 7     | 0.50 | 6     | 0.43 | 13        | 0.46 |
| <b>Northern Parula*</b>       | <b>FIDS</b>        | 10    | 0.71 | 12    | 0.86 | 22        | 0.79 |
| Orchard Oriole                |                    |       |      | 2     | 0.14 | 2         | 0.07 |
| Osprey                        |                    | 4     | 0.29 | 8     | 0.57 | 12        | 0.43 |

| Species                         | Habitat Specialist | 2018         |              | 2019         |              | 2018-2019    |              |
|---------------------------------|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                 |                    | Total        | Mean         | Total        | Mean         | Total        | Mean         |
| Ovenbird*                       | FIDS               | 4            | 0.29         | 7            | 0.50         | 11           | 0.39         |
| Pileated Woodpecker             | FIDS               | 4            | 0.29         | 1            | 0.07         | 5            | 0.18         |
| Prothonotary Warbler*           | FIDS               | 2            | 0.14         | 4            | 0.29         | 6            | 0.21         |
| Red-bellied Woodpecker          |                    | 14           | 1.00         | 11           | 0.79         | 25           | 0.89         |
| Red-eyed Vireo                  | FIDS               | 16           | 1.14         | 17           | 1.21         | 33           | 1.18         |
| Red-shouldered Hawk             | FIDS               |              |              | 1            | 0.07         | 1            | 0.04         |
| Red-winged Blackbird            |                    | 28           | 2.00         | 33           | 2.36         | 61           | 2.18         |
| Ruby-throated Hummingbird       |                    | 1            | 0.07         |              |              | 1            | 0.04         |
| Scarlet Tanager*                | FIDS               | 3            | 0.21         | 7            | 0.50         | 10           | 0.36         |
| Summer Tanager                  |                    |              |              | 4            | 0.29         | 4            | 0.14         |
| Tufted Titmouse                 |                    | 15           | 1.07         | 13           | 0.93         | 28           | 1.00         |
| Turkey Vulture                  |                    | 3            | 0.21         | 2            | 0.14         | 5            | 0.18         |
| White-breasted Nuthatch         |                    | 1            | 0.07         | 1            | 0.07         | 2            | 0.07         |
| White-eyed Vireo                | SHRUB              | 2            | 0.14         | 3            | 0.21         | 5            | 0.18         |
| Wood Duck                       |                    |              |              | 3            | 0.21         | 3            | 0.11         |
| Wood Thrush*                    | FIDS               | 10           | 0.71         | 9            | 0.64         | 19           | 0.68         |
| Yellow-billed Cuckoo            |                    | 3            | 0.21         | 5            | 0.36         | 8            | 0.29         |
| Yellow-throated Vireo*          | FIDS               | 3            | 0.21         | 10           | 0.71         | 13           | 0.46         |
| Yellow-throated Warbler         |                    |              |              | 2            | 0.14         | 2            | 0.07         |
| <b>TOTALS</b>                   |                    | <b>228</b>   | <b>16.29</b> | <b>304</b>   | <b>21.71</b> | <b>532</b>   | <b>19.00</b> |
| <i># Species</i>                |                    | 40           |              | 46           |              | 52           |              |
| <b>FIDS TOTALS</b>              |                    | <b>80</b>    | <b>5.71</b>  | <b>106</b>   | <b>7.57</b>  | <b>186</b>   | <b>6.64</b>  |
| <i># FIDS Species</i>           |                    | 12           |              | 14           |              | 14           |              |
| <b>Proportion FIDS</b>          |                    | <b>35.1%</b> |              | <b>34.9%</b> | <b>0.84</b>  | <b>0.35</b>  | <b>3.40</b>  |
| <i>Proportion FIDS Species</i>  |                    | <i>30.0%</i> |              | <i>30.4%</i> |              | <i>0.27</i>  |              |
| <b>SGCN TOTALS</b>              |                    | <b>61</b>    | <b>4.36</b>  | <b>87</b>    | <b>6.21</b>  | <b>148</b>   | <b>5.29</b>  |
| <i># SGCN Species</i>           |                    | 10           |              | 12           |              | 12           |              |
| <b>Proportion SGCN</b>          |                    | <b>26.8%</b> |              | <b>28.6%</b> |              | <b>27.8%</b> |              |
| <i>Proportion SGCN Species</i>  |                    | <i>25.0%</i> |              | <i>26.1%</i> |              | <i>23.1%</i> |              |
| <i># FIDS and SGCN</i>          |                    | 9            |              | 10           |              | 10           |              |
| <i>FIDS between points only</i> |                    | 0            |              | 0            |              | 0            |              |

