

# BIRD CONSERVATION

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Spring 2011





American Redstart: Greg Lavaty

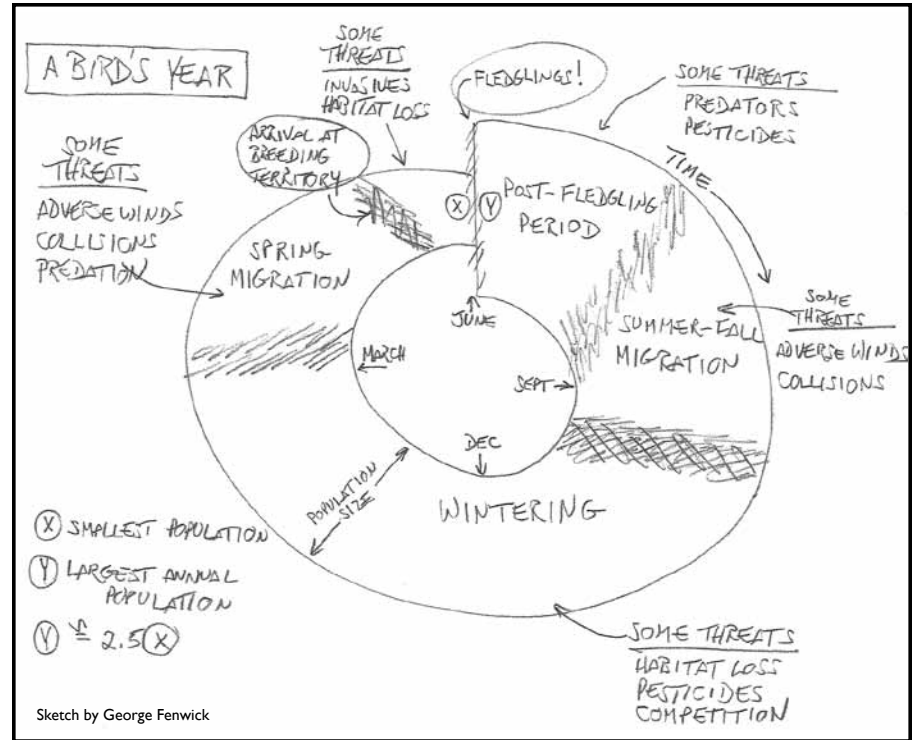
## BIRD'S EYE VIEW

# Circular Reasoning: Understanding Neotropical Migrant Bird Conservation

Imagine the annual cycle of migratory birds as a stylized spiral resembling a nautilus whose chambers represent months of the year, shaded to indicate migration periods. Instead of being open-ended, the shell's two ends abut, the narrow end representing the annual low population point (immediately preceding breeding), and the broad end representing the annual high population (immediately post-fledging). Across the year, the shell's diameter tapers as population decreases due to predators, severe weather, collisions with glass and communication towers, toxic poisoning, headwinds migrating across the Gulf of Mexico, habitat loss on the wintering grounds, and all of the other factors bird-lovers lament.

It looks simple, but it is not: the shape of the nautilus changes for every species and every year. Drought can mean low water, allowing waterfowl to reach deeper into mud for food, potentially gleaning decades-old lead shot and thus earning a painful death. Alternatively, flooding scours river banks and islands, re-describing nesting habitat for endangered Interior Least Terns. Scientists from the Institute for Bird Populations have learned that in La Niña years, winter precipitation is low in western Mexico and high in eastern Mexico. This matters because they discovered that, in the following spring, American Redstarts breed poorly in the western United States, but more successfully in the East.

Opponents to ABC advocacy efforts to reduce mortality in birds (or enhance survivorship, in scientists'



terms) always opine, "Why pick on us when habitat loss is the big problem for birds?" While that may be true, we don't often know exactly which factor – or, more likely, combination of factors – is contributing most to a population decline. These factors can be cumulative: multi-year droughts or permanent nesting habitat loss, combined with the annual gauntlet of other factors, can reduce bird populations forever. And where a species does not fill its available breeding habitat in spring, as is sometimes the case, we can conclude that breeding habitat is not the only – or even most significant – limiting factor.

The real problem is that although birds may be among the best-known classes of animal life, we don't know nearly enough about the relative

scope or scale of mortality factors to prioritize our work, to always make the best conservation decisions, to anticipate the effects of acting on those decisions, or even to evaluate after we have taken action. Scientists are giving us a growing body of applicable data, but we still have many "black boxes" which await further investigation. Revealing what is in these boxes, and what it means for our neotropical migrants, may be the best way for us to understand our most pressing scientific challenges in bird conservation.

*George H. Fenwick*

George Fenwick  
President, ABC



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# ON THE WIRE

## Gorgeted Puffleg – The World's Most Endangered Hummingbird?

**R**esults of surveys of the critically endangered Gorgeted Puffleg in Colombia have confirmed the species' precarious status and extremely limited range. The puffleg was discovered and described in 2007 from the highest cloud forest peaks of the Pinche Mountains in Colombia between 9,100 to 10,100 feet. It is a small, mostly dark hummingbird with bright white 'puffs' on its legs and an iridescent green and violet throat.

Throughout 2010, ABC funded its Colombian partner Fundación ProAves under the William Belton Grants Program to undertake regional searches across all of the upland massifs in the southern and central Western Cordillera of Colombia.

The surveys confirmed that the species occurs at extremely low densities (approximately one individual per acre) within an extremely limited potential range of likely no more than 2,700 acres.

According to ABC's Conservation Projects Specialist Benjamin Skolnik, "Searches in similar areas throughout the country have turned up empty. This bird is truly rare, and the best estimates suggest that only around 100 individuals remain in the wild. It is hard to place value on such a magnificent hummingbird, and I hope people come to cherish this little bird like any other jewel."

The main threat to the Gorgeted Puffleg is rapidly advancing habitat clearance across its tiny, unprotected range. Pristine forests and páramo (glacier-formed valleys and plains with a large variety of lakes, peat bogs, and wet grasslands intermingled with shrublands and forest patches) are being destroyed by fires set in the dry season, which spread upslope to the fragile tree line. As a result, the Gorgeted Puffleg may be the most endangered hummingbird on the planet.



