

# SAVING THE CERULEAN WARBLER

I will never forget the first time I saw a Cerulean Warbler. It was perched on a strand of barbed wire at Point Pelee National Park: a tiny Lamborghini of a bird sporting blue-and-white speed stripes that darted off the moment I laid my binoculars on it. I was eighteen. Since then I have seen a few Ceruleans, most of which have given me severe “warbler neck”, but sadly they are getting harder and harder to see on migration, following a three-decade-long decline attributed to habitat loss and fragmentation. If we are to avoid losing this species, we must take action. I hope this article will inspire you to join me in doing just that.

Today, the Cerulean Warbler is North America’s fastest declining neotropical migratory songbird. Breeding Bird Survey data indicate that the global population of this beautiful warbler has plummeted by almost 70% since 1966, and that its decline continues at a rate of approximately 3% per year. Despite the recent denial of Endangered Species Act listing for the species

by the U.S. Fish & Wildlife Service, most authorities consider this to be a bird in serious trouble, and groups are now mobilizing to protect remaining populations.

In North America, Cerulean Warblers typically reach their

highest breeding productivity in large blocks of interior forest that have a complex structure with trees that are at least 80 years old interspersed with canopy gaps. One Virginia study found that the warbler may actually prefer even older trees—more than 100 years old—with the overstory measuring 100 feet in height, and understory trees measuring 40 feet. The Cerulean’s breeding success has also been shown to fall by 50% in



Adult male **Cerulean Warbler** amid redbud blossoms. Zaleski State Forest, Ohio; April 2003. © Robert Royse.

forests less than 1,750 acres in extent.

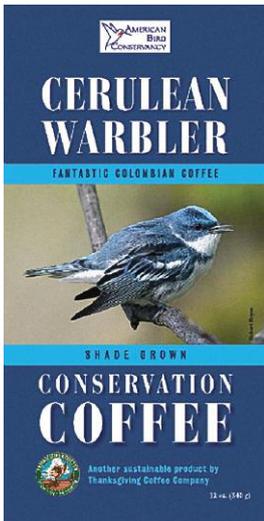
Mountaintop removal and valley fill coal mining are a major threat to the Cerulean Warbler. From 1992 to 2002, 380,000 forested acres were lost to mountaintop mining, and a significant proportion of the Cerulean Warbler’s breeding habitat in the heart of its range was destroyed as a result. Another four percent is projected to be lost by 2012 unless existing mining plans are changed. This type of mining is double jeopardy for the warbler, which nests primarily in mature ridge-top forests, but that also uses lower-elevation valley floor forests. To date, over 1,200 miles of streams have been buried by soil and rock removed by mountaintop mining, further degrading prime warbler habitat. Unfortunately, the highest density of nesting Cerulean Warblers in the U.S. is in the coal mining regions of West Virginia, Kentucky, and Tennessee, where mountaintop removal operations are concentrated.



Even more damaging than breeding habitat loss may be the loss of wintering habitat. The Cerulean Warbler is

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Proceeds from Cerulean Warbler Conservation Coffee will be used to maintain the Cerulean Warbler Reserve. *Image courtesy of © American Bird Conservancy.*

increasingly becoming recognized as a non-breeding habitat specialist, requiring subtropical Andean cloud forests, particularly in Colombia, but also in western Venezuela, Ecuador, and northern Peru. These areas have been severely altered by human colonization, with an estimated minimum of 70% of the warbler's preferred non-breeding habitat already lost—far in excess of the habitat loss experienced on its nesting grounds. Compounding the species' problems is the fact that shade coffee plantations, which once dominated the warbler's preferred elevational niche and buffered it from the conversion of forest to agriculture, are now rapidly being converted to

sun coffee and other crops that lack the shade trees the birds need for foraging.