**Table S5. Mattawoman Creek**

Total detections and mean relative abundance (detections/point) of each species observed. Forest Interior Dwelling Birds (FIDS) are denoted in bold font; Species of Greatest Conservation Need (SGCN) are denoted by \*. *Count* is the number of detections during 5-minute counts. *Mean* is the mean number of detections per 5-minute count. A mean of P indicates a species that was only detected outside of the 5-minutes count periods.

| Species                         | Habitat Specialist | 2018  |          | 2019  |      | Both  |          |
|---------------------------------|--------------------|-------|----------|-------|------|-------|----------|
|                                 |                    | Total | Mean     | Total | Mean | Total | Mean     |
| <b>Acadian Flycatcher*</b>      | <b>FIDS</b>        | 27    | 0.90     | 40    | 1.33 | 67    | 1.12     |
| American Crow                   |                    | 18    | 0.60     | 22    | 0.73 | 40    | 0.67     |
| American Goldfinch              |                    | 14    | 0.47     | 6     | 0.20 | 20    | 0.33     |
| <b>American Redstart*</b>       | <b>FIDS</b>        | 1     | 0.03     |       |      | 1     | 0.02     |
| <b>Barred Owl</b>               | <b>FIDS</b>        | 1     | 0.03     |       |      | 1     | 0.02     |
| Belted Kingfisher               |                    |       |          | 2     | 0.07 | 2     | 0.03     |
| <b>Black-and-white Warbler*</b> | <b>FIDS</b>        | 1     | 0.03     | 2     | 0.07 | 3     | 0.05     |
| Blue Jay                        |                    | 5     | 0.17     | 5     | 0.17 | 10    | 0.17     |
| Blue-gray Gnatcatcher           |                    | 22    | 0.73     | 34    | 1.13 | 56    | 0.93     |
| Brown-headed Cowbird            |                    | 6     | 0.20     | 3     | 0.10 | 9     | 0.15     |
| Canada Goose                    |                    | 1     | 0.03     | 3     | 0.10 | 4     | 0.07     |
| Carolina Chickadee              |                    | 12    | 0.40     | 15    | 0.50 | 27    | 0.45     |
| Carolina Wren                   |                    | 35    | 1.17     | 38    | 1.27 | 73    | 1.22     |
| Chimney Swift*                  |                    | 1     | 0.03     | 4     | 0.13 | 5     | 0.08     |
| Common Grackle                  |                    | 4     | 0.13     | 5     | 0.17 | 9     | 0.15     |
| Common Yellowthroat             |                    | 2     | 0.07     | 8     | 0.27 | 10    | 0.17     |
| Downy Woodpecker                |                    | 10    | 0.33     | 11    | 0.37 | 21    | 0.35     |
| Eastern Bluebird                |                    |       |          | 7     | 0.23 | 7     | 0.12     |
| Eastern Phoebe                  |                    |       |          | 1     | 0.03 | 1     | 0.02     |
| Eastern Towhee                  | SHRUB              | 1     | 0.03     |       |      | 1     | 0.02     |
| Eastern Wood-Pewee              |                    | 17    | 0.57     | 18    | 0.60 | 35    | 0.58     |
| European Starling               |                    |       |          | 1     | 0.03 | 1     | 0.02     |
| Fish Crow                       |                    |       |          | 4     | 0.13 | 4     | 0.07     |
| Gray Catbird                    |                    | 1     | 0.03     | 3     | 0.10 | 4     | 0.07     |
| Great Blue Heron*               |                    | 1     | 0.03     | 1     | 0.03 | 2     | 0.03     |
| Great Crested Flycatcher        |                    | 10    | 0.33     | 7     | 0.23 | 17    | 0.28     |
| Green Heron                     |                    |       |          | 3     | 0.10 | 3     | 0.05     |
| <b>Hairy Woodpecker</b>         | <b>FIDS</b>        |       |          | 2     | 0.07 | 2     | 0.03     |
| <b>Hooded Warbler*</b>          | <b>FIDS</b>        |       | <i>P</i> |       |      |       | <i>P</i> |
| Indigo Bunting                  |                    | 4     | 0.13     | 7     | 0.23 | 11    | 0.18     |
| <b>Kentucky Warbler*</b>        | <b>FIDS</b>        | 2     | 0.07     |       |      | 2     | 0.03     |
| <b>Louisiana Waterthrush*</b>   | <b>FIDS</b>        | 1     | 0.03     | 3     | 0.10 | 4     | 0.07     |

