

**Black Swamp Bird Observatory
Navarre Banding Station
Fall 2021 Passerine Migration Monitoring
Latitude 413 Longitude 0830**

The 32nd fall season began daily 17 August at our primary passerine banding station.

This site is a barrier beach ridge along the southwest shore of Lake Erie. Operations are conducted daily weather permitting from mid-August to mid-October. Twenty-three nets are run from ½ hour before sunrise to at least 11:00 AM. Only raw data (i.e., uncorrected for effort) are presented here, all of these data should be considered provisional. They are presented here for general interest, not as scientific analyses.

Fall 2020 was not operated due to Covid-19.

Fall 2021 – Navarre - New Bandings only

| Date | Number Banded 2021 | Cumulative Banded 2021 | Birds/Net Hour | Same Date 2019 |
|-------------|---------------------------|-------------------------------|-----------------------|-----------------------|
| 8-12 | | | | 121 |
| 8-13 | | | | 163 |
| 8-14 | | | | 193 |
| 8-15 | | | | 223 |
| 8-16 | | | | 241 |
| 8-17 | 58 | | .53 | 263 |
| 8-18 | 26 | 84 | .23 | 272 |
| 8-19 | 38 | 122 | .35 | 295 |
| 8-20 | 62 | 184 | .56 | 316 |
| 8-21 | 40 | 224 | .34 | 340 |
| 8-22 | 29 | 253 | .25 | 354 |
| 8-23 | 41 | 294 | .38 | 376 |
| 8-24 | 38 | 332 | .37 | 386 |
| 8-25 | 4 - RAIN | 336 | .23 | 397 |
| 8-26 | RAIN | 336 | | 415 |
| 8-27 | 49 | 385 | .43 | 415 |
| 8-28 | 53 | 438 | .49 | 441 |
| 8-29 | 25 | 463 | .23 | 460 |
| 8-30 | 47 | 510 | .42 | 504 |
| 8-31 | 32 | 542 | .30 | 530 |
| 9-01 | RAIN | 542 | | 542 |
| 9-02 | 61 | 603 | .59 | 558 |
| 9-03 | 36 | 639 | .35 | 615 |
| 9-04 | 32 | 671 | .29 | 652 |
| 9-05 | 41 | 712 | .37 | 691 |
| 9-06 | 130 | 842 | 1.15 | 724 |
| 9-07 | 138 | 980 | 1.24 | 753 |
| 9-08 | 133 | 1113 | 1.20 | 799 |
| 9-09 | 122 | 1235 | 1.08 | 837 |
| 9-10 | 114 | 1349 | 1.03 | 866 |
| 9-11 | 102 | 1451 | .92 | 902 |
| 9-12 | 103 | 1554 | 1.01 | 923 |
| 9-13 | 195 | 1749 | 1.56 | 955 |

