BIRDCONSERVATION

The Magazine of American Bird Conservancy

FALL 2017



BIRD'S EYE VIEW

ABC's New President: Putting Hope Into Action

t is an enormous honor for me to take on the role of ABC President following in the footsteps of George Fenwick. As we worked together for more than 20 years, George and I collaborated with

the staff to develop American Bird Conservancy's conservation strategy. It has produced demonstrable results year after year, and I believe ABC is firmly on the right track.

I love birds and birding, and I want my children, and eventually their children, to have the opportunity to enjoy birds as I have. I also believe that birds and nature have inherent value regardless of human appreciation. We have a responsibility to conserve them. Every time I step into the field I realize there is still time to conserve the birds and habitats we see around us. Threats are real, but if we all put our hope for birds together into action, it will become an important force for good in the struggle to safeguard Earth's environment for the future.

I am pleased to tell you that ABC plans to stay the course on our key goals of preventing species extinctions, conserving bird habitats, and eliminating threats to birds throughout the Americas. In particular, ABC wants to ensure that the most endangered bird species are adequately included in effective protected areas. More than 50 of the most endangered species still have less than 10 percent of their global ranges within official reserves. We are committed to improving this coverage.

The phenomenon of mass bird migration is also at stake, and habitat changes on both breeding and wintering grounds are compromising its integrity and diversity. Grassland birds, long-distance migrants, aerial insectivores, shorebirds, and southwest desert

species are among the most heavily impacted. ABC will work with partners through BirdScapes and other conservation tools to ensure that these birds and their habitats are adequately conserved. And we will

> remain at the forefront to find both political and technological solutions to the main threats to birds.

We will continue to conduct our work with authenticity, transparency, and dignity; we will approach our partners thoughtfully and with respect, even if we disagree. We will also continue to foster an environment that encourages innovation and the exploration of new techniques and ideas to advance bird conservation. We also want to build on our strong partnerships with everyone who cares about birds.

ABC's mission is my personal mission. I believe that my years of experience with the organization have prepared me to build on ABC's many accomplishments, made possible by George and Rita Fenwick. We will remain

courageous and visionary, and we will continue to be an organization that you can count on for effective, creative, and lasting conservation results.

Thank you for supporting and partnering with ABC to help get results for birds and their habitats. We can't do this without you.



Michael J. Parr, President

American Bird Conservancy



A copy of the current financial statement and registration filed by the organization may be obtained by contacting: ABC, P.O. Box 249, The Plains, VA 20198. 540-253-5780, or by contacting the following state agencies:

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West Virginia: Secretary of State, State Capitol, Charleston, WV 25305.

Registration does not imply endorsement, approval, or recommendation by any state.

Bird Conservation is the magazine of ABC and is published four times yearly for members

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Common Black Hawk by Alfred Yan

TOP: São Paulo Marsh Antwren (female) by Elvis Japão



ABC plans to stay the course on our key goals of preventing species extinctions, conserving bird habitats, and eliminating threats to birds throughout the Americas.



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ON the WIRE



Bird Conservation Groups Halt Wind Project

ABC and Black Swamp Bird Observatory (BSBO) have won a hard-fought campaign to stop a planned wind turbine in a major bird migration corridor close to the shores of Lake Erie. In response to a lawsuit by ABC and BSBO, the Ohio Air National Guard announced in June that it has not approved or authorized plans to install a large turbine at its Camp Perry facility in Ottawa County, Ohio, and that it has no plans to do so. As a result, ABC and BSBO filed a motion in U.S. District Court to dismiss the lawsuit.

The Camp Perry site would have been the first wind energy development on public land in this ecologically sensitive area. Located less than a mile from Lake Erie, this turbine would have been extremely dangerous for migrating songbirds, including the federally endangered Kirtland's Warbler. Other birds likely to be harmed by such projects include Bald Eagles and other raptors, and waterfowl.

The victory sets an important precedent because of the many other wind energy projects being planned around the Great Lakes, which could threaten millions of migratory birds and bats. The U.S. Fish and Wildlife Service (USFWS) has recommended that no turbines be built within 3 miles of the Great Lakes shoreline. Based on USFWS's advanced radar studies showing vast numbers of birds and bats migrating through this area and flying within the rotor-swept area of wind turbines, ABC recently suggested that this setback be expanded to at least 5 miles.