| Species                         | Habitat Specialist | 2018       |              | 2019       |              | Both       |              |
|---------------------------------|--------------------|------------|--------------|------------|--------------|------------|--------------|
|                                 |                    | Total      | Mean         | Total      | Mean         | Total      | Mean         |
| Mallard                         |                    |            |              | 2          | 0.07         | 2          | 0.03         |
| Mourning Dove                   |                    | 7          | 0.23         | 3          | 0.10         | 10         | 0.17         |
| Northern Cardinal               |                    | 37         | 1.23         | 38         | 1.27         | 75         | 1.25         |
| Northern Flicker                |                    | 1          | 0.03         |            |              | 1          | 0.02         |
| Northern Mockingbird            |                    | 1          | 0.03         |            |              | 1          | 0.02         |
| <b>Northern Parula*</b>         | <b>FIDS</b>        | 17         | 0.57         | 22         | 0.73         | 39         | 0.65         |
| <b>Ovenbird*</b>                | <b>FIDS</b>        | 9          | 0.30         | 4          | 0.13         | 13         | 0.22         |
| <b>Pileated Woodpecker</b>      | <b>FIDS</b>        | 9          | 0.30         | 9          | 0.30         | 18         | 0.30         |
| Pine Warbler                    |                    | 2          | 0.07         | 1          | 0.03         | 3          | 0.05         |
| <b>Prothonotary Warbler*</b>    | <b>FIDS</b>        | 2          | 0.07         | 5          | 0.17         | 7          | 0.12         |
| Red-bellied Woodpecker          |                    | 23         | 0.77         | 28         | 0.93         | 51         | 0.85         |
| <b>Red-eyed Vireo</b>           | <b>FIDS</b>        | 34         | 1.13         | 33         | 1.10         | 67         | 1.12         |
| <i>Red-headed Woodpecker*</i>   |                    |            | <i>P</i>     |            |              |            | <i>P</i>     |
| <b>Red-shouldered Hawk</b>      | <b>FIDS</b>        | 2          | 0.07         | 10         | 0.33         | 12         | 0.20         |
| Red-winged Blackbird            |                    | 5          | 0.17         | 4          | 0.13         | 9          | 0.15         |
| <b>Scarlet Tanager*</b>         | <b>FIDS</b>        | 8          | 0.27         | 7          | 0.23         | 15         | 0.25         |
| Summer Tanager                  |                    | 3          | 0.10         |            | <i>P</i>     | 3          | 0.05         |
| Tufted Titmouse                 |                    | 36         | 1.20         | 28         | 0.93         | 64         | 1.07         |
| White-breasted Nuthatch         |                    | 8          | 0.27         | 7          | 0.23         | 15         | 0.25         |
| White-eyed Vireo                | SHRUB              | 14         | 0.47         | 5          | 0.17         | 19         | 0.32         |
| Wood Duck                       |                    |            |              | 1          | 0.03         | 1          | 0.02         |
| <b>Wood Thrush*</b>             | <b>FIDS</b>        | 14         | 0.47         | 22         | 0.73         | 36         | 0.60         |
| <b>Worm-eating Warbler*</b>     | <b>FIDS</b>        |            | <i>P</i>     |            |              |            | <i>P</i>     |
| Yellow-billed Cuckoo            |                    | 6          | 0.20         | 9          | 0.30         | 15         | 0.25         |
| <b>Yellow-throated Vireo*</b>   | <b>FIDS</b>        | 1          | 0.03         | 2          | 0.07         | 3          | 0.05         |
| Yellow-throated Warbler         |                    | 2          | 0.07         |            |              | 2          | 0.03         |
| <b>TOTALS</b>                   |                    | <b>438</b> | <b>14.60</b> | <b>495</b> | <b>16.50</b> | <b>933</b> | <b>15.55</b> |
| <i># Species</i>                |                    | 46         |              | 47         |              | 55         |              |
| <b>FIDS TOTALS</b>              |                    | <b>129</b> | <b>4.30</b>  | <b>161</b> | <b>5.37</b>  | <b>290</b> | <b>4.83</b>  |
| <i># FIDS Species</i>           |                    | 15         |              | 13         |              | 16         |              |
| <b>SGCN TOTALS</b>              |                    | <b>85</b>  | <b>2.83</b>  | <b>112</b> | <b>3.73</b>  | <b>197</b> | <b>3.28</b>  |
| <i># SGCN Species</i>           |                    | 13         |              | 11         |              | 13         |              |
| <i>FIDS between points only</i> |                    | 2          |              | 0          |              | 2          |              |