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| Date | Number Banded 2021 | Cumulative Banded 2021 | Birds/Net Hour | Same Date 2019 |
|-------------|---------------------------|-------------------------------|-----------------------|-----------------------|
| 9-14 | 73 | 1822 | .63 | 994 |
| 9-15 | 210 | 2032 | 2.07 | 1066 |
| 9-16 | 114 | 2146 | 1.06 | 1106 |
| 9-17 | 83 | 2229 | .80 | 1133 |
| 9-18 | 57 | 2286 | .54 | 1159 |
| 9-19 | 72 | 2358 | .70 | 1191 |
| 9-20 | 81 | 2439 | .82 | 1254 |
| 9-21 | 39 | 2478 | .47 | 1319 |
| 9-22 | RAIN | 2478 | | 1415 |
| 9-23 | RAIN | 2478 | | 1483 |
| 9-24 | 323 | 2801 | 3.37 | 1605 |
| 9-25 | 135 | 2936 | 2.82 | 1683 |
| 9-26 | 358 | 3294 | 2.92 | 1744 |
| 9-27 | 141 | 3435 | 1.78 | 1848 |
| 9-28 | 128 | 3563 | 1.19 | 1895 |
| 9-29 | 119 | 3682 | 1.14 | 1975 |
| 9-30 | 100 | 3782 | .93 | 1984 |
| 10-01 | 94 | 3876 | .91 | 2119 |
| 10-02 | 107 | 3983 | .95 | 2230 |
| 10-03 | 72 | 4055 | .70 | 2301 |
| 10-04 | 67 | 4122 | .65 | 2404 |
| 10-05 | 35 | 4157 | .33 | 2518 |
| 10-06 | 30 | 4187 | .31 | 2603 |
| 10-07 | 84 | 4271 | .91 | 2662 |
| 10-08 | 110 | 4381 | .91 | 2739 |
| 10-09 | 116 | 4497 | 1.21 | 2786 |
| 10-10 | 87 | 4584 | .91 | 2818 |
| 10-11 | 134 | 4718 | 1.17 | 2847 |
| 10-12 | 103 | 4821 | 1.00 | 2920 |
| 10-13 | 97 | 4918 | .91 | 2959 |
| 10-14 | 70 | 4988 | .72 | 2995 |
| 10-15 | RAIN | 4988 | | 3073 |
| 10-16 | 128 | 5116 | 1.15 | 3116 |
| 10-17 | 137 | 5253 | 1.49 | 3149 |
| 10-18 | 120 | 5373 | 1.23 | 3266 |
| 10-19 | 68 | 5451 | .75 | 3338 |
| 10-20 | 58 | 5499 | .62 | 3396 |
| 10-21 | RAIN | 5499 | | 3440 |
| 10-22 | 126 | 5625 | 1.11 | 3440 |
| 10-23 | 133 | 5758 | 1.33 | 3440 |
| 10-24 | 98 | 5856 | 1.11 | 3550 |
| 10-25 | | 5856 | | 3676 |
| 10-26 | | 5856 | | 3694 |
| 10-27 | 28 | 5884 | .39 | 3694 |
| 10-28 | | 5884 | | 3752 |

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| Date | Number Banded 2021 | Cumulative Banded 2021 | Birds/Net Hour | Same Date 2019 |
|-------------|---------------------------|-------------------------------|-----------------------|-----------------------|
| 10-29 | | 5884 | | 3778 |
| 10-30 | | 5884 | | 3800 |
| 10-31 | 54 | 5938 | .61 | 3800 |

Species summary, for the Navarre banding station, fall 2021. Includes first/last capture, peak capture, 2021 new banded total, and the 2019 total for the species.

Last date is only included if the species main migration has passed through the region. 2021 totals bold if surpassed year 2019 totals, blue if surpassed average, and red if record year.

Bird Movement:

Updated last: October 31

| Species | First /Last Capture | Peak Capture | 2021 Total | 2019 Total | 1990 - 2019 | | |
|---------------------------|----------------------------|---------------------|-------------------|-------------------|--------------------|---------------|--------------|
| | | | | | Total | - High | - Avg |
| Wood Duck | | | | | 1 | 1 | <1 |
| Green Heron | | | | | 4 | 2 | <1 |
| American Woodcock | 9/5-13 | | 2 | 1 | 43 | 7 | 1 |
| Mourning Dove | | | | | 33 | 7 | 1 |
| Sharp-shinned Hawk | | | | | 18 | 2 | <1 |
| Cooper's Hawk | | | | | 5 | 1 | <1 |
| Red-tailed Hawk | | | | | 4 | 1 | <1 |
| Northern Saw-whet Owl | | | | | 2 | 1 | <1 |
| Eastern Screech-Owl | 8/18 | | 4 | 3 | 16 | 4 | <1 |
| Yellow-billed Cuckoo | 9/13-10/12 | | 3 | | 119 | 13 | 4 |
| Black-billed Cuckoo | | | | | 7 | 1 | <1 |
| Belted Kingfisher | | | | | 4 | 2 | <1 |
| Hairy Woodpecker | 8/30-9/30 | | 3 | 3 | 19 | 5 | <1 |
| Downy Woodpecker | 8/19 | 8/21-2 | 20 | 16 | 665 | 41 | 22 |
| Yellow-bellied Sapsucker | 9/30-10/17 | | 3 | 15 | 159 | 19 | 5 |
| Red-head Woodpecker | | | | | 4 | 2 | <1 |
| Red-bellied Woodpecker | 8/20 | | 2 | | 17 | 3 | <1 |
| Yellow-shafted Flicker | 9/2-10/27 | 9/29-2 | 13 | 17 | 248 | 19 | 8 |
| Whip-poor-will | | | | | 1 | 1 | <1 |
| Ruby-throated Hummingbird | 8/19-9/20 | 9/14-2 | 10 | 25 | 377 | 58 | 13 |
| Eastern Kingbird | | | | 3 | 62 | 18 | 2 |
| Great Crested Flycatcher | 9/3 | 9/3-2 | 2 | | 38 | 9 | 1 |
| Eastern Phoebe | 8/19-10/16 | 8/19-2 | 18 | 22 | 692 | 54 | 23 |