ABC's work on this program is made possible by the Leon Levy Foundation.

Conservation Groups to Sue Over Seabird Deaths in Hawai'i

everal conservation organizations on Maui U have announced plans to sue the Hawai'i Department of Transportation (DOT) under the federal Endangered Species Act (ESA) for failing to regulate bright lighting at state-operated airports and harbors on Maui, Lanai, and Kaua'i. The Center for Biological Diversity, Conservation Council for Hawai'i, and Hui Ho'omalu i Ka 'Aina (Partners to Protect the Earth), represented by Earthjustice, sent the DOT a notice of intent to sue in mid-June.

These lights have led to collision injuries and deaths of Newell's Shearwaters, Hawaiian Petrels, and Band-rumped Storm-Petrels — all threatened or endangered seabirds. Since the 1990s, collisions caused by lights have contributed to population declines on Kaua'i among Newell's Shearwaters and Hawaiian Petrels by 94 percent and 78 percent, respectively.

The groups claim the DOT has failed to protect these seabirds from harmful operations at its facilities, a violation of the ESA. They are asking the department to comply with its obligations under the ESA by securing incidental "take" permits for its facilities on all three islands. They also ask the agency to resume its discussions with federal and state wildlife agencies about its participation in an island-wide habitat conservation plan to minimize and mitigate harm to the seabirds on Kaua'i.

"We have solutions to this issue, which affects night-flying seabirds around the world," said Hannah Nevins, ABC's Seabird Program Director. "The good news is there are ways we can mitigate the impact of these lights on seabirds. We can reduce their exposure to upward, radiating light by installing downward-facing fixtures and shielding lightbulbs. And we can minimize the use of lights when they're not needed, and reduce the number of lights that shine into coastal waters."



Newell's Shearwater killed in a collision. Photo by Brenda Zaun, USFWS

Technology Unlocks Migration Mysteries of Texas Shorebirds

B ird-tracking technologies are improving each year, helping scientists and engineers solve the mysteries of bird migration. David Newstead, the Director of Bird Conservation at the Coastal Bend Bays & Estuaries Program in Corpus Christi, Texas, has been using this new technology to track two bird species of conservation concern: Long-billed Curlew and Black Skimmer.

The Long-billed Curlew study, a part of the Smithsonian Migratory Bird Center's Migratory Connectivity Project, concentrates on the distribution, dispersal, and migratory connectivity of curlew populations that winter along the Texas coast. Previous studies had concentrated on western populations of the species. The research partnership between Smithsonian and Newstead aims to fill in data gaps on other populations of this wide-ranging shorebird and is supported by the ConocoPhillips Global Signature Program.

As part of this project, Newstead tagged nine curlews wintering along the Texas coast in 2014. The curlews were fitted with lightweight, solar-powered satellite transmitters. These 9.5-gram tags, attached with teflon ribbon, last for many years, but don't appear to hurt birds' ability to fly or breed successfully.

The tags periodically transmitted data via the Argos satellite system as the birds moved about. The data showed that although the tagged birds from the same general wintering area dispersed widely during the breeding season — from South Dakota to Nebraska and on to Saskatchewan — they showed strong winter site fidelity. Year after year they returned in winter to the same habitats in Texas.

"This project has raised greater awareness in the community, since we can now show people on maps where the birds are going," Newstead said. "There is a great deal of insight to be had from a much deeper analysis of the data, and our goal is to synthesize it in coming years."

Black Skimmers have been of particular concern along the Texas coast and elsewhere in the U.S. The bird's population continues to decline, with little data to explain why. Newstead is working on another project, funded by the U.S. Fish & Wildlife Service's Coastal Program and ConocoPhillips Global Signature Program, to find answers. He initially outfitted 10 Black Skimmers with 5-gram satellite tags to track their movements.



Tagging a Long-billed Curlew. Photo by David Newstead

Although the project is still in its first year, it has already yielded interesting data: One bird tagged in Texas headed south through Mexico and across the Isthmus of Tehuantepec to Nicaragua — and is still there as of this writing.

The new insights from these technologies have yielded considerable advances in conservation, Newstead said. "By identifying previously unknown regions of importance and highlighting the many challenges birds are facing, this new data can help conservation organizations and agencies make the best use of fieldwork and funding."