Gorgeted Puffleg: Alex Cortes, Birdlife International

Armed with this new information, ABC and ProAves are eager to begin protecting the species within its limited range. Residents of one of the local communities have expressed interest in working to establish better protection of the upper watershed where the bird is found, which would also ensure continued water security for them and other communities.

## Study Highlights the Impact of Cat Predation on Young Birds

**A** recent study that tracked Gray Catbird fledglings in three Washington, D.C. suburbs found that outdoor cats were the leading source of known predation on the young birds. This study, published in the January 2011 edition of the *Journal of Ornithology*, was conducted by Dr. Peter Marra and Dr. Thomas Ryder of The Smithsonian Institution and Ms. Anne L. Balogh of Towson University.

In the study, small radio transmitters were attached to 69 newly hatched catbirds. These transmitters recorded the birds' locations every other day until they died or left the study area. Forty-two birds died during the study—33, or almost 80%, due to predation. Almost half of the known predators were free-roaming cats.

The study also found that predation was the most significant factor affecting a catbird fledgling's survival—not parental age, brood size, sex, or hatching date. The vast majority of the deaths occurred in the first week after the bird fledged from the nest. Because fledglings beg loudly for food and are not yet alert to predators, they are easy prey for cats and other predators.

"This study certainly adds more validation to what we have been saying for years—that outdoor cats are a highly destructive predatory force that is causing havoc in the world of native wildlife. I hope we can now stop minimizing the impacts that outdoor cats have on the environment, and start addressing the serious problem of cat predation," remarked Darin Schroeder, Vice President for Conservation Advocacy at ABC.

ABC has a wide variety of materials available on its website to help address the problems caused by free-roaming cats: [www.abcbirds.org/abcprograms/policy/cats/materials.html](http://www.abcbirds.org/abcprograms/policy/cats/materials.html)

A complete copy of the study is available at: [http://nationalzoo.si.edu/scbi/migratorybirds/science\\_article/pdfs/55.pdf](http://nationalzoo.si.edu/scbi/migratorybirds/science_article/pdfs/55.pdf)





# SPRING CONSERVATION CHALLENGE

Cerulean Warbler, Wood Thrush, Mountain Plover, Sprague's Pipit: some of the migrants featured in this issue of *Bird Conservation* are birds many of us are lucky enough to see each spring. You've read in this magazine about all that ABC and its partners are accomplishing for neotropical migratory bird conservation. **But we need your help.** It is time for those of us who love and appreciate the natural world to recognize that its immediate future depends on our actions—actions that we can increase through “citizen conservation.”

For me, being a citizen conservationist means taking personal action close to home, but it also means **helping those groups you most trust** to accomplish the things we cannot do alone. I hope that, for you, ABC is that group—the nimble, quick, outcome-oriented group that turns the dial in favor of birds.

Now I have an important request: ABC board member and author Jonathan Franzen, longtime ABC supporter and conservationist Robert W. Wilson, ABC Chair Jim Brumm and his wife Yuko, and ABC Vice-Chair Warren Cooke and his wife Cathy, have teamed up to offer ABC a \$125,000 challenge grant to enable ABC and our partners to succeed with our ambitious bird conservation plans. **Simply put, every dollar we raise between now and June 20 will be matched dollar for dollar up to \$125,000—that's a quarter of a million dollars for birds!** Can you help us? This is a terrific opportunity to double your impact on bird conservation.

George Fenwick  
President, ABC



Cerulean Warbler (above): Greg Lavaty  
Wood Thrush (left): Greg Homel, Natural Elements Productions



## Rare Yellow-billed Cotingas Captured and Radio-tagged for the First Time

In 2007, ABC and partner group Friends of the Osa began a project to monitor rare birds in the Osa Peninsula and Golfo Dulce regions of southwestern Costa Rica. These mangrove swamps and lowland forests are thought to be the stronghold for the Endangered Yellow-billed Cotinga and other threatened birds such as the Black-cheeked Ant-Tanager and Mangrove Hummingbird.

One of the main aims of this project is to safeguard the of the cotinga's mangrove habitat. Another important goal is to answer questions about this species' movements and distribution, both during and outside of its breeding season (see *Bird Conservation*, Fall 2010).

To begin answering some of these questions, ABC and Friends of the Osa initiated a radio-tracking study with support from the Mohamed Bin Zayed Species Conservation Fund; this phase of the project began in December 2010.

Success came recently with the capture of three Yellow-billed Cotingas—two males and a female. These were the first Yellow-billed Cotingas ever captured. The birds were fitted with radio transmitters, and will be tracked over the next 6-10 months, with researchers looking at home range size, feeding and reproductive habits, and habitat use to develop a conservation plan for the species in and near the Osa.



This male Yellow-billed Cotinga has already been fitted with a radio transmitter, visible as a black line on the bird's back. Photo: Karen Leavelle

"Placing a radio transmitter on an endangered species such as the Yellow-billed Cotinga is a great opportunity that could open the door to a wealth of ecological and behavioral information that will guide us in protecting this little-known bird and the habitat it requires," says Karen Leavelle, Friends of the Osa's Chief Investigator on the project.

"This is a bird that we believe used to exist in large numbers, but is now increasingly difficult to even glimpse, much less study. This is an outstanding opportunity to acquire information on this species and take action to address its habitat needs now before it is too late," added Andrew Rothman, Conservation Biologist, who oversees ABC's programs in Costa Rica.

## Waved Albatross Bycatch Targeted

The Waved Albatross has a global population estimated to be fewer than 35,000 individuals.

The species was recently up-listed to Critically Endangered under IUCN World Conservation Union criteria due to evidence of a 42% decline between the years 1994-2007. Although lacking definitive evidence, ABC suspects that accidental bycatch on the hooks of small, artisanal South American fishing boats could have a significant impact on adult survivorship.

In 2007, ABC collaborated with Equilibrio Azul to gather the first data from fishermen in southern Ecuador. Approximately one-third of the fishermen interviewed said that they had accidentally caught an albatross while fishing. With this new

information, ABC and Equilibrio Azul went on to identify the fisheries that have the most seabird interactions and when they occur, and to develop mitigation measures that will help lessen the bycatch.

