

Outline of Full Annual Life-cycle Conservation Example Text for SWAPs: Text could be as simple as what is full annual life-cycle conservation and a few species that are a priority in your state that require that approach to have successful conservation or you could pick and choose sections from the text below.

**Setting the stage:** States' ecoregions extend beyond state borders; State conservation area boundaries and SGCN ranges are larger than states. States must work regionally, nationally, and internationally to accomplish conservation objectives for many habitats and species. To prevent migratory species from becoming endangered, and recover those already endangered, we must understand and address the totality of threats facing the species throughout their full life-cycle and **x state's** role in supporting their populations. This is particularly important for neotropical migratory birds.

**Multi-State and International Collaboration: Initiatives and Priority Areas:**

1. Beyond planning, management of state resources requires working beyond the borders on a regular basis. Many of the landscapes of state lands along the border extend across the border and most SGCN have ranges beyond the borders of **[Name of State]**, requiring partnerships with neighboring states and regional or international partners to accomplish needed actions to achieve shared goals. Watersheds and flyways often encompass all or parts of multiple states and require complex coordination among many partners and jurisdictions to improve conditions, regulate harvest and methods, and provide needed habitat. Recovery of declining species that have large ranges requires coordination with partners and agencies with interest and jurisdiction throughout the species' range.
2. Much of this work may include efforts to protect and maintain migratory species habitat throughout their annual cycles, which is called full life-cycle conservation. Full life-cycle conservation of migratory species is one area of **[Name of State]** commitment to cross-border conservation and is imperative to the improvement and long-term sustainability of **[Name of State]** natural communities and species. Some key examples of this work (i.e., Neotropical migrant birds, waterfowl, and monarch butterfly) are included in this section to build understanding of the importance of supporting these partnerships beyond **[Name of State]'s** borders.

**Bird declines and urgency:** In light of recent research that quantified a net loss of 2.9 billion birds in the last 50 years (many of which are migrants; Rosenberg et al. 2019), we cannot afford to ignore the threats that many migratory birds face across their full life-cycle ranges.

**Why full life-cycle conservation is important**

1. **X percent of [Name of State]'s** breeding birds are neotropical migratory birds and spend up to eight months of the year beyond the borders of the U.S., some traveling thousands of miles each way.
2. When one considers the millions of migratory birds (entire continental populations) that breed across Canada and the U.S. wintering in a relatively small geographies within Mexico, Central America, South America, and the Caribbean during migration and the nonbreeding season, it puts into perspective the importance of this work.
3. Threats to these vital landscapes, ecosystems, and the birds that use them vary by country and region but include deforestation, commodity agriculture (palm oil), illegal logging, contaminants,

and insufficient enforcement on protected areas, among others. Intense poverty across this region of the world adds to the dire need for support from international partners that have a shared interest in the protection and conservation of shared avifauna. Conservation efforts on migratory stop-over sites and the nonbreeding grounds work to curb these threats through acquisition and protection of lands used as migratory pathways and nonbreeding sites; education of landowners on regenerative agricultural and ranching practices including shade-grown coffee farming; the creation and maintenance of native tree nurseries and reforestation efforts; and other actions.

4. Add a map from Cornell Lab of Ornithology's eBird website for a high priority species. Contact Deb Hahn if you need assistance. <https://ebird.org/science/status-and-trends/abundance-maps>