In the past, a lack of information on the species' non-breeding range and precise habitat requirements impeded conservation efforts and masked this serious threat to the warbler's survival. However, the American Bird Conservancy (ABC), its Colombian partner Fundación ProAves, and the Cerulean Warbler Working Group have been collating distributional data in the non-breeding season for the species. Analyses by ABC and ProAves reveal a particular wintering concentration in subtropical forests in the intermontane valleys of northern Colombia. Combined with the known loss of habitat in this region, it has become clear that the data indicate a major threat to the species. Fortunately, the data also present an important opportunity for conservation.

Various responses have been sparked by this alarming new information. For example, a critical area with an exceptional Cerulean Warbler population density in primary forest and adjacent shade coffee plantations was identified by ProAves in early 2005. A conservation plan was developed, and properties totaling 500 acres were acquired with ABC's support that July.



The Cerulean Warbler Bird Reserve is located near the city of Bucaramanga in central Colombia, where rich subtropi-

cal forests buffer the newly created Yariguíes National Park. The reserve is still limited in size, but its creation has formed an important beach-head for a broader regional Cerulean Warbler conservation effort that is now gathering momentum. The reserve also protects habitat for other neotropical migrants such as Olive-sided Flycatcher and Golden-winged and Canada Warblers, as well as globally threatened endemics such as Gorgeted Wood-Quail, Chestnut-bellied Hummingbird, and Black Inca. Though important as a flagship for conservation, ABC and its partners realized that the 500-acre reserve was far from sufficient to make a major dent in slowing the warbler's population decline. A broader habitat conservation program would be needed—one that not only maintained and expanded the reserve, but that also addressed the issue of habitat loss across the entire Andean landscape.

It is now well-known that shade coffee plantations support a high diversity of canopy-foraging bird species. Conversely, sun coffee supports only half as many bird species, and one third as many individual birds. The Cerulean Warbler is one of many species that does not tolerate the change to sun coffee, and the maintenance of shade planta-



Adult male **Gorgeted Wood-Quail**. The Cerulean Warbler Reserve forms a global stronghold for this critically endangered species. *Cerulean Warbler Reserve, Colombia.* © Fundación ProAves.

tions, especially in central Colombia, has therefore become a priority in its conservation.

In the latter part of 2005, ABC approached the Thanksgiving Coffee Company and the American Birding Association (ABA) with a novel proposal: develop a shade-grown coffee that is designed specifically to conserve habitat for a single declining species: the Cerulean Warbler. By paying a premium above the regular price for the coffee, we would support growers and encourage them to avoid switching to

## Birding the Cerulean Warbler Reserve

In the past few years, travel in Colombia has become much safer, and birding groups are now starting to return to the country that boasts the largest bird list of any on Earth. In the six months following the establishment of the Cerulean Warbler Reserve, without any promotion, word of the reserve spread, and birders from around the world have already begun to visit.