Learn more about the Migratory Connectivity Project, read about the latest tagging technologies, and check out the most recent Long-billed Curlew movements at **migratoryconnectivityproject.org**

Learn more about the Coastal Bend Bays & Estuaries Program at **cbbep**. **org/coastal-waterbirds**

Legislative Measures Introduced to Help Birds

In spite of many legislative attacks on wildlife, some members of Congress have introduced bills in recent months that aim to help birds.

Boost Funding for Migratory Birds

Sen. Ben Cardin (D-MD) and Sen. Rob Portman (R-OH) have introduced a bipartisan bill, S. 1537, to reauthorize the Neotropical Migratory Bird Conservation Act (NMBCA), one of the nation's most important bird conservation laws. Now called the Migratory Birds of the Americas Conservation Act, the bill would provide greater funding to conserve declining species such as Red Knot and Wood Thrush. Rep. Robert Wittman (R-VA) and Rep. Ron Kind (D-WI) have introduced H.R. 3598, companion legislation in the House of Representatives.

The NMBCA encourages habitat protection, education, research, and monitoring to provide longterm protection of neotropical migratory birds, which breed in Canada or the United States and winter in Latin America. Since 2002, NMBCA has supported conservation projects in 36 countries.

TAKE ACTION: Visit abcbirds.org/action/ petition-migratory-birds

Protect Pollinators from Neonics

Pollinators stand to benefit from a bill introduced by Rep. John Conyers Jr. (D-MI) and Rep. Earl Blumenauer (D-OR). The Saving America's Pollinators Act of 2017 directs the Environmental Protection Agency (EPA) to suspend registration of a toxic group of pesticides called neonicotinoids. Now the most commonly used insecticides on the planet, these chemicals are deadly to organisms that we rely on for pollinating crops and controlling pests. ABC research has found that one seed coated with these insecticides is enough to kill a songbird.

A coalition of diverse groups — including ABC, beekeepers, scientists, and business leaders — has asked the EPA to suspend the four most toxic neonicotinoids until a comprehensive study of their effects on wildlife and people is completed.

TAKE ACTION: Visit abcbirds.org/action/ petition-neonics

Make Federal Buildings Bird-Friendly

Rep. Mike Quigley (D-IL) and Rep. Morgan Griffith (R-VA) have introduced a bill that would address one of the greatest human-caused threats to birds: building collisions, which kill up to a billion birds annually in the United States. The bipartisan Federal Bird-Safe Buildings Act calls for federal buildings to incorporate bird-safe building materials and design features. Many bird-friendly design techniques — such as installing screens or grilles on windows and minimizing the use of glass on lower floors — are already used in some federal buildings to control heat and light or security. The proposed bill would require the General Services Administration to apply similar measures, where practicable, to all new and existing federal buildings.

TAKE ACTION: Visit abcbirds.org/action/ petition-bird-safe-buildings



Reserve Established for Brazil's Cherry-throated Tanager

mportant habitat for the rare Cherry-throated Tanager will now be protected thanks to a new, 4,171-acre refuge in Brazil's Atlantic Forest. The tanager, which may number as few as 30 individuals, is a candidate for designation as an Alliance for Zero Extinction (AZE) species because it is critically endangered and is restricted to one site.

The reserve, which was finalized in June, is the second-largest private protected area in the state of Espírito Santo. It shelters more than 250 bird species in addition to the Cherry-throated Tanager. Five other globally threatened birds also occur in the surrounding region: White-necked Hawk, Brown-backed Parrotlet, Goldentailed Parrotlet, Vinaceous Amazon Parrot, and Bare-throated Bellbird. Threatened mammals, including the endangered buffy-headed marmoset and brown-throated sloth, could gain habitat as well.



Cherry-throated Tanager by Ciro Albano

Researchers Locate Ringed Storm-Petrel Nesting Sites

fter years of searching, an expedition by members of the Chilean Bird Observers Network (Red de Observadores de Aves de Chile) discovered the firstever recorded nesting colony of Ringed Storm-Petrel in the desolate Atacama Desert of Chile. The nests, located in natural cavities in the desert's rocks and salt pans, were found 70 miles from the Humboldt Current off the Pacific coast, where the birds feed and spend most of their time.