### Southern Wings

1. The Association of Fish and Wildlife Agencies' (AFWA) created Southern Wings in 2009. Southern Wings facilitates state fish and wildlife agency participation in the conservation of priority migratory birds across their full life-cycle. The latest tracking data, stopover habitat information, and research to guide where we support projects on the ground. Since that time, 41 states have contributed over \$4.2 million to conservation efforts on stop-over sites and wintering grounds in Mexico, Central America, South America, and the Caribbean.
2. A list of current projects is available here (<https://www.fishwildlife.org/afwa-inspires/southern-wings>).
3. Strategic actions vary by project and species but include slowing or reversing continued deforestation through reforestation efforts and implementation of regenerative agroforestry systems with local landowners; securing protection of core migratory bird habitat through protected area creation and management; improving or reestablishing shade-grown coffee practices that maintain or create migratory-bird foraging habitat; working with local communities to build sustainable conservation capacity and ownership; among others.
4. Species these efforts support (**tailor to [Name of State],**)
  - i. Full life-cycle conservation efforts in Mexico, Central and South America support over 150 species of Neotropical migrants that migrate through or overwinter in these rich habitats, including these SGCN. **List species.**
  - ii. Cornell Lab of Ornithology created a [state-level data resources page](#) that can assist you in using eBird data. For each state, Stewardship Maps show the migratory connections between that state and the rest of the hemisphere. Stewardship Connections show the relative strength of connection between your state and the rest of the hemisphere for priority species. Uniqueness of Stewardship Connections depict how uniquely-connected your state is to the rest of hemisphere relative to all other states for priority species.
  - iii. National Audubon Society created the [Migratory Bird Explorer](#). This resource is valuable for visualizing the connections between breeding and non-breeding areas for migratory birds, especially related to individual-level movements using telemetry data. Connections can be visualized either as tracks or as connected polygons.
  - iv. Check out our species [FAC spreadsheet](#) and FAC Resources Guide for additional information you can include in your SWAP.