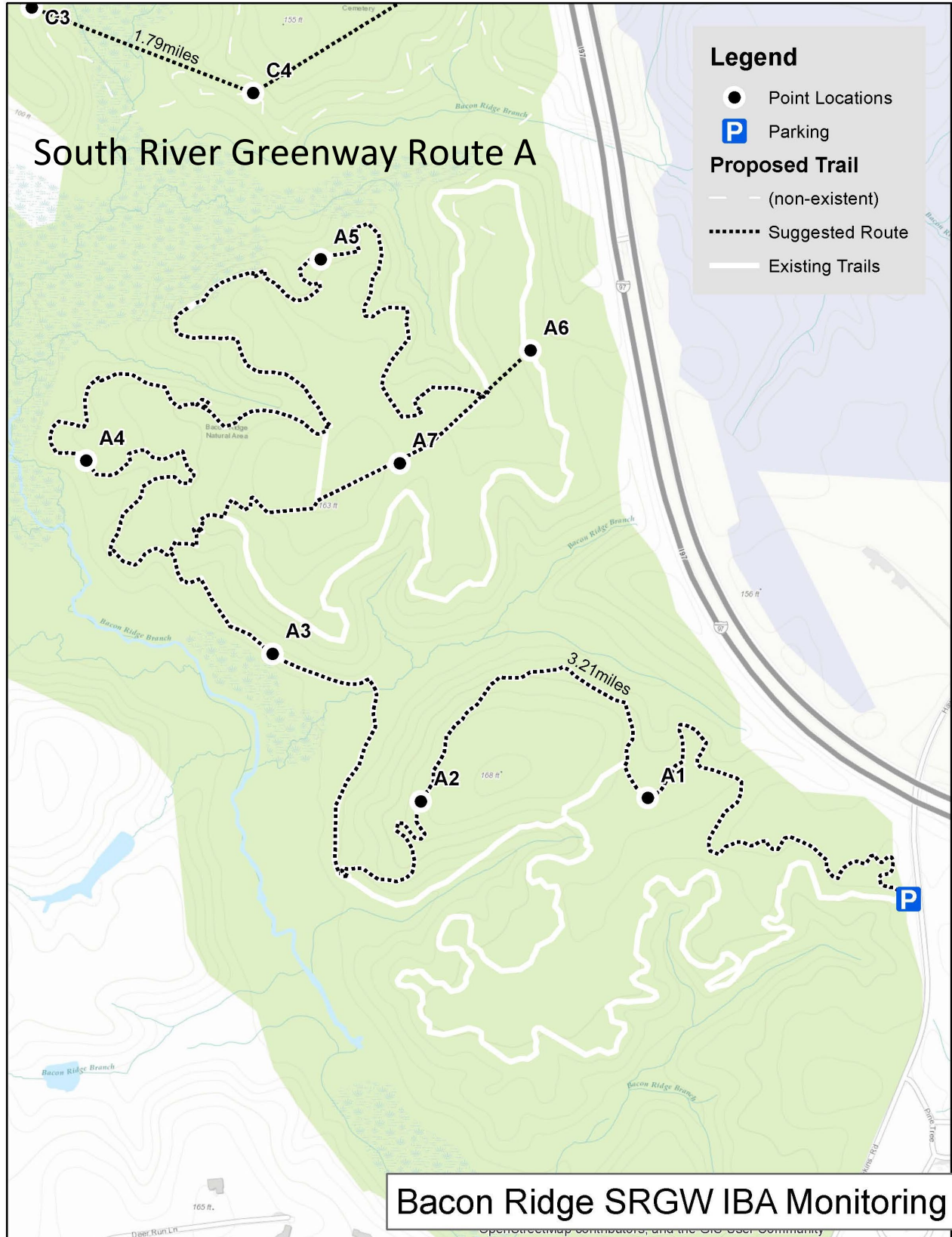
**Table S6. Parkers Creek MARSH**

Total detections and mean relative abundance (detections/point) of each species observed at 5 survey points in open marsh habitat at Parkers Creek IBA in 2017 and 2018. Each point was surveyed twice. Forest Interior Dwelling Birds (FIDS) are denoted in bold font; Species of Greatest Conservation Need (SGCN) are denoted by \*. *Count* is the number of detections during 5-minute counts. *Mean* is the mean number of detections per 5-minute count. Marsh specialist birds as defined by Maryland-DC Important Bird Areas Program Criteria for site selection; available online at <http://md.audubon.org/conservation/important-bird-areas-0>