This tiny seabird comes to land only to breed and nest. To avoid rodents, snakes, and other predators, they choose isolated, difficult-to-access spots such as the Atacama Desert, which provide safe places to leave chicks while the parent birds commute back to the sea to feed. Markham's Storm-Petrels, which have a similar nesting strategy, were found nesting in the Atacama in 2013.

Chilean scientists say this discovery is critical to estimating the stability and size of the Ringed Storm-Petrel population, and to determining the threats posed by mining and proposed wind farms in the region. Lights from mining facilities attract and disorient storm-petrels, especially juveniles, on their first flight to the sea; wind turbine blades rotate too quickly for storm-petrels to avoid. The conservation organization SAVE Brasil (Society for the Conservation of Birds in Brazil) worked with Grupo Águia Branca, one of Brazil's largest transportation and logistics companies, to create the new reserve. At the same time, SAVE Brasil has also been working with the state government to create a 10,625-acre wildlife refuge adjacent to the new private reserve. Last year, ABC helped SAVE Brasil seek public comments on the proposed public refuge.

"We hope that creation of the reserve will accelerate the process of establishing the wildlife refuge," said Daniel Lebbin, ABC's Vice President of International Programs. "With a total of nearly 15,000 acres, these two protected areas would contribute much-needed hope for the tanager's survival."

The Chilean government, which hopes to obtain 70 percent of its energy from renewable sources by 2050, views the Atacama as a good location for solar and wind facilities. A 56-turbine installation was recently built in the region.



Ringed Storm-Petrel in hand by Felipe de Groote

BIRDS in BRIEF

Táchira Antpitta Rediscovered

An international team of researchers has rediscovered the Táchira Antpitta, a bird not seen since it was first recorded in the 1950s, in El Tamá National Park in western Venezuela. The International Union for Conservation of Nature (IUCN) lists the species as critically endangered, and many had feared it was lost for good.



honathan Miranda

On the first day searching the rugged terrain of El Tamá, researchers, led by Jhonathan Miranda, detected a distinctive antpitta song they had not heard before. Over the next week, the team was able to confirm the mysterious song as that of the long-lost Táchira Antpitta, obtaining the first photographs and sound recordings ever made of the living bird.

"The rediscovery provides hope and inspiration that we still have a chance to conserve this species," said Daniel Lebbin, ABC's Vice President of International Programs. "We hope this rediscovery will lead to improved management of and attention to protected areas like El Tamá National Park." ABC provided financial support to this expedition through a William Belton Conservation Fund grant, as part of our ongoing Search for Lost Birds.

Learn more about the Search for Lost Birds: lostbirds.org

New Organization Established to Protect Chilean Woodstar

Karolina Araya, a veterinarian from the town of Arica in northern Chile, has created an organization to help rescue the critically endangered Chilean Woodstar. This tiny hummingbird is restricted to just a few river valleys in the northernmost reaches of Chile. Araya named her organization Picaflor de Arica, which means "hummingbird of Arica" and is the local Spanish name for the bird.

Most of the Chilean Woodstar's natural habitat has been converted or heavily degraded for agriculture and settlement. It is being outcompeted by the closely related Peruvian Sheartail, a larger, generalist bird that has expanded its range from Peru and now outnumbers the woodstar. Chilean Woodstar numbers have declined by more than 80 percent, from at least 1,500 birds in 2003 to approximately 400 birds today.

Araya hopes to work with local communities on education and habitat restoration, as well as



promote the organization nationally to raise awareness of the species' plight. ABC is providing training and financial assistance to help Araya establish her organization and accomplish these goals with support from our Latin American Reserve Stewardship Initiative with the March Conservation Fund.

The project's next step is to develop plant nurseries and stock them with dry valley plants native to northern Chile — especially flowering plants the Chilean Woodstar favors for nectar. Once the nursery is established, the organization will work with local people and landowners to begin replanting private land to provide more food resources and habitat for the Chilean Woodstar.



Connecticut Warbler's Marathon Migrations Revealed

A recent study published in the journal *Ecology* shows that the Connecticut Warbler, a secretive, declining species, makes a marathon migration from the bogs of boreal North America to the Amazon basin each year, similar to the long-distance migration of the Blackpoll Warbler.