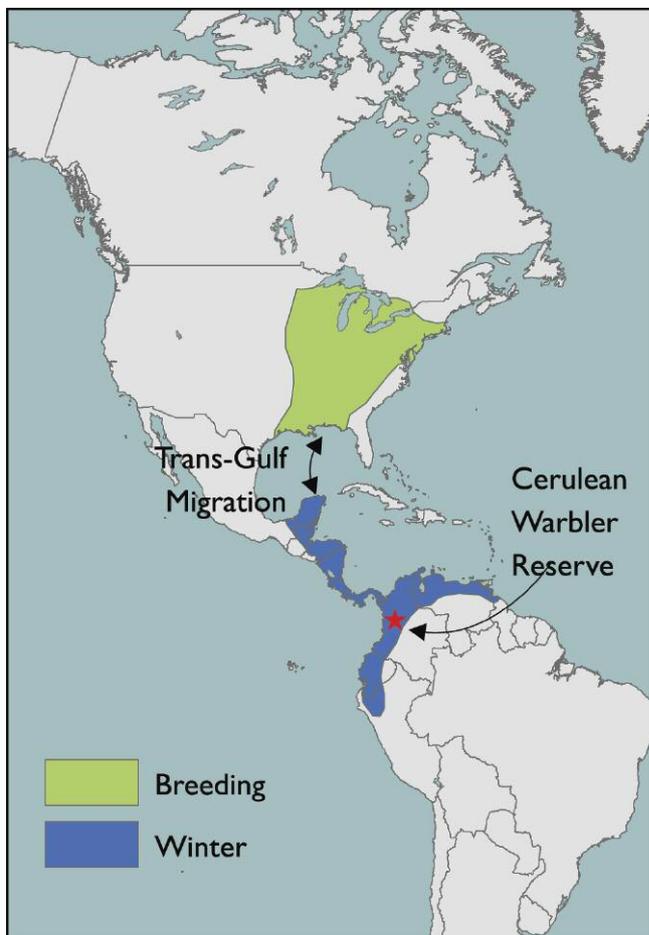
The ABC and ProAves conservation plan calls for the provision of infrastructure for tourism, including accommodation for 16 people, the improvement of a stone path laid by indigenous persons, and the installation of trail signs. The initiative will also provide a nature-guide training course for selected members of the community. The reserve is the best place in the world to see several rare Colombian endemics, such as Gorgeted Wood-Quail and Colombian Mountain-Grackle, and has been declared an Alliance for Zero Extinction Site as a result of the occurrence of these two critically endangered species.

On a recent birding tour hosted by ABC, over a dozen Ceruleans were sighted within the adjacent shade coffee plantation along with many other migrant songbirds. On seeing these and other warbler species, Nick Athanas, an experienced birding guide, said he had “never seen so many neotropical migrants in South America before.”

Contact Dr. Paul Salaman <[psalaman@abcbirds.org](mailto:psalaman@abcbirds.org)> if you are interested in visiting the reserve.



Winding through the Cerulean Warbler Reserve is a stone path paved by indigenous peoples. The path is ideal for birding tours. *Photo courtesy of © Fundación ProAves.*



Habitat ranges and migration of the Cerulean Warbler. *Map by Kei Sochi; based on data from eNature.*

the normally more lucrative sun coffee. Warblers and farmers would both benefit. ABC and Fundación ProAves would monitor the plantations to ensure that they provided good Cerulean habitat, and Thanksgiving and ABA would help with funding and commercializing the product. With this notion, Cerulean Warbler Conservation Coffee was born.

“We at ABA have long been involved in the shade-grown coffee market with Thanksgiving Coffee and are pleased to now have the opportunity to also work with ABC and Fundación ProAves in a meaningful effort to protect Cerulean Warbler and other songbird habitat in Colombia,” says Richard Payne, President of the American Birding Association.

In October 2006, ABC and ProAves were able to purchase a 45-acre shade coffee plantation that produces approximately 15 tons of coffee per year, immediately adjacent to the Cerulean Warbler Reserve. One possibility is that the reserve can be sustained in the long term by the sale of coffee from this plantation. Importers—who are discovering that the coffee from this region is among the best in the world—could be encouraged to purchase coffee at a premium and expand the influence of the program to a much wider area and market.

Paul Katzeff, roastmaster at Thanksgiving and a leader in

the coffee industry, has said that Cerulean Warbler Conservation Coffee is the best Colombian he has tasted in a



Adult male **Cerulean Warbler**. Aransas County, Texas; April. © Barth Schorre.

decade. One reason the coffee tastes so good is that it is grown on naturally fertile volcanic slopes with just enough rain, perfect temperatures for ripening, and no pesticides.

Thanksgiving Coffee also supports the ABC's conservation work on the declining Cerulean Warbler and other rare or endemic birds species in the central Andes of Colombia. The coffee retails for \$10.50 for a 12-ounce bag (wholesale \$7.45 for orders of 20 or more bags) and can be ordered online <[abcbirds.org](http://abcbirds.org)> or by calling 800-648-6491.

