

### Exploring eBird & Citizen Science – Links to Find out More

eBird web site www.ebird.org All About Birds www.allaboutbirds.org Birds of North America birdsna.org

Project Feeder Watch Great Backyard Bird Count Nest Watch

www.feederwatch.org gbbc.birdcount.org www.nestwatch.org

National Audubon Audubon New York Audubon's Plants for Birds outreach www.audubon.org www.ny.audubon.org www.audubon.org/plantsforbirds

**Mobile Apps** 

**eBird** – to enter lists for both IOS and Android **Merlin** – app to ID birds from pictures! **FREE Audubon Guides: Birds** – with bird pictures/sounds & easier access to eBird data

Impact of eBird

State of the Birds eBird and Hundred Million Points of Light

www.stateofthebirds.org https://www.allaboutbirds.org/a-hundred-million-points-of-light/

#### **Dynamic Migration Map of 118 Bird Species**

www.allaboutbirds.org/mesmerizing-migration-watch-118-bird-species-migrate-across-a-map-of-the-western-hemisphere/

# Selected Studies using eBird

#### Exploring spatiotemporal variation in migration phenology

ebird.org/content/ebird/news/hurlbert\_plos\_2012/

Hurlbert AH, Liang Z (2012) Spatiotemporal Variation in Avian Migration Phenology: Citizen Science Reveals Effects of Climate Change. PLoS ONE 7(2): e31662. doi:10.1371/journal.pone.0031662

#### Using open access observational data for conservation action: A case study for birds

www.allaboutbirds.org/9-ways-people-have-used-ebird-data-to-make-conservation-happen Sullivan, B.L., T. Phillips, A.A. Dayer, C.L. Wood, A. Farnsworth, M.J. Iliff, I.J. Davies, A. Wiggins, D. Fink, W.M. Hochachka, A.D. Rodewald, K.V. Rosenberg, R. Bonney, and S. Kelling. 2016. Using open access observational data for conservation action: A case study for birds, *Biological Conservation*. doi:10.1016/j.biocon.2016.04.031

#### Can Observation Skills of Citizen Scientists Be Estimated Using Species Accumulation Curves

www.ebird.org/content/ebird/news/plos2015/

Kelling S, Johnston A, Hochachka WM, Iliff M, Fink D, Gerbracht J, et al. (2015) Can Observation Skills of Citizen Scientists Be Estimated Using Species Accumulation Curves? PLoS ONE 10(10): e0139600. doi:10.1371/journal.pone.0139600

#### **Updated Listing of Publications Utilizing eBird data**

https://ebird.org/science/publications

## 2016 eBird Species Mapping - Species # Key

https://www.allaboutbirds.org/mesmerizing-migration-watch-118-bird-species-migrate-across-a-map-of-the-western-hemisphere/

81. Ruby-throated Hummingbird

40. Eastern Kingbird

1. Acadian Flycatcher

38. Dark-faced Ground-Tyrant

39. Dusky Flycatcher

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|---------------------------------|-----------------------------------|--------------------------------|
| 2. Alder Flycatcher             | 41. Eastern Wood-Pewee            | 82. Rufous Hummingbird         |
| 3. American Golden-Plover       | 42. Fork-tailed Flycatcher        | 83. Rusty Blackbird            |
| 4. American Redstart            | 43. Golden-crowned Sparrow        | 84. Scarlet Tanager            |
| 5. Baird's Sandpiper            | 44. Golden-winged Warbler         | 85. Scissor-tailed Flycatcher  |
| 6. Baird's Sparrow              | 45. Gray-cheeked Thrush           | 86. Small-billed Elaenia       |
| 7. Baltimore Oriole             | 46. Gray-crowned Rosy-Finch       | 87. Smith's Longspur           |
| 8. Bay-breasted Warbler         | 47. Great Crested Flycatcher      | 88. Solitary Sandpiper         |
| 9. Bicknell's Thrush            | 48. Hammond's Flycatcher          | 89. Southern Martin            |
| 10. Black Turnstone             | 49. Harris's Sparrow              | 90. Spot-billed Ground-Tyrant  |
| 11. Black-and-white Warbler     | 50. Hermit Thrush                 | 91. Sprague's Pipit            |
| 12. Black-billed Cuckoo         | 51. Hermit Warbler                | 92. Sulphur-bellied Flycatcher |
| 13. Blackburnian Warbler        | 52. Indigo Bunting                | 93. Summer Tanager             |
| 14. Black-headed Grosbeak       | 53. Kentucky Warbler              | 94. Swainson's Thrush          |
| 15. Blackpoll Warbler           | 54. Lapland Longspur              | 95. Tennessee Warbler          |
| 16. Black-throated Blue Warbler | 55. Lazuli Bunting                | 96. Townsend's Warbler         |
| 17. Black-throated              | 56. Le Conte's Sparrow            | 97. Veery                      |
| Green Warbler                   | 57. Least Flycatcher              | 98. Violet-green Swallow       |
| 18. Blue-headed Vireo           | 58. Least Seedsnipe               | 99. Virginia's Warbler         |
| 19. Blue-winged Warbler         | 59. Louisiana Waterthrush         | 100. Warbling Vireo            |
| 20. Bobolink                    | 60. MacGillivray's Warbler        | 101. Western Kingbird          |
| 21. Brown-chested Martin        | 61. Magnolia Warbler              | 102. Western Tanager           |
| 22. Brown-crested Flycatcher    | 62. Mourning Warbler              | 103. Western Wood-Pewee        |
| 23. Buff-breasted Sandpiper     | 63. Nashville Warbler             | 104. White-browed              |
| 24. Bullock's Oriole            | 64. Nelson's Sparrow              | Ground-Tyrant                  |
| 25. Calliope Hummingbird        | 65. Northern Parula               | 105. White-crested Elaenia     |
| 26. Canada Warbler              | 66. Northern Waterthrush          | 106. White-rumped Sandpiper    |
| 27. Cape May Warbler            | 67. Ochre-naped Ground-Tyrant     | 107. Willow Flycatcher         |
| 28. Cassin's Vireo              | 68. Olive-sided Flycatcher        | 108. Wilson's Phalarope        |
| 29. Cerulean Warbler            | 69. Orange-crowned Warbler        | 109. Wilson's Warbler          |
| 30. Chestnut-collared Longspur  | 70. Orchard Oriole                | 110. Wood Thrush               |
| 31. Chestnut-sided Warbler      | 71. Ovenbird                      | 111. Worm-eating Warbler       |
| 32. Chimney Swift               | 72. Pacific-slope Flycatcher      | 112. Yellow Warbler            |
| 33. Cinnamon-bellied            | 73. Palm Warbler                  | 113. Yellow-bellied Flycatcher |
| Ground-Tyrant                   | 74. Pectoral Sandpiper            | 114. Yellow-bellied Sapsucker  |
| 34. Clay-colored Sparrow        | 75. Philadelphia Vireo            | 115. Yellow-billed Cuckoo      |
| 35. Common Nighthawk            | 76. Prothonotary Warbler          | 116. Yellow-green Vireo        |
| 36. Connecticut Warbler         | 77. Purple Martin                 | 117. Yellow-rumped Siskin      |
| 37. Crowned Slaty Flycatcher    | 78. Purple Sandpiper              | 118. Yellow-throated Vireo     |
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79. Red-eyed Vireo

80. Rose-breasted Grosbeak