| Species                       | Habitat Specialist | 2017  |      | 2018  |      | 2017 & 2018 |      |
|-------------------------------|--------------------|-------|------|-------|------|-------------|------|
|                               |                    | Total | Mean | Total | Mean | Total       | Mean |
| Acadian Flycatcher*           | FIDS               | 5     | 0.50 | 2     | 0.20 | 7           | 0.35 |
| American Crow                 |                    | 12    | 1.20 | 11    | 1.10 | 23          | 1.15 |
| American Goldfinch            |                    |       |      | 1     | 0.10 | 1           | 0.05 |
| Bald Eagle*                   |                    |       |      | 3     | 0.30 | 3           | 0.15 |
| Barn Swallow                  |                    | 2     | 0.20 | 1     | 0.10 | 3           | 0.15 |
| Belted Kingfisher             |                    | 2     | 0.20 |       |      | 2           | 0.10 |
| Blue Grosbeak                 |                    | 1     | 0.10 | 2     | 0.20 | 3           | 0.15 |
| Blue Jay                      |                    | 12    | 1.20 | 7     | 0.70 | 19          | 0.95 |
| Brown-headed Cowbird          |                    |       |      | 2     | 0.20 | 2           | 0.10 |
| Canada Goose                  |                    | 3     | 0.30 | 12    | 1.20 | 15          | 0.75 |
| Carolina Chickadee            |                    |       |      | 1     | 0.10 | 1           | 0.05 |
| Carolina Wren                 |                    | 7     | 0.70 | 7     | 0.70 | 14          | 0.70 |
| Chimney Swift*                |                    |       |      | 2     | 0.20 | 2           | 0.10 |
| Common Grackle                |                    | 2     | 0.20 |       |      | 2           | 0.10 |
| Common Yellowthroat           |                    | 22    | 2.20 | 23    | 2.30 | 45          | 2.25 |
| CROW SP                       |                    |       |      | 3     | 0.30 | 3           | 0.15 |
| Eastern Wood-Pewee            |                    | 6     | 0.60 | 3     | 0.30 | 9           | 0.45 |
| Great Blue Heron*             |                    | 3     | 0.30 |       |      | 3           | 0.15 |
| Great Crested Flycatcher      |                    | 2     | 0.20 | 2     | 0.20 | 4           | 0.20 |
| Indigo Bunting                |                    | 1     | 0.10 | 3     | 0.30 | 4           | 0.20 |
| Louisiana Waterthrush*        | FIDS               |       |      | 2     | 0.20 | 2           | 0.10 |
| <b>Marsh Wren*</b>            | <b>MARSH</b>       | 3     | 0.30 | 5     | 0.50 | 8           | 0.40 |
| Mourning Dove                 |                    | 9     | 0.90 | 3     | 0.30 | 12          | 0.60 |
| Northern Cardinal             |                    | 7     | 0.70 | 9     | 0.90 | 16          | 0.80 |
| Northern Parula*              | FIDS               |       |      | 2     | 0.20 | 2           | 0.10 |
| Northern Rough-winged Swallow |                    | 2     | 0.20 | 6     | 0.60 | 8           | 0.40 |
| Orchard Oriole                |                    |       |      | 1     | 0.10 | 1           | 0.05 |
| Osprey                        |                    | 1     | 0.10 | 4     | 0.40 | 5           | 0.25 |
| Ovenbird*                     | FIDS               | 1     | 0.10 | 2     | 0.20 | 3           | 0.15 |
| Pileated Woodpecker           | FIDS               | 1     | 0.10 | 7     | 0.70 | 8           | 0.40 |
| Red-bellied Woodpecker        |                    | 7     | 0.70 | 8     | 0.80 | 15          | 0.75 |