Since 2008, Equilibrio Azul has operated an on-board observer program out of Ecuador's largest artisanal port, Santa Rosa. They have observed more than 600 line sets, and documented the accidental deaths of more than a dozen Waved Albatrosses, indicating a rate of accidental capture may easily explain the decline in adult survivorship.

In the fall of 2010, Equilibrio Azul conducted a series of line-weighting experiments designed to reduce bycatch by making the gear sink faster and reducing gear tangles and handling time



Robert Medina, fisheries technician, preparing to begin the haul, with a hake fisherman from Santa Rosa, Ecuador. Note the Waved Albatrosses in the water, waiting for the action to start. Photo: Jodie Darquea, Equilibrio Azul, November 2010.

during the haul, when the most birds are caught. Throughout 2011, ABC and Equilibrio Azul will be disseminating the best practices they have developed

through a fishermen education campaign, and working with the fishermen and authorities to ensure that the modifications are adopted.

# Effective Bird Conservation Throughout the Year

by David Pashley, Vice President for Conservation Programs, ABC, and Dave DeSante, President, The Institute for Bird Populations

The fundamentals of bird conservation seem simple at first glance—work to increase the breeding success of threatened species and take action to reduce the threats that cause bird mortality. Multiply your efforts and you can positively affect bird populations at a national and even international level.

Of course, little is ever that easy. Bird mortality and survivorship are complicated, especially for migratory songbird species that face the challenge of travelling long distances to reach suitable breeding grounds. And breeding and migration only comprise half of a bird's year. How do we identify the most urgent threats to birds during the other half? There are still many outstanding questions about this “big picture” that if answered will make more targeted and effective bird conservation possible.

Little is known about what happens to young birds between the time they become independent and when they leave for fall migration. Recent studies suggest that many forest-breeding birds seek out dense, early-successional habitat during this period. This is evidence that homogeneous, even-aged forests are less than ideal for breeding birds, even if ample nest sites are provided. More and better forest management can help increase survivorship during this period.



Black-throated Blue Warbler:  
Peter LaTourrette, [www.birdphotography.com](http://www.birdphotography.com)

**For the most effective bird conservation, we need to understand the needs of our priority species over their full-year life cycles.**



Prairie Warbler: Greg Lavaty

## The Hard Numbers

The number of birds that die each year is astonishing. For instance, Partners in Flight ([www.partnersinflight.org](http://www.partnersinflight.org)) has estimated the total population of eastern and boreal long-distance migratory warblers at 350 million pairs. Data from The Institute for Bird Populations and elsewhere suggest that, taking re-nesting into consideration, each pair of warblers produces an average of about 2.5 independent birds per year. Add these 875 million young to 700 million adults and you have a post-nesting, pre-fall migration population of over 1.5 billion warblers.

It follows that for warbler populations to remain stable, no more than 875 million birds (adults and young) can die between fledging and the following spring. This is consistent with data that suggest that only about half of all adults make it back for spring and perhaps only 40% of juveniles.



Deaths from natural causes combined with those caused by human factors may be too much for an already-vulnerable population of birds to absorb. Mortality during spring migration may represent a more crucial loss because these birds that have demonstrated they can survive from post-fledging independence through migration and a challenging winter.

So simply put, if more than 875 million warblers die, then populations will decline. Again, real-life scenarios are more complex. For example, if more birds die during the non-breeding season, breeding success of the remaining birds may actually increase the following spring, since densities are lower and more quality breeding habitat is available per bird. This

can have a huge impact on population size and trend, and is one of the major areas where the bird conservation community expends effort and resources.

## The Importance of Wintering Habitat

Winter habitat conditions are becoming recognized as equally or perhaps even more important to bird populations than nesting habitats, especially for species with specialized requirements for habitats that have been greatly reduced or degraded by human activity, such as the moist forests on the Caribbean coasts of Mexico and Central America. The Louisiana Waterthrush and Kentucky Warbler, for example, have been shown to have

suffered population impacts because of the loss of this winter habitat (see page 18 for an article on how ABC is working to preserve some of this important habitat in Mexico's Yucatan Peninsula).

During winter, many warblers appear to be habitat generalists because they are found in human-altered environments, but closer investigation often reveals that they are actually specialists that just happen to thrive in specific human-modified habitats. Many of these species seem to do reasonably well in winter. Still, if it turns out that overwintering survival is the primary factor affecting population trends for some of our migratory landbirds, we must address these difficult issues or risk losing these species entirely.

Red Knots: Gregory Breese, USFWS







Kentucky Warbler: Greg Lavaty

**The Louisiana Waterthrush and Kentucky Warbler have been shown to have suffered population impacts because of the loss of winter habitat.**



Louisiana Waterthrush: Greg Lavaty

A similar situation can be seen in the plight of the *rufa* subspecies of the Red Knot, which continues to decline despite concerted conservation efforts along the mid-Atlantic Coast, one of the most important migration stopover regions along its epic migration route (which totals some 20,000 miles annually between its wintering grounds in Tierra Del Fuego and its Arctic nesting grounds). Even though numbers of horseshoe crabs, whose eggs provide essential fuel to the northward-migrating knots, are beginning to rebound due to harvest limits, the birds' numbers continue to crash. This alarming decrease may be continuing because the egg-laying crabs have not yet recovered enough to support viable numbers of Red Knots, but it may equally be due to another, as-yet undiscovered factor on the bird's wintering grounds or elsewhere along their migration route. Certainly, the initial population plunge (from hundreds of thousands of knots to a mere 16,000) caused by the overharvesting of horseshoe crabs made the knot population much more vulnerable to other threats, both natural and man-made. Whether this population can recover remains to be seen.

ABC continues its work to mitigate factors such as collisions, cats, and habitat loss that seem to have their greatest effect on birds during nesting and migration. These are positive achievements, but only part of the larger conservation picture. For the most effective bird conservation, we need to understand the needs of our

priority species over their full-year life cycles. Thinking about these cycles and what truly regulates the size of priority bird populations is the most important and challenging research issue that we face as we try to enhance the effectiveness of our bird conservation efforts.



Kirtland's Warbler at nest: Ron Austing



# Providing a Safe Haven for Migrants While Protecting the Worthen's Sparrow

Worthen's Sparrow: Ricardo Canales

by Mary Gustafson, Rio Grande  
Joint Venture Coordinator, ABC

In 2005, ABC helped the Mexican conservation organization Pronatura Noreste acquire 585 acres of high-elevation grasslands to form the El Cercado Reserve, located in the northeastern region of Chihuahua.