Of course, this coffee program is just one facet of what needs to be a major effort to protect the Cerulean Warbler across many countries and landscapes. Various groups are already engaged but we still need more hands on deck. For example, the concept of "bird conservation design" has cut its teeth on species such as the Cerulean Warbler in the Central Hardwoods Bird Conservation Region, which includes portions of Kentucky, Illinois, and Tennessee. "Conservation design" sets population and habitat goals for key species across the landscape, then engages partners such as public-private bird conservation joint ventures to support the implementation of bird conservation goals. See the sidebar, opposite, for a more comprehensive list of Cerulean Warbler conservation actions and what you can do to help.

## Recommended Reading

- Baicich, Paul J. 2006. Saving birds, cup by cup. *Bird Watcher's Digest*, November/December, pp. 50–56.
- Southern Environmental Law Center. 2006. Facts about the Cerulean Warbler <[southernenvironment.org/cases/cerulean/factsheet.pdf](http://southernenvironment.org/cases/cerulean/factsheet.pdf)>. Website visited 27 October 2006.
- Moreno, M.I., P. Salaman, and D. Pashley. 2006. The current status of the Cerulean Warbler on its winter range <[fws.gov/Midwest/Eco\\_Serv/soc/birds/cerw/MorenoetalReport9-28-06.pdf](http://fws.gov/Midwest/Eco_Serv/soc/birds/cerw/MorenoetalReport9-28-06.pdf)>. Website visited 5 March 2007.

## What Needs to be Done and How You can Help

All birders are familiar with the phrase, "Think globally, act locally." Well, it sounds like a great concept, but in many parts of the world, including throughout the neotropics where most of our migratory songbirds winter, conservationists rarely have sufficient resources to act locally. However, if the millions of birders and more than 1,000 bird clubs in the U.S. would join forces, and if each would make a contribution to a high-priority bird conservation project each year, we would be able to deliver those resources, change the face of bird conservation, and turn the tide in favor of birds and their habitats.

In response to the Cerulean Warbler crisis, the American Bird Conservancy (ABC) and members of the Bird Conservation Alliance—including the American Birding Association—are supporting a multifaceted strategy to conserve the species. Major donors to this effort include the American Birding Association, the U.S. Fish & Wildlife Service, the National Fish & Wildlife Foundation, ConocoPhillips, the Damuth Foundation, Robert Wilson, Robert Giles, Robert Anderson, and Dorothy Welch. The conservation strategy includes the following:

- Purchasing and protecting land to establish reserves in Colombia, Ecuador, and Peru that provide wintering habitat for the Cerulean Warbler.
- Marketing Cerulean Warbler Conservation Coffee to support shade coffee growers in the Colombian Andes whose plantations provide important habitat for the species.
- Reforestation to improve the value of Andean pasturelands for Cerulean Warblers at altitudes where the species is known to occur.
- Education, research, monitoring, training, and outreach programs to engage local communities in supporting habitat conservation throughout the species' winter range.
- Advocating that federal agencies change lighting on communication towers that kill Cerulean Warblers and other migratory songbirds during nocturnal migration across the U.S.
- Working with state wildlife agencies and other land managers to identify, protect, and restore Cerulean Warbler breeding habitat, and to adopt land management policies to benefit the species.
- Protecting key breeding concentrations of the species from threats such as mountaintop mining.

## What You Can Do

Send a check to ABC for the Cerulean Warbler Appeal, or pledge to raise funds to support the Appeal through your 2008 spring birdathon or other fundraising events. Purchase—or contact ABC about selling—Cerulean Warbler Conservation Coffee. Work with your state wildlife agency and bird conservation joint venture to help protect key habitat for the Cerulean Warbler in your area. More information about protecting Cerulean Warblers is available online <[store.thanksgivingcoffee.com/aba](http://store.thanksgivingcoffee.com/aba)>.