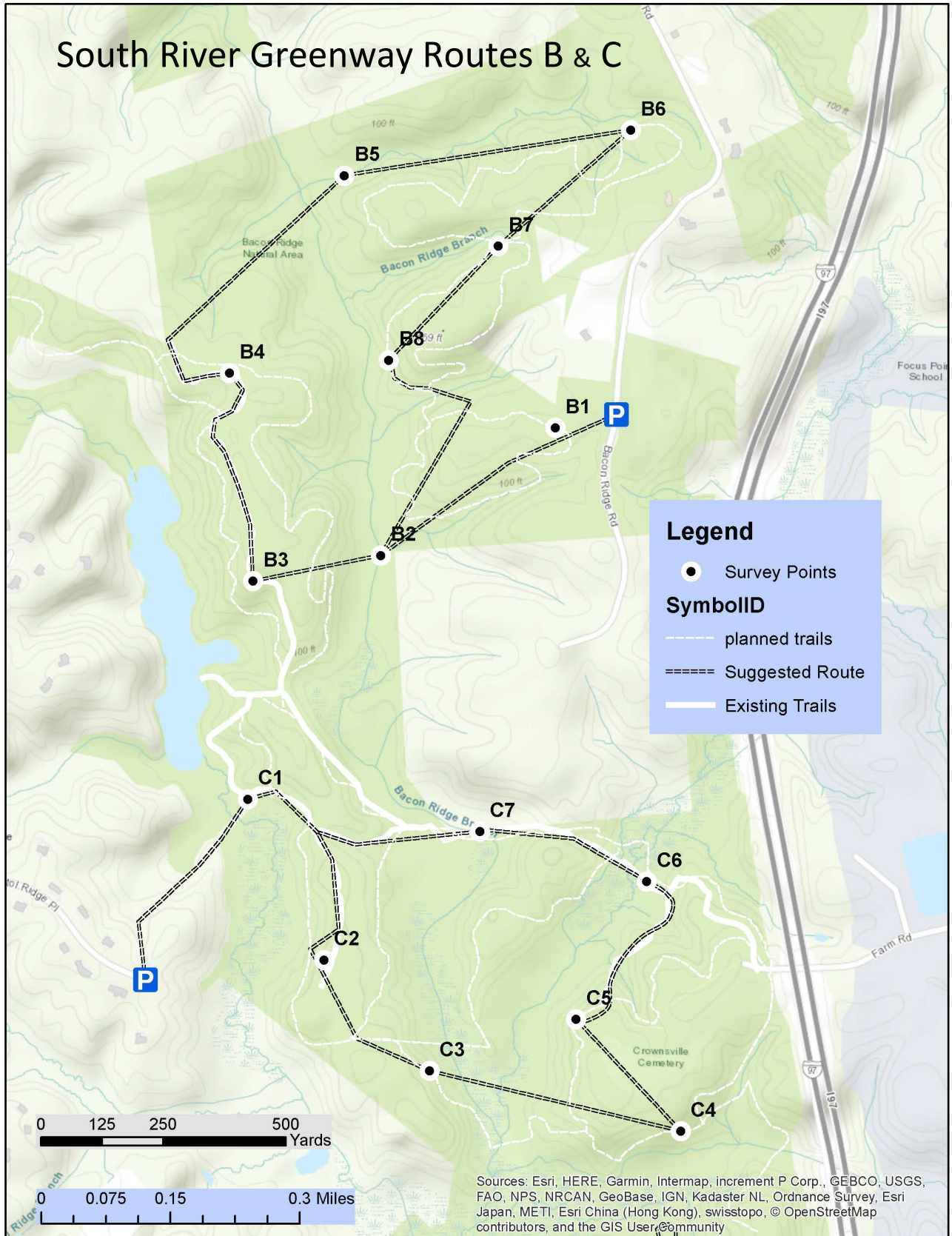
| Species                         | Habitat Specialist | 2017         |              | 2018         |              | 2017 & 2018  |              |
|---------------------------------|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                 |                    | Total        | Mean         | Total        | Mean         | Total        | Mean         |
| Red-eyed Vireo                  | FIDS               | 7            | 0.70         | 5            | 0.50         | 12           | 0.60         |
| Red-shouldered Hawk             | FIDS               |              |              | 2            | 0.20         | 2            | 0.10         |
| Red-winged Blackbird            |                    | 45           | 4.50         | 41           | 4.10         | 86           | 4.30         |
| Ruby-throated Hummingbird       |                    | 1            | 0.10         |              |              | 1            | 0.05         |
| Scarlet Tanager*                | FIDS               | 4            | 0.40         | 5            | 0.50         | 9            | 0.45         |
| Summer Tanager                  |                    |              |              | 2            | 0.20         | 2            | 0.10         |
| Tree Swallow                    |                    | 1            | 0.10         |              |              | 1            | 0.05         |
| Tufted Titmouse                 |                    | 9            | 0.90         | 10           | 1.00         | 19           | 0.95         |
| White-eyed Vireo                | SHRUB              | 4            | 0.40         | 5            | 0.50         | 9            | 0.45         |
| Wild Turkey                     |                    | 5            | 0.50         |              |              | 5            | 0.25         |
| Wood Duck                       |                    |              |              | 3            | 0.30         | 3            | 0.15         |
| Wood Thrush*                    | FIDS               | 8            | 0.80         | 6            | 0.60         | 14           | 0.70         |
| Yellow-billed Cuckoo            |                    | 1            | 0.10         |              |              | 1            | 0.05         |
| Yellow-throated Vireo*          | FIDS               | 5            | 0.50         | 1            | 0.10         | 6            | 0.30         |
| <b>TOTALS</b>                   |                    | <b>201</b>   | <b>20.10</b> | <b>214</b>   | <b>21.40</b> | <b>415</b>   | <b>20.75</b> |
| <i># Species</i>                |                    | 33           |              | 38           |              | 45           |              |
| <b>Marsh TOTALS</b>             |                    | <b>3</b>     | <b>0.30</b>  | <b>5</b>     | <b>0.50</b>  | <b>8</b>     | <b>0.40</b>  |
| <i># Marsh Species</i>          |                    | 1            |              | 1            |              | 1            |              |
| <b>Proportion Marsh</b>         |                    | <b>1.5%</b>  |              | <b>2.3%</b>  |              | <b>1.9%</b>  |              |
| <i>Proportion Marsh Species</i> |                    | 3.0%         |              | 2.6%         |              | 2.2%         |              |
| <b>SGCN TOTALS</b>              |                    | <b>29</b>    | <b>2.90</b>  | <b>30</b>    | <b>3.00</b>  | <b>59</b>    | <b>2.95</b>  |
| <i># SGCN Species</i>           |                    | 7            |              | 10           |              | 11           |              |
| <b>Proportion SGCN</b>          |                    | <b>14.4%</b> |              | <b>14.0%</b> |              | <b>14.2%</b> |              |
| <i>Proportion SGCN Species</i>  |                    | 21.2%        |              | 26.3%        |              | 24.4%        |              |
| <i># Marsh and SGCN</i>         |                    | 1            |              | 1            |              | 1            |              |