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| Species | First /Last Capture | Peak Capture | 2021 Total | 2019 Total | 1990 - 2019 | | |
|--------------------------------|---------------------|--------------|------------|------------|-------------|------|-----|
| | | | | | Total | High | Avg |
| Olive-sided Flycatcher | | | | 2 | 8 | 2 | <1 |
| Eastern Wood-Pewee | 8/27-9/27 | | 10 | 26 | 459 | 26 | 15 |
| Yellow-bellied Flycatcher | 8/17-10/8 | 9/2-8 | 31 | 27 | 634 | 43 | 21 |
| Acadian Flycatcher | | | | | 19 | 2 | <1 |
| Traill's Flycatcher | 8/30-9/24 | 8/30-2 | 3 | 6 | 179 | 18 | 6 |
| Least Flycatcher | 8/22-9/11 | | 3 | 4 | 214 | 15 | 7 |
| Blue Jay | 9/27 | | 1 | 4 | 149 | 19 | 5 |
| European Starling | | | | | 5 | 5 | <1 |
| Brown-headed Cowbird | 9/26 | 9/26-20 | 20 | 3 | 3 | 3 | <1 |
| Red-winged Blackbird | 8/29 | 10/7-15 | 35 | 26 | 847 | 134 | 28 |
| Orchard Oriole | | | | | 14 | 8 | <1 |
| Baltimore Oriole | 8/19-9/6 | 8/20-4 | 19 | 20 | 622 | 86 | 21 |
| Rusty Blackbird | 10/2-23 | | 3 | 10 | 326 | 47 | 11 |
| Common Grackle | 8/17-10/27 | 10/7-12 | 39 | 74 | 1367 | 116 | 46 |
| Purple Finch | 9/30-10/2 | 9/30-4 | 5 | | 347 | 79 | 12 |
| House Finch | 10/1-22 | | 4 | 5 | 420 | 148 | 14 |
| American Goldfinch | 8/29-10/31 | | 6 | 8 | 571 | 191 | 19 |
| Pine Siskin | | | | | 4 | 2 | <1 |
| Savanna Sparrow | | | | | 4 | 1 | <1 |
| Grasshopper Sparrow | | | | | 1 | 1 | <1 |
| Nelson's Sparrow | | | | | 3 | 1 | <1 |
| White-crowned Sparrow | 10/7-9 | 10/7-2 | 3 | 2 | 286 | 27 | 10 |
| Gambel's White-crowned Sparrow | | | | | 4 | 2 | <1 |
| White-throated Sparrow | 9/19 | 10/18-26 | 341 | 310 | 10290 | 1119 | 343 |
| American Tree Sparrow | | | | | 29 | 8 | <1 |
| Chipping Sparrow | 10/6-22 | 10/16-3 | 6 | 1 | 30 | 4 | 1 |
| Field Sparrow | 10/1-17 | | 2 | 1 | 76 | 7 | 2 |
| Slate-colored Junco | 9/29-10/31 | 10/18-6 | 23 | 12 | 850 | 78 | 28 |
| Song Sparrow | 8/17 | 10/18-8 | 59 | 40 | 1571 | 140 | 52 |
| Lincoln Sparrow | 10/7-18 | 10/17-2 | 5 | 3 | 341 | 42 | 11 |
| Swamp Sparrow | 9/30 | 10/18-14 | 77 | 27 | 1893 | 239 | 63 |
| Fox Sparrow | 10/19-31 | 10/22-4 | 9 | 3 | 390 | 43 | 13 |
| Eastern Towhee | | | | 2 | 31 | 4 | 1 |
| Northern Cardinal | 8/17 | 8/17-5 | 49 | 28 | 1377 | 75 | 46 |
| Rose-breasted Grosbeak | 8/21-9/27 | | 5 | 5 | 243 | 28 | 8 |
| Indigo Bunting | 9/24 | | 1 | 2 | 337 | 58 | 11 |
| Dickcissel | | | | | 1 | 1 | <1 |
| Scarlet Tanager | 9/8 | | 1 | 1 | 52 | 6 | 2 |
| Purple Martin | | | | | 1 | 1 | <1 |
| Barn Swallow | | | | | 14 | 8 | <1 |
| Tree Swallow | | | | | 5 | 4 | <1 |
| Cedar Waxwing | 8/21-10/17 | 10/3-3 | 9 | 39 | 674 | 78 | 22 |
| Northern Shrike | | | | | 1 | 1 | <1 |
| Red-eyed Vireo | 8/22-10/8 | 8/27-10 | 114 | 87 | 1933 | 103 | 64 |
| Philadelphia Vireo | 9/8-10/17 | 9/24-6 | 18 | 11 | 402 | 24 | 13 |
| Warbling Vireo | 8/17-10/3 | 8/17-5 | 28 | 18 | 1340 | 132 | 45 |
| Yellow-throated Vireo | | | | 1 | 21 | 3 | <1 |