These once-flourishing grasslands had been grazed down to bare, dusty ground by cattle and other introduced livestock, leaving only a few scraggly yuccas and cacti behind.

Conservation of this area was of special concern to ABC and other organizations due to its importance as a wintering site for the AZE-listed Worthen's Sparrow, which forms flocks of up to 100 individuals there in the fall and winter, but also because of its significance for many species of U.S. migrants.

El Cercado lies within a larger region of grassy plains known as the Chihuahuan Desert Grasslands. Over 75 percent of the migratory grassland birds from the northern Great Plains, including Mountain Plover, Long-billed Curlew, Upland Sandpiper, Burrowing Owl, Loggerhead Shrike, three species of Sparrows (Grasshopper, Baird's, and Lark), and Chestnut-collared Longspur, spend the winter in this region, which encompasses the southern United States and northern Mexico. Severe population declines in many of these species over the last four decades – some by as much as



Worthen's Sparrow: Antonio Hidalgo

80 percent – are probably due to at least in part to loss of this critical wintering habitat.

With 8,000 Long-billed Curlews (40% of the U.S. population) and over 1,500 Mountain Plover recorded wintering in the Chihuahuan Grasslands, it's no wonder that they have been recognized by the Western Hemisphere Shorebird Reserve Network ([www.whsrn.org](http://www.whsrn.org)) as a site of international importance, and by the Commission for Environmental Cooperation as a Grassland Priority Conservation Area for the North American Bird Conservation Initiative (NABCI).



Wintering Long-billed Curlews, Nuevo León, México. Photo: Gabriel Ruiz, Universidad Autónoma de Nuevo León





Mexican prairie dog at El Cercado, Mexico, July 2008. Photo: David Weidenfeld, ABC

Wintering and resident birds alike must compete with agricultural interests for habitat here, since these broad, flat lands are highly sought-after by farmers for growing potatoes. These grasslands will – with enough irrigation – produce only a few crops of potatoes before salts accumulate in the soil and the land becomes unfarmable. The continued use of groundwater for irrigation is unsustainable, however, as very little rain falls in this arid climate.

A 2010 satellite tracking project conducted by José Ignacio González of the University of Nuevo León and funded in part by a Neotropical Migratory Bird Conservation Act grant, showed that wintering Long-billed Curlews spend most of their time in the remaining grasslands and little in areas developed for agriculture.

When spring arrives and neotropical migrants return to their nesting grounds in the U.S., flocks of Worthen's Sparrows disperse to find

suitable breeding sites. Although not a migrant, the Worthen's is a "rainfall nomad", appearing to seek out spots throughout the region that get the most moisture. They will breed in brushy or weedy areas near grasslands created and maintained by endemic Mexican prairie dogs, which play an important role in creating and maintaining this ecosystem.

In addition to the Long-billed Curlew, protection of these expansive areas also safeguards essential winter



Long-billed Curlew with a solar tracking tag, Nuevo León, México, 2010. Photo: Gabriel Ruiz, Universidad Autónoma de Nuevo León



Grasshopper Sparrow: Bill Hubick



Burrowing Owl: Tom Grey



Mountain Plover: Greg Homel, Natural Elements Productions

habitat for other migratory grassland species such as the Mountain Plover and Sprague's Pipit. If sufficient rains don't come, the sparrows continue their wandering. Their nomadic nature makes effective land conservation for the Worthen's Sparrow more difficult, as protection is required over a large area to ensure the species will find suitable breeding habitat regardless of where the rain falls in any given year. The total area needed for protection of the species is much larger than the amount that will actually be used in any one year.

Pronatura Noreste has continued acquiring land across the Chihuahuan grasslands for the Worthen's Sparrow and winter migrants. To date, they have saved some 123,000 acres by means of easement or ownership, and, according to Alfonso Banda, Pronatura's Director of Conservation, are working to conserve even more. Pronatura Noreste has also received funds from Southern Wings (see article on page 16) for ongoing grassland restoration, fence maintenance on existing reserves to keep out goats, and an assessment of the wintering ecology of Mountain Plovers.

Since ABC's initial land acquisition at El Cercado, this portion of the reserve has been fenced and grazing restricted, allowing healthy stands of grass to return. We are optimistic that one day Worthen's Sparrows will again nest there and declining WatchList species will once again find a safe haven waiting for their arrival.

Worthen's Sparrow in secondary vegetation, Chihuahuan Grasslands.  
Photo: Ricardo Canales, Universidad Autónoma de Nuevo León







# Do Cerulean Warblers Like Chocolate?

by Benjamin Skolnik, Conservation Projects Specialist, ABC

Buttresses of the vast Andes mountains rise out of the Magdalena River Valley in northern Colombia like giant, gnarled tree roots, creating steep hillsides that harbor lush green forests. As I travel across the broad, agricultural valley on my way to visit a reforestation project in the Cerulean Warbler Bird Reserve being carried out by ABC's partner Fundación ProAves, I melt in the scorching heat, and eagerly look forward to the cooler climates that await me at higher elevations.

As I ascend, I try to imagine the perilous journey taken by the migrating Cerulean Warbler. The bird leaves the wet, temperate forests of Appalachia and flies thousands of miles to reach montane forests in Colombia, Ecuador, and Peru. These days, the forests in both the United States and South America are much changed. Entire mountaintop forests in the Appalachians are gone in the wake of ruinous mining activity, and the South American forests are largely converted to agriculture and pasture. It is fascinating to ponder the number of larger birds that are restricted to much smaller ranges, while the fate of the diminutive Cerulean Warbler depends on a landscape-level conservation approach.

The Cerulean is one of the few warblers whose known non-breeding range is entirely within South America, and it has one of the longest migrations of any songbird of its size, traveling approximately 2,500 miles round-trip each year. It is also our fastest declining migratory songbird, having experienced an alarming three percent population decline each year over the last four decades or more.

The reserve in Colombia created in its name was set up to conserve this and other migrants, as well as resident species. During my visit there, I saw a Cerulean Warbler for the first time in my life. Its bright blue beauty lived up to my expectations, and I felt somehow relieved to see it in its rightful place atop the tallest trees in the dense, mature forests – akin perhaps to seeing a macaw flying over the canopy of a rainforest after a lifetime of seeing them in zoos and cages.

