

State-by-state data boosts bird conservation planning

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State wildlife planners need to know where migratory birds use stopover sites in their state to fully understand their responsibility to protect those species, such as this tundra swan. Credit: Ian Davies/Cornell Lab of Ornithology

New data summaries from the Cornell Lab of Ornithology's eBird platform will help state wildlife planners assess the status of bird populations that live in or pass through their state—a crucial tool in protecting species.

A team of data scientists at eBird, the participatory science platform, has packaged summaries covering every [bird species](#) in every state, and [made them available online for free](#). These data summaries will help states prepare their federally required 2025 updates to State Wildlife Action Plans.

"As we began to work more closely with state agencies and regional conservation partnerships, we realized that we needed to significantly increase the accessibility of eBird information for these partners," said Viviana Ruiz-Gutierrez, assistant director of the Cornell Lab's Center for Avian Population Studies and the driving force behind development of the state summaries.

"The state-level tables, charts and maps are an offshoot of eBird Status & Trends data products, which analyze and visualize bird data submitted from all over the world," said Andrew Stillman, a Rose Postdoctoral Fellow at the Cornell Lab. "By providing these customized summaries, state agencies don't have to wrangle with big data and spatial tools. They get data targeted to the area they are responsible for. It's much more efficient, saving them time and money."

State Wildlife Action Plans are critical to conservation in the United States, Stillman said. The plans must be updated every 10 years and submitted to the U.S. Fish and Wildlife Service for approval. Approval releases funding from the State and Tribal Wildlife Grants program, which is used to proactively conserve birds and other species that make up the biodiversity of each state.

The 2025 updates will mark the second major revision to state wildlife plans since the first plans were completed in 2005. But this is the first time eBird state data summaries will be available to inform the revisions, helping planners easily identify which species are in greatest need of conservation and to set priorities for where and when to take

conservation action.

"Before the Cornell Lab provided these summaries, states were using a mix of long-established monitoring programs and more targeted local or regional monitoring surveys—for marsh birds or grassland species, for example—to get a handle on how bird populations were faring statewide," said Bradley Wilkinson, bird conservation program manager for the Association of Fish and Wildlife Agencies. "The eBird state-level summaries complement those existing surveys. The summaries are also getting states to start thinking about addressing the full-year annual life-cycle of migratory birds."

Without year-round weekly bird abundance data from eBird, an important part of the big picture is missing. For example, tundra swans don't breed in Michigan and are not found there for most of the year. But during two weeks in March, 13% of the global population is migrating through Michigan, making marsh and wetland habitat vital for stopovers during their long journey back to their Arctic breeding grounds.

"Knowing a state's responsibility for a certain percentage of a species' global population is really important in setting conservation priorities," Wilkinson said. "There's a lot more connection information available now about where a state's breeding birds are going during autumn migration, the nonbreeding season and during spring migration."

The state summaries are updated each year with new population numbers from eBird. With the latest August 2024 update, planners can now also see which way bird populations are trending for the entire state: increasing, decreasing or stable; and by how much.

"We'll continue to refine and update the summaries so states have what they need," Stillman said. "We're also looking into expanding this

customization for the two dozen Migratory Bird Joint Ventures in the U.S. and Canada. Birds are not known for recognizing human boundaries, and joint venture partnerships work across boundaries to conserve birds and the habitats they need where they need them. The state planners tell us, 'Keep it coming.'

More information: [U.S. State-Level eBird Data Summaries](https://phys.org/news/2024-09-state-boosts-bird.html)

Provided by Cornell University

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