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|------------------------------|---------------------|--------------|------------|------------|-------------|------|-----|
| | | | | | Total | High | Avg |
| Blue-headed Vireo | 9/11-10/9 | | 9 | 7 | 313 | 28 | 10 |
| White-eyed Vireo | | | | 3 | 33 | 4 | 1 |
| Black-and-white Warbler | 8/19-10/1 | 9/6-3 | 28 | 33 | 693 | 45 | 23 |
| Prothonotary Warbler | 8/17-9/2 | 8/20-7 | 30 | 36 | 281 | 36 | 8 |
| Worm-eating Warbler | | | | | 2 | 1 | <1 |
| Blue-winged Warbler | 8/23 | | 1 | | 16 | 2 | <1 |
| Brewster's Warbler | | | | | 2 | 1 | <1 |
| Golden-winged Warbler | | | | 1 | 26 | 3 | <1 |
| Nashville Warbler | 8/20-10/18 | 9/26-6 | 37 | 18 | 1125 | 87 | 38 |
| Orange-crowned Warbler | 9/28 | | 1 | 1 | 133 | 13 | 5 |
| Tennessee Warbler | 8/23-10/17 | 9/26-36 | 198 | 62 | 2226 | 232 | 75 |
| Northern Parula | 9/6-10/13 | 9/25-3 | 9 | 3 | 71 | 8 | 2 |
| Cape May Warbler | 8/30-10/16 | 9/24-23 | 99 | 15 | 2766 | 428 | 95 |
| Yellow Warbler | 8/20 | 8/20-5 | 5 | 32 | 1748 | 207 | 59 |
| Black-throated Blue Warbler | 8/20-10/16 | 9/2-8 | 78 | 51 | 1378 | 92 | 46 |
| Myrtle Warbler | 9/7-10/31 | 10/11-32 | 180 | 130 | 8865 | 1658 | 301 |
| Audubon's Warbler | | | | | 1 | 1 | <1 |
| Magnolia Warbler | 8/19-10/19 | 9/24-16 | 165 | 93 | 4528 | 266 | 153 |
| Cerulean Warbler | | | | | 1 | 1 | <1 |
| Chestnut-sided Warbler | 8/22-9/27 | 8/23-4 | 17 | 11 | 531 | 38 | 18 |
| Bay-breasted Warbler | 8/23-10/16 | 9/24-18 | 132 | 88 | 1040 | 129 | 33 |
| Blackpoll Warbler | 9/5-10/17 | 9/26-181 | 982 | 255 | 16436 | 1464 | 558 |
| Blackburnian Warbler | 9/4-10/3 | 9/25-2 | 10 | 4 | 147 | 11 | 5 |
| Black-throated Green Warbler | 9/14-10/16 | 9/15-2 | 8 | 11 | 361 | 30 | 12 |
| Pine Warbler | 9/13-10/17 | | 2 | | 17 | 4 | <1 |
| Western Palm Warbler | 10/10 | | 1 | 2 | 289 | 54 | 10 |
| Yellow Palm Warbler | | | | | 6 | 6 | <1 |
| Prairie Warbler | | | | | 2 | 1 | <1 |
| Ovenbird | 8/23-10/10 | 8/23-6 | 101 | 58 | 2223 | 130 | 75 |
| Northern Waterthrush | 8/19-10/22 | 8/20-3 | 42 | 41 | 894 | 59 | 29 |
| Kentucky Warbler | | | | | 3 | 1 | <1 |
| Connecticut Warbler | 9/5-10/3 | 9/5-3 | 7 | 4 | 233 | 20 | 8 |
| Mourning Warbler | 8/21-9/20 | 9/17-3 | 13 | 7 | 326 | 20 | 11 |
| Common Yellowthroat | 8/17-10/23 | 9/10-10 | 118 | 92 | 4667 | 458 | 158 |
| Yellow-breasted Chat | 9/24 | | 1 | | 23 | 4 | <1 |
| Hooded Warbler | 9/16 | | 1 | | 8 | 1 | <1 |
| Wilson's Warbler | 8/30-10/10 | 9/2-2 | 9 | 12 | 602 | 62 | 20 |
| Canada Warbler | 8/17-9/21 | 8/23-2 | 11 | 8 | 264 | 17 | 9 |
| American Redstart | 8/23-10/17 | 9/6-16 | 94 | 85 | 2287 | 158 | 76 |
| Gray Catbird | 8/17-10/31 | 8/28-27 | 432 | 320 | 8539 | 452 | 283 |
| Brown Thrasher | 8/17-10/4 | | 6 | 2 | 161 | 13 | 5 |
| Carolina Wren | 8/18 | 8/19-3 | 14 | 4 | 392 | 30 | 13 |
| House Wren | 8/17-10/17 | 9/2-8 | 68 | 68 | 1850 | 153 | 61 |
| Winter Wren | 9/26-10/31 | 9/30-5 | 46 | 94 | 1862 | 158 | 61 |
| Marsh Wren | 8/20 | | 1 | 4 | 80 | 9 | 3 |
| Brown Creeper | 9/27-10/31 | 9/29-6 | 60 | 28 | 1706 | 119 | 58 |
| White-breasted Nuthatch | 9/7 | | 4 | 1 | 39 | 5 | 1 |