Researchers from the University of Manitoba put tracking tags on the backs of 29 birds, then analyzed the data from the tags when they recaptured some of the same birds the following year. They found that the tagged birds traveled from their breeding grounds in Manitoba to the Mid-Atlantic region of the United States, then departed on a 48-hour, nonstop flight over the ocean to the Greater Antilles. The birds rested there for a few days before tackling the last leg of their journey: a 370- to 500mile flight to the South American mainland and forests of the Amazon basin.

Emily McKinnon, the lead researcher in this study, hopes the data will help reveal reasons for the species' rapid decline. The study is ongoing, and aims to pinpoint sites in the Caribbean where the Connecticut Warbler may be losing valuable stopover habitat.

Interior Directive Could Revive Threats to Greater Sage-Grouse

The U.S. Department of the Interior has ordered revisions of the federal government's Greater Sage-Grouse conservation plans, opening the door to expanded development across the American West.

At ABC, we believe that any weakening of the conservation standards laid out in the original plans, which were finalized in 2015 after five years of collaboration among



stakeholders across the West, would likely result in further losses to a species on the brink of becoming endangered.

Conservation Grant Will Benefit Red-crowned Parrot

The U.S. Fish and Wildlife Service (USFWS) has awarded a grant to the Rio Grande Joint Venture (RGJV) and ABC to develop a monitoring and conservation plan for the Red-crowned Parrot in Tamaulipas, Mexico. The grant is administered cooperatively between the Texas Parks and Wildlife Department and the Endangered Species Program of the USFWS.



The RGJV will work with partner organization Terra Asesoría Ambiental to develop a monitoring and conservation plan for the parrot in the core of its remaining critical habitat in northeastern Mexico — a step toward recovering this rapidly declining species.

Migratory Bird Legislative Briefing a Success

On May 9th, ABC, the Cornell Lab of Ornithology, Ducks Unlimited, and the American Birding Association hosted the inaugural Migratory Bird Legislative briefing and reception on Capitol Hill. Over 150 conservation partners, legislative staffers, and constituents gathered to hear presentations



Steve Holmer, ABC's Vice President of Policy, and Jennifer Cipolletti, Deputy Director of Policy, at the reception on Capitol Hill.

from various conservation groups on important legislation currently under consideration such as the Farm Bill and the NMBCA (Neotropical Migratory Bird Conservation Act).

Senator Sheldon Whitehouse, the keynote speaker, emphasized the importance of continued funding for federal migratory bird legislation, noting the links between birds and healthy economies.

Sharing the Shore Workshop Educates Kids

Where do beach-nesting birds put their nests? Are people, coyotes, and domestic dogs dangerous for the birds? What about plastics and fishing line?

Schoolchildren in New Orleans learned about these questions and more during "Sharing the Shore," a workshop about beach-nesting birds such as Least Terns and Wilson's Plovers.

The program, put on by ABC's Kacy Ray and Melinda Averhart of Audubon Louisiana, was part of a summer camp at Arden Cahill Academy in New Orleans.

Find out more about sharing the shore with Wilson's Plovers and other birds at **HelpGulfBirds.org**

The SKY

New research is shaping what we know about airspace as vital habitat for birds

By Jennifer Howard

ook up. All that empty space over our heads isn't so empty. Many birds, bats, and insects spend a good part of their lives up in the air, foraging, mating, and migrating. Aerial insectivores such as swallows and swifts feed almost exclusively on the wing. It doesn't look like habitat, but

for these animals, the airspace is home. It's where they spend much of their lives. And as researchers are learning, what happens there carries life-or-death consequences. Aeroecology, as it's sometimes called, has come into its own as a field of research. This study of airspace as habitat is enabled by new technologies, by a rapidly expanding understanding of the complex ways animals interact with their environments, and by a growing interest in how human activities affect those environments. And it could have important implications for how conservation groups, including American Bird Conservancy, focus their work in coming years.

Threats in the Airspace

Knowing how birds use the airspace already helps drive

ABC's work to minimize the dangers posed by wind turbines and communications towers. Aeroecology can help researchers and conservationists understand what happens to those birds in the air and how easy or safe it is to move from one location to another, an idea sometimes called "habitat connectivity."

