



## **NONGAME WILDLIFE FUND PROJECT REPORT—INDIANA** **Southern Wings**



*A male cerulean warbler displays his beautiful breeding plumage. (Photo by Mike Brown)*

### **CURRENT STATUS**

Final year of a three-year project

### **FUNDING SOURCES AND PARTNERS**

DNR Division of Fish & Wildlife (DFW)  
American Bird Conservancy

Many land birds that nest in Indiana migrate long distances and winter in tropical areas of the Caribbean, other parts of Central America, and even in South America. These include some hawks, cuckoos, nightjars (nighthawks, whip-poor-wills), swifts, hummingbirds and many songbirds. The songbird or passerine bird group is the largest order of birds. Among this group that migrates long distances are warblers, flycatchers, swallows, thrushes, vireos, tanagers, grosbeaks, sparrows, buntings and orioles.

These birds are often referred to as neo-tropical migrants. Even though we consider them to be our birds, they spend more time elsewhere during the course of

the year than in Indiana. Many long-distance migrants have suffered greater declines in number compared to year-round residents or birds that only migrate short distances. This is because threats like habitat loss in any leg of their migratory journey can cause an entire population to decline.

The risks of migration are great. Birds travel thousands of miles, braving ill-suited winds and inclement weather in search of hospitable stopover sites where they can rest and refuel before continuing their journey. Other perils are tall towers, utility wires, buildings, vehicles and predators. In spite of these dangers, over evolutionary time, the risk has been worth the reward. The warm tropical areas are rich in insects, other invertebrates, fruit, and other foods at a time when their breeding grounds are frozen and snow-covered, and food is in short supply.

Conservation efforts in the United States, Canada and other developed countries have been relatively well funded over the years and have benefitted birds with

secure habitats to nest and feed. However, economic pressures in less-developed countries have placed enormous strain on native habitats. Exploitation of natural resources for food, energy and shelter is occurring at a costly pace. Deforestation, habitat fragmentation and conversion of forests, grasslands and shrub lands to crops and grazing areas are threatening resident birds as well as the stopover and wintering areas on which birds from North America depend. Efforts and resources spent to conserve breeding habitats may be severely compromised if these birds cannot survive elsewhere.

In 2009, the Southern Wings program was developed by the Association of Fish and Wildlife Agencies to provide an efficient means for states to support conservation projects in tropical areas that benefit their species of greatest conservation need. More than half of all states have participated. Indiana joined in 2013. Over the past three years, the Division of Fish & Wildlife has been partnering with the American Bird Conservancy to provide \$30,000 to support a conservation corridor in Colombia. This corridor is expected to benefit cerulean warblers (*Dendroica cerulea*), golden-winged warblers (*Vermivora chrysoptera*), and black-and-white warblers (*Mniotilta varia*), all of which are state-endangered or special-concern species in Indiana.

Indiana's funds will specifically contribute to the management of two reserves and the creation of a wildlife corridor within the major wintering areas of the cerulean warbler, which is one of the most threatened neo-tropical migrants in South America. With more than 90% of wintering habitat lost, funds will primarily support cerulean warbler habitat conservation. This includes supporting activities such as reforestation of degraded land within and around the reserves, partnering with local farmers to promote bird-friendly, shade-grown coffee, and capacity building to help monitor bird populations and protect the reserves.

To date, reforestation efforts within the Cerulean Warbler Conservation Corridor have resulted in a contiguous corridor that spans 7 miles. More than 508,300 saplings of 26 native tree species have been produced and planted on the reserve and on private farms within the corridor. This has contributed to the reforestation of 2,835 acres. Eighteen conservation easements (1,139 acres) have also been created and managed for the purpose of preventing further deforestation. A bird-friendly, shade-grown coffee business within the corridor was established and certified sustainable by the Rainforest Alliance last year. Further efforts are being made to certify this business as an organic, "Bird Friendly" (Smithsonian Migratory Bird Center certified) coffee farm. A cacao farm has also been built to try to grow sustainable cacao from which to make chocolate. More than 600 seedlings of cacao were planted in shaded areas to preserve forest habitat for migrants.

In addition, community outreach activities are taking place each year to educate stakeholders on local bird

conservation. This includes a migratory bird festival that involves hundreds of participants annually and has reached out to thousands of school-age children. A radio program about migratory birds has extended their reach by engaging more than 2,000 listeners within their region.

Success of the project in Colombia has led to expansion into Ecuador's Narupa Reserve. This area hosts the most important wintering habitat for cerulean warblers in that region. Accomplishments include acquiring 203 acres to add to the reserve; the hiring and training of guard staff to patrol, manage habitat and monitor birds; and the construction of a guardhouse and boundaries around the reserve. The staff also held a bio-blitz to record all bird species observed within the reserve over a 24-hour period. An estimated 6,475 birds were found that included Indiana's state-listed species: cerulean warblers, golden-winged warblers, and black-and-white warblers, among many other neo-tropical migrants in decline. These results provide clear evidence that the Cerulean Warbler Conservation Corridor project provides wintering habitat for species that we host here in the summer, and that Indiana's funds are directly contributing to the conservation of our state-listed species beyond our borders.

#### **COST: \$30,000 FOR THE COMPLETE THREE-YEAR PROJECT**