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| | | | | | Total | High | Avg |
| Red-breasted Nuthatch | 9/26-10/17 | 9/26-2 | 7 | | 356 | 91 | 12 |
| Tufted Titmouse | 9/3-10/31 | | 3 | | 83 | 12 | 3 |
| Black-capped Chickadee | 8/19 | 8/21-2 | 9 | 6 | 160 | 13 | 5 |
| Golden-crowned Kinglet | 9/26 | 10/24-48 | 404 | 196 | 7463 | 787 | 249 |
| Ruby-crowned Kinglet | 9/27 | 10/17-14 | 131 | 134 | 6133 | 627 | 204 |
| Wood Thrush | 9/10-10/16 | | 8 | 11 | 194 | 14 | 6 |
| Veery | 8/23-9/27 | 9/2-4 | 28 | 18 | 622 | 40 | 21 |
| Gray-cheeked Thrush | 9/6-10/13 | 9/13-17 | 173 | 183 | 5375 | 344 | 179 |
| Bicknell's Thrush | | | | | 2 | 1 | <1 |
| Swainson's Thrush | 8/23-10/14 | 9/13-91 | 801 | 393 | 14310 | 895 | 477 |
| Hermit Thrush | 9/5 | 10/18-21 | 148 | 135 | 5505 | 361 | 184 |
| American Robin | 8/17 | 10/23-26 | 197 | 128 | 1936 | 138 | 64 |
| TOTAL | | | 5,938 | 3,800 | 142,239 | 7,232 | 4,741 |