"We spend a lot of time studying birds on the ground, but they have to go from one place on the ground to another place on the ground. And the way they do that is, of course, by flying," says Christine Sheppard, Director of ABC's Glass Collisions Program. "It exposes them to so many threats." Hers is one of several ABC programs that address hazards birds encounter in the airspace, including glass windows, tall buildings, wind turbines, power lines, communications towers, and artificial lighting. The collateral damage of these threats is staggering — and it's growing.

Birds can't see glass unless it it's modified to incorporate specific patterns or designs. Up to a billion birds a year die in the United States when they fly into windows of office buildings and homes. Many fall victim to communications towers and related guywires, which in the U.S. kill an estimated 7 million birds a year. That number should begin



to decline as tower operators switch from steady-burning to blinking lights that are less disorienting for birds — a change in Federal Communications Commission guidelines that ABC was closely involved in bringing about.

Wind turbines kill many species of birds and bats that fly within the rotor-swept area. Others die on the power lines and related infrastructure that carry energy from wind energy facilities to power grids.

"It's tempting to think about habitat as being on the ground or in the water," says Michael Hutchins, Director of ABC's Bird-Smart Wind Energy Campaign. "But for most birds, the sky is key. It's the highway they travel from wintering grounds to breeding grounds, or the place where they find food. It's essential to their survival. And we have to protect it just like we would any other type of habitat."

Forests, Deserts – and Now Airspace

The idea that airspace should be thought of as habitat is relatively new. Many people, including a lot of ecologists and biologists, grew up thinking of habitat as landbased or aquatic environments. Forests, grasslands, and deserts counted. So did lakes, rivers, and marshes. Researchers might study the mechanics of a bird's flight or their nesting ecology, but overlook the conditions and threats that birds encounter on the wing.

In 2013, a research ecologist named Robert H. Diehl published a short but influential paper that helped define aeroecology as a field. Diehl works at the U.S. Geological Survey's Northern Rocky Mountain Science Center, and concentrates on studying migratory birds. Titled "The Airspace Is Habitat," Diehl's paper explains why we should think more broadly about what constitutes habitat, and makes the case that airspace counts.

"The core concept of habitat has remained remarkably unchanged for decades," Diehl writes. But airspace, he argues, fits into classic definitions of habitat as a place where an organism lives or goes to find the resources it needs for survival. This is important, because "recognition of airspace



Birds disoriented by the light beams of the 9/11 memorial. Photo by jnap, Flickr.com

Light pollution from brightly lit office towers or the glow of cities on the horizon can disrupt migratory birds and species active at night.

as habitat has implications for policy, regulation, and species conservation."

Watch the Skies

Andrew Farnsworth is another scientist who has turned his attention to the sky. A Research Associate in Information Science at the Cornell Lab of Ornithology, Farnsworth specializes in migration biology and ecology. His work on migratory birds includes the use of bioacoustics — birds' flight calls and what they tell us, for instance ---and the analysis of large amounts of weather radar data that can pick up where birds are moving, and when. Scientists can now use computers to filter out so-called biological events, like the presence of birds and bats, from weather events, and to analyze shifting patterns of movement over time.

Much of Farnsworth's time goes to studying how artificial light affects birds — one big branch of aeroecology research. Light pollution from brightly lit office towers or the glow of cities on the horizon, illuminated oil rigs, or other human-related sources can disrupt migratory birds or species active at night. Sometimes the results are fatal. It's a global problem: In Lima, Peru, for instance, fledgling **Ringed Storm-Petrels disoriented** by city lights end up grounded on the streets rather than soaring above the open Pacific, where they belong. An ABC-supported project in Lima connects residents who find the seabirds with veterinarians

who rehabilitate them.

In one ground-breaking study, Farnsworth and other researchers analyzed the disruptive effects on birds caused by one famous urban light display: the Tribute in Light display in New York City that commemorates the victims of the 9/11 terrorist attacks. Farnsworth's team used radar and acoustic sensors along with direct observations to determine how those powerful beams of light changed birds' behavior. In a forthcoming journal article, researchers Benjamin Van Doren, Kyle Horton, and Farnsworth explain how they documented "significant behavior alterations": birds aggregated in greater densities, flew more slowly, and vocalized much more frequently when the beams were illuminated. That was true even in good weather, when the birds' visibility wasn't hampered by clouds.