Example for cerulean warbler and Missouri

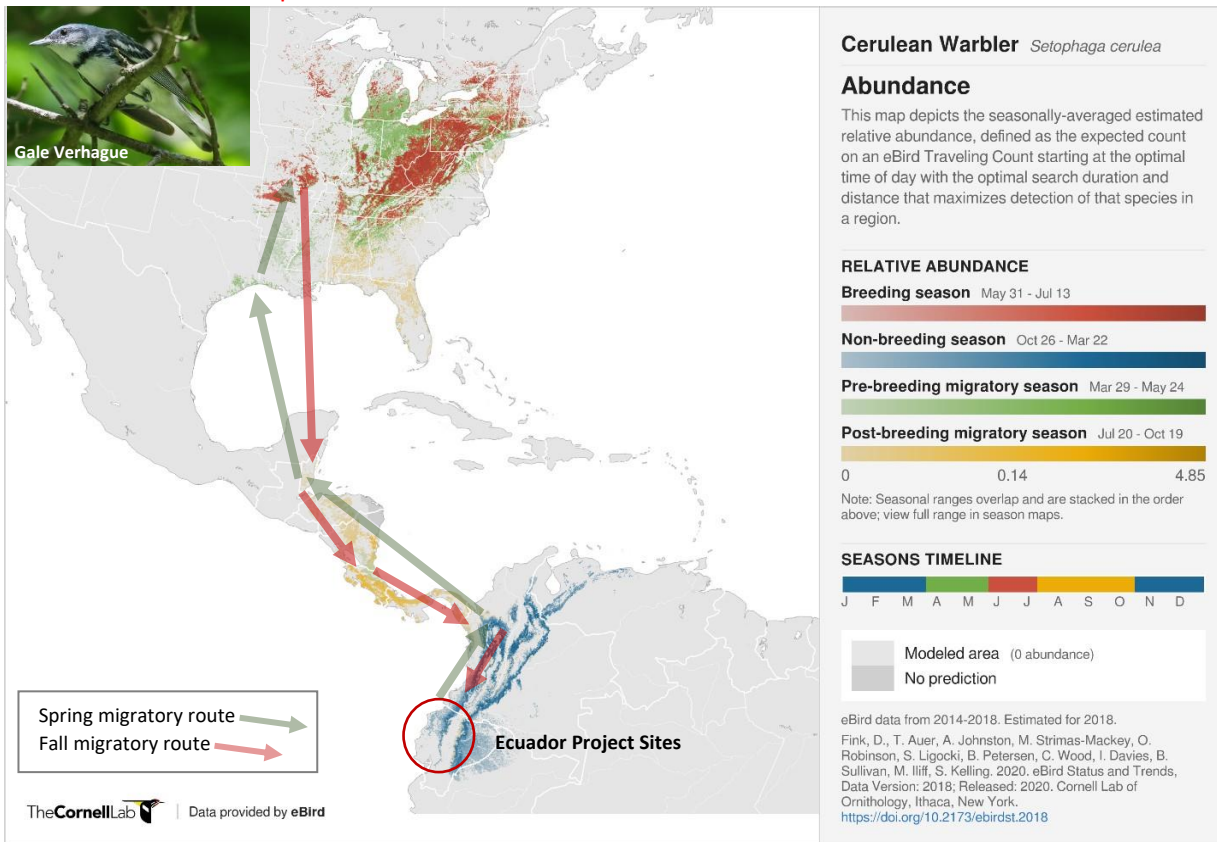


Figure 2.35 – Cerulean Warbler eBird<sup>1</sup> abundance map. Ceruleans migrate through Central America and overwinter in northwestern South America, including Ecuador where Southern Wings projects work on reforestation with landowners to maintain and restore vital habitat (Buehler et al. 2020).

Additional information on status and trends can be found here. <https://ebird.org/science/status-and-trends/>

**Case Studies:** We recommend 1 or 2 case studies about a project. Below are some examples. Connect [Deb Hahn](#) or [Bradley Wilkinson](#) for more information.

**Case Study: Conserving North America’s Grasslands**

Arizona Game and Fish Department, New Mexico Game & Fish Department, Montana Fish, Wildlife & Parks and Colorado Parks and Wildlife have partnered with Bird Conservancy of the Rockies to help facilitate conservation of grassland bird species in the western U.S., through the protection and conservation of the Chihuahuan Desert grasslands in Mexico. The Sustainable Grazing Network (SGN) is an important program developed by Bird Conservancy of the Rockies and IMC Vida Silvestre to engage ranchers in conserving and restoring their grasslands and implementing sustainable practices. Monitoring bird populations and gathering data have also been an important facet of Bird Conservancy of the Rockies and IMC Vida Silvestre’s efforts and a reason for the success of the project. As of 2024, the SGN encompasses almost 700,000 acres. 350,000 acres of grassland habitat have been improved with demonstrated increases in Sprague’s pipits.

### **Case Study: Pacific Shorebird and Wetland Bird Restoration**

Arizona Game and Fish Department, California Department of Fish and Wildlife, and the Pacific Flyway Council have supported Terra Peninsular and other partners since 2017. The projects goal is to improve the efficiency of conservation and management for coastal wetlands, shorebirds, waterbirds, and waterfowl through the integration of data and prioritization of decision-making. The project impacts the conservation of between 3 and 21 SGCN species in AK, AR, CA, CO, ID, MT, NV, NM, OR, UT, WA, and WY including long-billed curlew, mountain plover, snowy plover, Pacific brant, lesser scaup, American white pelican, redhead, and more. Actions include conducting surveys for Pacific Brant, snowy plover, California least tern and other species; collaborating with the local hunting organizations to improve the sustainability of hunting; installing predator exclusion devices on beaches; and working with local communities to implement best management practices.

### **Case Study: Migratory Bird Wintering Grounds Conservation in Nicaragua and Honduras - Wood Thrush and Others**

Along with key conservation partners American Bird Conservancy, El Jaguar Private Wildlife Refuge (Nicaragua), Red de las Reservas Silvestres Privadas de Nicaragua, and La Asociación de Investigación para el Desarrollo Ecológico y Socio Económico (Honduras), and others, Missouri and Pennsylvania support habitat conservation projects in Nicaragua and Honduras that provide benefits for a broad suite of Neotropical migrants. Project goals include slowing rates of deforestation in Honduras and Nicaragua by working landowners and communities to adopt land-use practices compatible with forest preservation. Project successes include native plant and tree nurseries; regenerative land-use workshops for local landowners; and landowner agreement sign-ups outlining commitments to reduce the impact of cattle ranching through silvopasture techniques, tree planting, and the creation of feed banks and rotational grazing systems; among others.

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