But what route did this bird travel to get here? What distance did it have to fly without rest over denuded pasturelands? Just how important are the areas of forest in between Appalachia and the Colombian foothill forests? I especially wonder about the value of farm lands that maintain tree cover.

Cerulean Warbler Reserve: Fundación ProAves. [www.proaves.org](http://www.proaves.org)





Cacao harvest at the Cerulean Warbler Reserve. Photo: Benjamin Skolnik, March 2011



These Golden-winged (top) and Blackburnian (above) Warblers were seen foraging at ABC/ProAves reserves in Colombia. Photos: Benjamin Skolnik, March 2011

Some of these questions are beginning to be answered through an important collaboration that has brought together experts to compile information on the species and map Cerulean Warblers on their non-breeding grounds. The resulting publication, *Conservation Plan for the Cerulean Warbler on in its Non-breeding Range*, provides insight into the mysterious life of this little bird. For instance, through modeling exercises, scientists suggest the warbler may prefer areas

of less rainfall. Competitive interactions between the Cerulean Warbler and other species could explain different patterns of habitat use at the landscape level. For example, Blackburnian Warblers are the most common species in mixed-species flocks in forest habitat, while Cerulean Warblers appear most common in shade coffee plantations.

The Conservation Plan also confirms what many already suspect: Colombia

is the most important nonbreeding territory for Ceruleans, yet only 16% of that habitat lies within recognized protected areas. As rural areas are becoming safer thanks to government efforts to curtail the drug trade, many people are reclaiming lands for cultivation of other crops and for cattle ranching, driving the already steep annual deforestation rate of 0.5% even higher. So what are the bright spots for the Cerulean Warbler and other migrants that depend on Colombian forests?

One is your morning latte made from Colombia's finest certified shade-grown coffee beans. Shade coffee has important benefits for birds over varieties that grow in full sun or other agricultural products that require no tree cover. In one study, Cerulean Warblers were twice as common on shade coffee farms than forested areas, with a density of two birds per acre compared to one per acre. We don't know whether these birds are being



forced to reside in shade coffee plantations due to lack of natural forest or because they actually prefer the more open secondary forests of shade coffee farms, but whichever the reason, the value of shade coffee is clear. All bird lovers, therefore, should be drinking shade coffee, either Rainforest Alliance or Smithsonian Bird-Friendly certified. Unfortunately organic and fair-trade certifications do not require any amount of tree cover, and thus do not alone guarantee habitat for migrants.

There are additional methods for maintaining forests for our migratory species in South America, such as the biological corridor I visited on this trip. Biological corridors have long been an important tool for species conservation, and are used particularly effectively for large mammals that are relatively easy to monitor. With funding from the U.S. Fish and Wildlife Service and the Amos W. Butler Audubon Society, ABC and Fundación ProAves are implementing the Cerulean Warbler Conservation Corridor. The project presently aims to connect about eight miles between two private reserves (the Pauxi Pauxi and Cerulean Warbler Bird Reserves) through reforestation and conservation easements on private land. Already, thirteen farmers have entered into the program, protecting more than 300 acres. Over the coming year, ProAves will help landowners plant nearly fifty thousand trees on these and other area farms.

Cacao (chocolate), like coffee, is another hot export item on the international market that can fetch a good price and can be grown in the shade. Certified shade cacao is likely just as beneficial for migrants as shade coffee, and is another major agricultural product at this ideal elevation for the Cerulean Warbler. We visited



Heidy Valle with cacao fruit. Photo: Benjamin Skolnik, March 2011

one such farm and chatted with its 82-year-old owner, Raul. His wealth of experience and enthusiasm for cacao farming was just as invigorating as the delectable fruit that surrounds the seed, which is eventually ground into chocolate (most North Americans have never experienced this wonderful fruit, see photo). He told me that he removed all his coffee trees years ago in favor of cacao because the chocolate requires less labor and is sold in a more stable market. Just then we sighted a Golden-winged Warbler, another declining U.S. WatchList species, flitting energetically through the cacao and shaded understory while foraging for a meal. I now know that my chocoholic pursuit of more expensive, high-quality, certified chocolate has wider-ranging benefits. We left the farm encouraged, discussing ways for ABC and ProAves to reach out to even more cacao and coffee growers.

The ProAves team is an inspiring group of young, dedicated Colombian biologists and conservationists.

As they try to reach out to the community to discuss the importance of protecting birds, they face an array of challenges. Heidy Valle, the organization's lead for the reforestation program, told me that one common misconception is that "people think we plan to bottle the water and oxygen and sell it to foreigners." This comment suggests that locals intrinsically understand the value of forests for the bounty they bring. However, the degree of misinformation and suspicion with which conservation is sometimes seen is reason for concern.

In light of these challenges, ProAves is making education a priority and working to shift the local economics to favor forest protection. Over a century ago, slaves in this region constructed a stone path of similar girth and quality to the famed Inca Trail in Peru. ProAves is now working with local municipalities to restore key portions of the several-hundred-mile trail in order to bring national and international tourism that may one day sustain livelihoods and provide an alternative to clearing habitat.

While efforts to protect Cerulean Warblers are off to an admirable start, effective landscape-level conservation must still reach a larger scale. Working with cacao and coffee cooperatives to promote reforestation and shade certification is an obvious next step. Perhaps with your help, we can begin to employ these and other techniques across Colombia, and in Ecuador and Peru as well. Thankfully, buying delicious shade-grown coffee and chocolate is no hardship!

ABC will, of course, also continue to increase reforestation activities and grow the private reserve network. Your support of these programs is most appreciated.



# SOUTHERN WINGS

## *A Partnership of State Fish and Wildlife Agencies*

*by Deborah Hahn, International Resource Director, Association of Fish and Wildlife Agencies*

Successful bird conservation, whether for waterfowl or other migratory species, must address the full array of bird habitat needs in all geographies regardless of political boundaries. Nearly 170 species of songbirds such as flycatchers, vireos, thrushes, warblers, grosbeaks, buntings, and orioles have 90% of their wintering range south of the U.S.-Mexico border. Many non-songbirds including herons, egrets, ducks, sandpipers, terns, cuckoos, and swifts also winter in Latin America and the Caribbean, where they depend on habitat outside of the jurisdiction of U.S. federal and state fish and wildlife agencies for up to eight months of the year.