That doesn't mean cities have to go entirely dark to be more bird-friendly. Turning out lights at strategic times, like periods of peak migration, can reduce the disruption. Such tactics can be considered by local governments and even individual building owners looking to reduce the negative effects of light pollution.

How big a problem is artificial lighting? "You can see lights on the horizon from as far as 224 miles," says Travis Longcore, an Assistant Professor of Architecture, Spatial Sciences, and Biological Sciences at the University of Southern California. That's irksome enough for humans. Birds, he says, are even more sensitive to certain parts of the light spectrum than humans are, relying on natural light cycles and sources to trigger certain behaviors, like when it's time to forage or roost.

'The Final Ecological Frontier'

As human-related activity in the airspace has ramped up, so have technologies that allow Farnsworth, Longcore, and other researchers to get a better handle on the effects those activities have on birds. What these scientists are learning about the skies could have major implications for conservation and environmental policy.

Weather radar, critical to Farnsworth's work, has become a robust tool for analyzing the movements and concentrations of birds as they travel on their annual migrations and interact with human-related obstacles, including artificial light and various structures. At the Smithsonian Migratory Bird Center, for instance, Emily Cohen and colleagues have been using radar data to understand how birds migrate across the Gulf of Mexico and trace their specific paths — aerial knowledge that can help drive onthe-ground conservation work.

The work got a big boost in 2004 when the National Oceanic and Atmospheric Administration made its national weather radar data freely available. That gave researchers years' worth of data to analyze. And they had increasingly powerful computer programs with which to analyze it.

"The radar really opens your eyes to what's happening over a really large region," says Jeffrey J. Buler, an Associate Professor of Wildlife Ecology at the University of Delaware, where he runs the Aeroecology Program. Using radar data, he has studied the stopover distributions of migratory birds throughout the Northeast.

"We're starting to comprehend more what the effects of lighting might be on migrating birds," Buler says. In a forthcoming paper, for instance, he and several co-authors share their analysis of multi-year radar data showing how brightly lit urban areas attract greater densities of migrating landbirds. Such information could boost municipal efforts to change cities' lighting policies, like the Lights Out and Dark Skies movements in Toronto, Chicago, and other major cities.

Earlier this year, three Canadian researchers — Christina M. Davy, Adam T. Ford, and Kevin C. Fraser — published a much-discussed





paper in the journal *Conservation Letters* that talked about the implications of this growing body of work. Their paper reviews how much more we know now about airspace and the human-caused threats that make this vital habitat such an obstacle course for birds. Airspace, the authors suggest, could be "the final ecological frontier."

Understanding threats to birds in the airspace is an essential complement to what scientists already know about birds on their breeding, feeding, and wintering grounds, says ABC's Sheppard. And it's crucial in ensuring a sustainable future for birds, she adds.

"We can't just look at where the bird is sitting now," Sheppard says. "We have to look at where it's going next and how it's going to get there."

Both ABC's Glass Collisions and Bird-Smart Wind Energy Campaigns are made possible through the generous support of the Leon Levy Foundation.

Jennifer Howard is Director of Public Relations at ABC. She was a writer and reporter with The Chronicle of Higher Education for 10 years and before that was a contributing editor and columnist with The Washington Post. Follow Jen on Twitter at @JenHoward.

Small Bird, BIGCITY

Can urban conservation save a critically endangered bird?

By Daniel Lebbin

São Paulo sprawls across the coastal plateau of southeastern Brazil like several large U.S. cities mashed together. More than 20 million people live in the greater metropolitan area known as Grande São Paulo. As my plane descended toward the capital on a visit to Brazil earlier this year, the city spread out before me, perfectly lit by the morning sun. I saw a carpet of concrete skyscrapers stretching mile after mile.

FOP: São Paulo Marsh Antwren by Elvis Japão

t's hardly a landscape where scientists would expect to discover a new bird species. But in 2004, that's exactly what happened. Dante Buzzetti, a Brazilian ornithologist, identified a small, secretive bird in a marshy area about 30 miles from the city center. Now the race is on to protect the remaining habitat for the São Paulo Marsh Antwren, a critically endangered species that lives in the shadow of South America's largest metropolis.