Map S1. South River Greenway survey route map

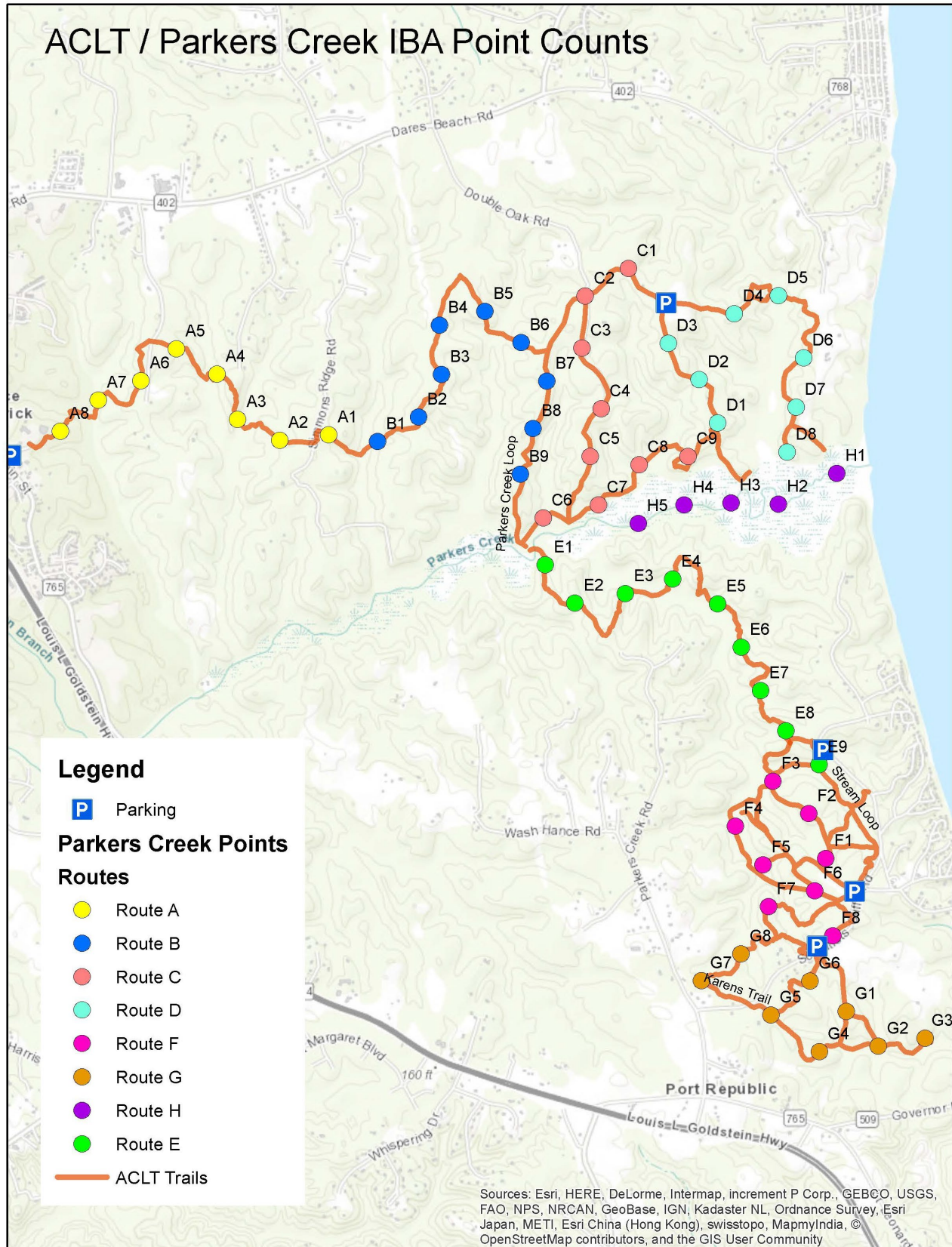




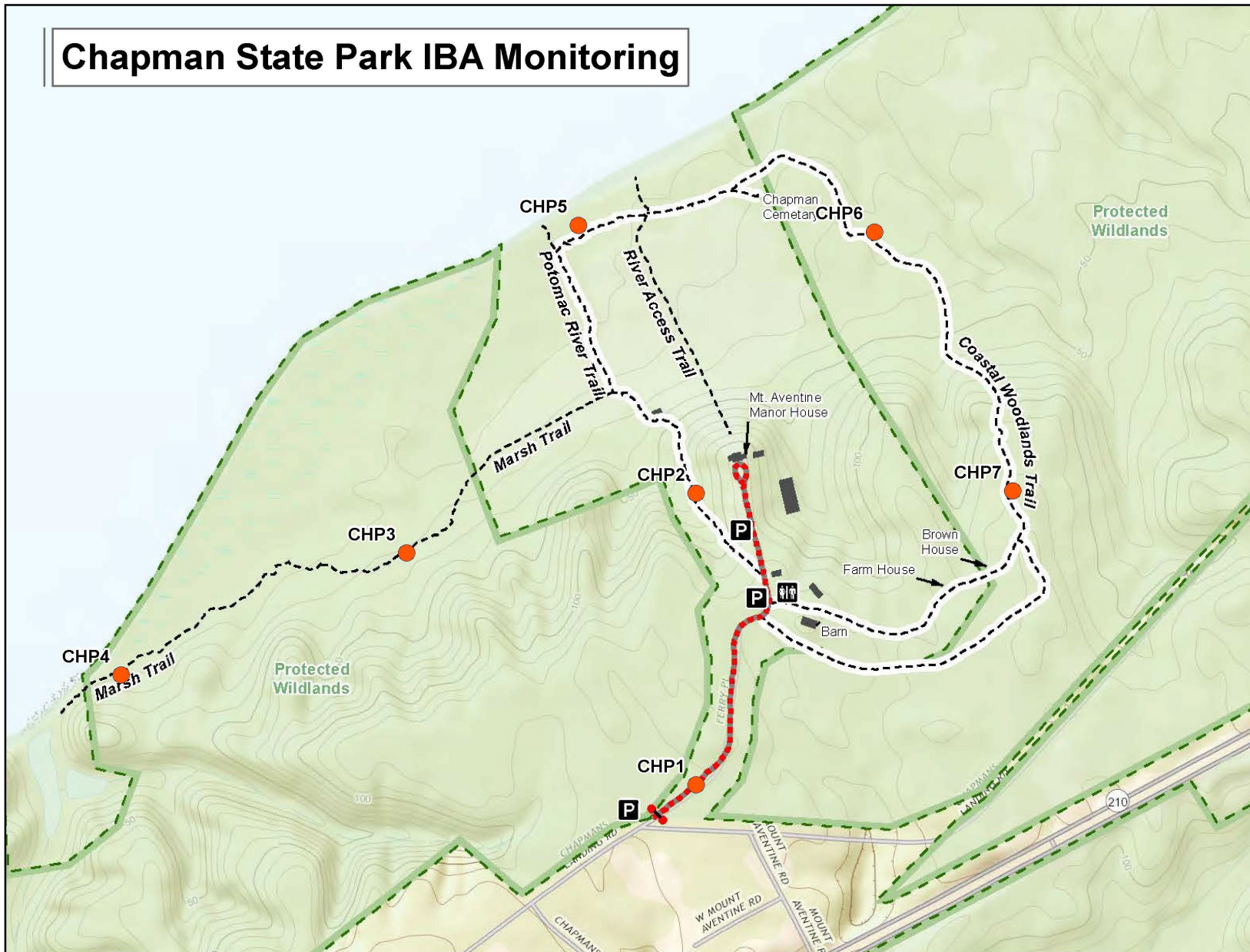
# South River Greenway Routes B & C



Map S2. Parkers Creek IBA survey route maps



Map S3. Chapman State Park IBA survey route map



Map S4. Mattwoman Creek IBA survey route maps