Since the mid-1990s, 20 plus states have participated in partnership-based bird conservation projects in Latin America and the Caribbean. For example, the Missouri Department of Conservation was involved in habitat protection, restoration and bird monitoring in El Cielo, Mexico for the approximately 70 species they share. Starting in 2003, the Tennessee Wildlife Resources Agency developed a project to restore habitat and monitor grassland/scrub shrub birds in Tennessee. They connected this project to critical habitat in the Yucatán Peninsula of Mexico via the development of an international monitoring program. The New Jersey

Department of Environmental Protection has supported the conservation of Red Knots on their breeding and wintering grounds. Every year since 1999, shorebird researchers from the United States, Canada, Argentina, and Chile have studied Red Knot populations along the Atlantic Flyway from the Canadian Arctic to far southern Chile. There are many more examples of such projects supported by other states. However, what has been missing is a relatively seamless and straightforward way to enable state participation in bird conservation on wintering ground habitats south of the U.S. border, and further, to ensure that state funds are supporting species that have a biological connection to their state, to have the benefits of financial leverage, and to create a convenient pipeline for the continuous flow of funds from states. Enter the Southern Wings Program.

The concept of this program – a partnership of state fish and wildlife agencies supporting a common vision of conserving birds throughout their entire life cycle by supporting projects in Latin America and the Caribbean – evolved from a presentation given by Brad Jacobs of the Missouri Department of Conservation to the Partners in Flight Implementation Committee in March 2005. The idea mirrors state agency conservation efforts to support wetlands and waterfowl conservation

in Canada, through which partnerships enable “match” leveraging of state agency resources, and where biological priorities are recognized in conservation delivery. After extensive discussions, in 2007, the Association of Fish and Wildlife Agencies (AFWA) Southern Wings Task Force was given the specific charge to “create a funding mechanism that provides an easy and flexible avenue for states willing to participate in conservation in Latin America and the Caribbean by contributing funds annually through a US-based third party that will handle the funds and coordinate the distribution of funds.”

The Task Force was led by Dave Erickson, also of the Missouri Department of Conservation, and included partners that were critical to the development and successful implementation of the Program. Beyond the state agencies, those partners included American Bird Conservancy, Ducks Unlimited, National Audubon Society, The Nature Conservancy, the U.S. Fish and Wildlife Service, and the U.S.D.A. Forest Service International Programs. With strong leadership from the Task Force, two years later at the AFWA Business Meeting, the Southern Wings Program was officially born.

Seven states – Arizona, Arkansas, Iowa, Missouri, Oklahoma, South Dakota, and Wisconsin – pledged





Lark Sparrow: Peter LaTourrette, [www.birdphotography.com](http://www.birdphotography.com)



Golden-winged Warbler: Greg Lavaty

funds in 2009, the inaugural year of the program. Additional states have since participated including Minnesota, Nebraska, Pennsylvania, Tennessee and the Northeast Fish and Wildlife Association. These states should be congratulated for their leadership.

A mechanism for state participation in bird conservation south of the

U.S. border is appropriate because: (1) southern habitats are of enormous biological significance to many migratory bird species shared with the states; (2) unique challenges face winter bird habitats in Latin America and the Caribbean; (3) birds are of great interest to citizens and are economically significant; (4) states have roles

in, and often legal responsibilities for, migratory bird conservation; (5) the commingling of state funds enhances match and leverage opportunities and the on-the-ground significance of efforts; and (6) some states with interests in comprehensive bird conservation are not staffed in ways that enable them to independently form cross-border partnerships.

The state fish and wildlife agencies spend millions of dollars conserving migratory birds each year. The economic significance of migratory birds is well known. The 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation: National Overview states that over \$45 billion was spent on wildlife watching in the United States in 2006. An addendum to the 2006 report stated that 48 million birders generated over \$82 billion in total industry output, 671,000 jobs, and \$11 billion in local, state, and federal tax revenue in 2006 on trip expenditures related to birding. Expenditures for wildlife watching activities in Pennsylvania during 2006 were over \$1.4 billion. The State Wildlife Grants Program has provided new sources of funding, brought partners to the table in each state, and required the states to meet goals and objectives for many migratory species beyond waterfowl.

Although the Southern Wings Program is young, it is already making contributions to conservation in Latin America and the Caribbean. It is forging new partnerships and engaging state wildlife agencies at all levels in conservation beyond their borders. Building on these successes, we are confident we can achieve our vision of participation by all state wildlife agencies in conservation activities in Latin America and the Caribbean within 5-10 years.

# Eliminating Threats to Migratory Birds in the Yucatán Peninsula of Mexico

by Andrew Rothman, International Conservation Officer, ABC

Mexico's Yucatán Peninsula is one of the most important areas for migrating birds in the Neotropics. Each spring, millions of migrant birds returning north from their wintering grounds rely on foraging areas across the Yucatán to nearly double their body weight before they attempt the next leg of their journey, the 12- to 18-hour migration across the Gulf of Mexico. In the fall, as these same birds move south, the Yucatán again provides important resting and refueling grounds. Its varied habitats include inundated savannas, several types of tropical and deciduous forest, freshwater and coastal wetlands, and secondary growth. While "our" neotropical migrants have used the Yucatán Peninsula during their annual migration for millennia, this area may be better known to most people for one of the most well-known and developed resort towns in the hemisphere...Cancún.

If you Google the word Cancún, you will get nearly 25 million results. Most of these guide you to a vast array of tourism options in the area. Cancún was once a small village, but resort and hotel development that began in the 1960s has resulted in over three million visitors each year and a permanent population of almost one million. This expansion presents a huge threat to the habitat needed by many migratory birds, including

U.S. WatchList species such as the Wood Thrush, and Blue-winged and Kentucky Warblers. Other WatchList species such as the Cerulean, Golden-winged, and Canada Warblers pass through the Yucatán on their way farther south.

Over 500 species of birds are permanent residents of the Yucatán Peninsula as well, including endemic species such as the Yucatán Nightjar, Yucatán Vireo, Yucatán Parrot, and Yucatán Jay.

ABC, with support from the Missouri Department of Conservation (MDC) and the Missouri Conservation and Heritage Foundation, via the Southern Wings program, is helping local conservation organizations purchase



Blue-winged Warbler: Greg Lavaty



Canada Warbler: Roger Ahlman

important pieces of remaining habitat in the Yucatán Peninsula to protect habitat for migratory birds. In Missouri, a local alliance of several bird organizations, nature study groups, and individuals, under the name Avian Conservation Alliance, has



Clearing land for a new resort, Playa del Carmen, Mexico. Photo: Andrew Rothman, ABC



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been fundraising to help support bird conservation efforts in Mexico and Central America.

“These funds are leveraged several times, including being matched by MDC, before they reach the ground at sites such as the Yucatán, where they provide direct assistance for the conservation of migratory and wintering habitat for Missouri’s breeding birds,” says MDC’s Brad Jacobs.

ABC is also partnering with The Yucatán Peninsula Alliance for Birds (Alianza para las Aves de la Península Yucatán or AAPY) to ensure the protection of habitat for neotropical migratory birds and to limit the

effects of the continuing expansion of Cancún. A major goal of this consortium is to create a biological corridor that links the Yum Balam Flora and Fauna Protection Area on the north coast of Yucatán to the Sian Ka’an Biosphere Reserve, which is south of another well-known beach town, Playa del Carmen.

ABC and Southern Wings funding is matching North America Wetlands Conservation Act and Neotropical Migratory Bird Conservation Act funds received by AAPY to acquire tracts of bird habitat west of Cancún. ABC helped purchase a 1,600-acre property north of Cancún called

San Mateo Aké in late 2010. This property abuts the existing El Eden Private Reserve, adjacent to the Yum Balam Protected Area. AAPY plans to purchase a second, 360-acre property by July 2011. This second purchase will add to the development of this biological corridor and secure more habitat for wintering migrants. These lands will be held permanently by a recently formed land conservation trust, ensuring that the properties will remain protected for decades to come.

Gonzalo Merediz, Director of Amigos de Sian Ka’an explains, “Given the large-scale threats faced by neotropical migrant habitat around Cancún,

Cancún resort: stock.xchng





Prothonotary Warbler: Greg Lavaty

## Eliminating Threats to Migratory Birds in the Yucatán Peninsula of Mexico

AAPY members decided to join efforts and work in collaboration to obtain stronger results and have a more efficient use of the funds donated by their national and international supporters. In addition to the purchase of land, AAPY is working to establish additional public protected areas in the region, developing forest fire prevention strategies, and educating the public on the importance of local tropical forests and wetlands. Furthermore, Amigos de Sian Ka'an and The Nature Conservancy are working with the National Forest Commission to create a fund to compensate the owners of forest for the environmental services provided to society (carbon sequestration, aquifer recharge, and biodiversity conservation)."

Conservationists and wildlife managers can and should continue to manage breeding habitat for neotropical migratory birds across the United States. However, these actions may have minimal results without additional conservation action on wintering and stopover habitats, such as those outside of Cancún.

The expansion of programs such as Southern Wings and legislation such as Neotropical Migratory Bird Act and North American Wetlands Conservation Act are critical for ABC and its partners to effectively conserve neotropical migrants throughout their entire life cycle. If we continue to develop and apply these resources, we can mitigate the effects of densely-populated resort towns such as Cancún to ensure continued safe passage for "our" migratory birds.

### A few resident Yucatan bird species



Yucatan Vireo: Tom Murray, PBase.com



Yucatan Jay: Tom Murray, PBase.com



Ocellated Turkey: Greg Homel, Natural Elements Productions

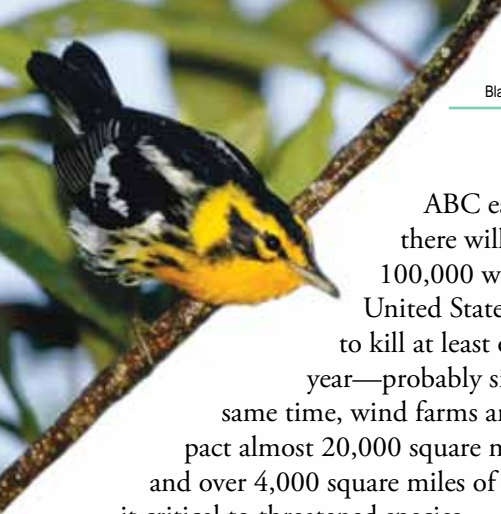


# WINGS AND WIND POWER — Proceed with Caution

**I**t's a warm autumn afternoon, and a migrating eagle rides the air currents along the mountain ridge top, heading south as it has so many times before. But today there's a difference—a newly built series of wind turbines stands in the bird's path. As it attempts to navigate through this gauntlet, the rapidly rotating tip of a turbine blade slams into its wing, and the fatally injured bird tumbles hundreds of feet to the ground, never to complete its journey. ABC recently posted a video that shows a similar incident, though in that case, the bird, a Griffon Vulture, survived. Watch now at [www.youtube.com/abcbirds](http://www.youtube.com/abcbirds).

Thousands of birds – including eagles, songbirds, and endangered species – are now meeting this same sad end through collisions with modern wind turbines. These turbines – with blades so long that, at 15 rotations per minute, they are moving at 180 to 200 miles per hour at their tips – are increasingly being placed atop prominent ridges, along which large numbers of hawks and other birds migrate.

Wind turbine montage: Mike Parr; Golden Eagle: FWS



ABC estimates that by 2030, there will likely be more than 100,000 wind turbines in the United States, and these are expected to kill at least one million birds each year—probably significantly more. By this same time, wind farms are also expected to impact almost 20,000 square miles of terrestrial habitat, and over 4,000 square miles of marine habitat, some of it critical to threatened species.

ABC has been taking the lead in the bird conservation community in pushing for mandatory standards and mindful planning for wind farms in the United States. Recent voluntary guidelines released by the federal government contain many good ideas, but aren't strong enough to be fully effective. More importantly, these guidelines are not mandatory.

The U.S. Fish and Wildlife Service has even asked whether these newly issued, voluntary guidelines should apply to "community-scale" wind energy. At first glance, it would seem that exempting wind projects with just a few wind turbines from these guidelines would be harmless. However, there is growing concern that in at least some areas, this may not be the case.

Take, for instance, the southern shore of Lake Erie in northwest Ohio – an area known to birders across the United States as Magee Marsh. Decades of bird banding data and birding observation have shown this area to be a

major stopover location for migratory birds. Many birders return to Magee Marsh year after year for the unparalleled spectacle of colorful warblers and tanagers and normally furtive thrushes, sparrows, and rails all feeding within arm's reach, completely unconcerned by their human admirers. Unfortunately, wind energy developers are proposing one- and two-turbine projects in this and other important migratory corridors. Because of legal loopholes, these small wind projects often do not have to be reviewed for their expected impacts to birds before they are built, nor do they have to be studied to see how many birds they kill after construction.

As renowned author and birding expert Kenn Kaufman has pointed out, Magee Marsh encompasses the only consistent stopover habitat between Michigan and the Bahamas for the endangered Kirtland's Warbler. Other species that concentrate in this area during spring migration include Connecticut, Mourning, Bay-breasted, Blackburnian, and Magnolia Warblers, as well as the Gray-cheeked Thrush and a wide variety of sparrows, vireos, shorebirds, and other neotropical migrants.

ABC supports Kenn Kaufman and the Black Swamp Bird Observatory, a local bird conservation nonprofit, in their call for a three-year moratorium on additional wind energy development within three miles of the Lake Erie shoreline in four northwest Ohio counties. This amount of time should allow for radar studies to be conducted and the true risk to birds from turbines in this important migratory stopover to be evaluated.



Wind turbine: Mike Parr

**ABC supports wind power that includes mandatory standards to minimize bird deaths and habitat impacts. Wind power should:**

- ✓ Use the best available technology and management practices to prevent avian impacts
- ✓ Be carefully sited to minimize harm to birds and bats
- ✓ Employ effective, federally reviewed and approved, site-specific, pre- and post-construction studies/assessments to assist with improved siting and operation
- ✓ Compensate fully for impacts to birds from collisions or from lost or degraded habitat.
- ✓ Comply with relevant state and federal wildlife protection laws, such as the Endangered Species Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and National Environmental Policy Act.





ABC is also campaigning against ill-considered wind power development in Hawai'i, which unfortunately is already the bird extinction capital of the world. A large build-out of wind power is expected in Hawai'i to aid in meeting a government goal of generating 70% of the state's energy from clean sources by 2030.

Birds including Hawaiian Petrel, Nēnē (Hawaiian Goose), and Hawaiian Short-eared Owl have already been killed at a wind farm on Maui. Shearwaters, frigatebirds, and albatrosses could also be vulnerable to collisions with wind turbines. The power lines and undersea transmission cables pose a risk to the habitat of many other species, including the endemic Hawaiian Coot, Hawaiian Common Moorhen, and Hawaiian Black-necked Stilt.

Since almost any wind project site in Hawai'i has the potential to impact threatened and endangered species,



Hawaiian Short-eared Owl (Pueo): Michael Walther

ABC is also campaigning against ill-considered wind power development in Hawai'i, which unfortunately is already the bird extinction capital of the world.

ABC is working to improve state and federal decisions about wind energy, both on Maui and in the entire state. ABC has contributed to public comment periods, suggested solutions to mitigate for wind development, and continued to reiterate the need for careful, deliberative development of wind energy in Hawai'i.

Wind power can be an important part of the solution to global warming, but badly planned projects and poorly sited turbines can decimate bird and bat populations and ruin essential wildlife habitat. ABC supports wind power, but feels that the cautious development of this resource is crucial to its success as a long-term solution to our country's energy needs. We can protect our environment and benefit from this new green energy source if we plan wisely, rather than rushing ahead thoughtlessly.

## SPECIES PROFILE

### The Baltimore Oriole: Treetop Neotrop

**T**he male Baltimore Oriole is an especially striking bird, sporting a vivid plumage of flame-oranges, snowy whites, and deepest blacks. These colors resemble those on the coat-of-arms of Lord Baltimore, from which the bird takes its name. It is the state bird of Maryland, and even has a baseball team named for it (go Baltimore Orioles!).

Each spring, the male's melodious, flutelike whistles proclaim its return to its nesting grounds in the treetops of deciduous woods throughout the eastern and central United States. Their tightly-constructed, purse-like nests, woven primarily by the female from long plant fibers, vine bark, hair, and sometimes yarn, are lined with hair, wool, and fine grasses, and are a common sight throughout the summer as the birds hatch and rear the year's young.

The Baltimore Oriole's diet consists of caterpillars, moths, beetles, ants, and other insects. They will also consume fruits and nectar, and regularly appear at hummingbird and fruit feeders.

This oriole is a true neotropical migrant, making the long and perilous journey each spring from non-breeding grounds in Mexico, and Central and South America to breeding territories in the United States, then back again when the nesting season is over. Human-caused hazards, such as collisions with buildings, towers, cars, and windows, take their toll on this species, along with loss of habitat on their wintering grounds.



Baltimore Oriole: Greg Lavaty

Baltimore Orioles and other “neotrops” actually spend the majority of their lives on their non-breeding territories – their nesting season only spans three to five months – which makes conservation of suitable habitat throughout Latin American especially important for their continued survival.

States can work with programs such as Southern Wings (see article on page 16) to help conserve “their” neotropical bird species during their winter sojourns in Latin America. In Wisconsin, for example, Southern Wings has facilitated the efforts of diverse groups including the Wisconsin Department of Natural Resources (DNR), Neenah Paper, Inc., and

the Natural Resources Foundation of Wisconsin to protect winter habitat for the Baltimore Oriole and other neotrops on the Osa Peninsula of southwestern Costa Rica.

Craig Thompson, a Regional Land Program Supervisor with the Wisconsin DNR, coordinates department involvement in the Osa project under the auspices of Southern Wings. Over the past two years this partnership has generated \$124,000 to support the project.

Craig stated: “Protection of wintering grounds for neotropical migrants is gaining steam nationally, and the seeds of locally driven, internationally supported conservation efforts are germinating throughout Latin America. Each new project site provides an anchor for species drifting toward extinction. That's very good news for our migratory birds, including the Baltimore Oriole.”