After Buzzetti discovered the São Paulo Marsh Antwren, he and other researchers looked for the dark, long-tailed bird among many marshes east of the city. São Paulo sits on a plateau, with the mountains of Serra da Cantareira to the north and the Atlantic Ocean to the south. Eventually Buzzetti and the researchers found the species present at more than a dozen sites in the headwaters of two rivers. They estimated the total antwren population at 250 to 300 individuals.

Additional research later estimated that the species occupied a total Antwrea area of just 350 acres. The bird had likely lost more than 74,000 acres of its historic habitat in the last 200 years, the research found, a result of sand mining, urban ne development, fish farms, drainage for agriculture and pastures, invasive plants, and flooding from dams.

It is unclear exactly how extensive the São Paulo Marsh Antwren's range used to be. But over the past century, this city of millions has grown up and now occupies part of the bird's relatively small range. The remaining areas, meanwhile, are vulnerable to development. The few birds that are left need immediate conservation action to survive.

During my visit, I planned to meet with conservationists who want to collaborate with local government officials to protect the antwren's marshy habitat. And I hoped to see this mysterious bird. For hundreds of thousands of years the stealthy antwren had lived quietly in the wetlands. Only recently did we learn of its existence — and its need for help.



Cities and Rare Birds, in Close Proximity

The International Union for the Conservation of Nature (IUCN) added the antwren to its Red List of Threatened Species in late 2016. Researchers had recommended the group consider the species to be critically endangered and noted that no protected areas existed to ensure the species' survival. The scientists urged conservation measures to save the bird and its habitat.

As the São Paulo Marsh Antwren shows, some of the most important areas for rare species are within or near urban areas. The idea of creating a protected area for birds in or near a city might seem unusual. Urban areas strike many people as inhospitable places for birds, harboring such threats as invasive species, dangerous glass windows, or pollution. Typically we instead imagine wilderness and remote reserves, far from people. Yet conservationists are increasingly working to conserve birds within working landscapes like cattle ranches or timber plantations.

As the São Paulo Marsh Antwren shows, some of the most important areas for rare species are within or near urban areas. This may not be a coincidence. Ornithologist Jon Fjeldså has documented a positive relationship between endemic bird areas in the Andes and centers of human civilization.

He hypothesizes that these same areas have been more stable in their climate over long periods of time, providing steady patterns of rainfall. This maintains habitat for endemic bird populations and allows agriculture to flourish for people. As a result, many of the high Andean forests with the most endemic birds are very close to major and ancient cities, like Cusco, Peru (population 435,000) and Cochabamba, Bolivia (population 630,000).

A Conservation Opportunity

When ABC evaluated the update to IUCN's Red List late last year, the São Paulo Marsh Antwren stood out as a conservation opportunity. So in early 2017, I called Pedro Develey, Executive Director of SAVE Brasil, one of our partner organizations. SAVE Brasil is a leading Brazilian bird conservation group, and happens to be headquartered in São Paulo. Coincidentally, Pedro was meeting later that morning with local organizations and government officials from the municipality of Guararema who wanted to create a protected area for the antwren. Without good funding prospects, Pedro was skeptical that there was much SAVE Brasil could do to help.

I encouraged him to find out all he could of the proposal. ABC would be interested in supporting the creation of a new protected area for the antwren, I told him. It would be a start to what would certainly be a broader, long-term effort required for this species to survive.

The local campaign for the antwren, I soon found out, had an important ingredient for success: strong local support for the creation of a protected area. In many efforts to establish new protected areas, garnering the support of local communities can often take time. But enthusiasm was only part of the equation. The municipality also needed funding to conduct a census of the bird's population and other baseline biological studies. The timing was urgent. With financial support from ABC board member David Davidson and his wife, Patricia, ABC soon had a contract signed with SAVE Brasil. Work would begin just two months later.

On the Trail of a Reclusive Bird

I took a redeye flight from Washington, D.C. to São Paulo in March. It was my first trip to this impressive country of warm and friendly people. I looked forward to meeting with some of its passionate conservationists.

The next day, Pedro and I drove out to Guararema along with Bennett Hennessey, who manages many of ABC's projects in Brazil. We crossed São Paulo's concrete expanse and a countryside denuded of most of its original forest. Along the way, after turning off the main highway, we spotted a large raptor atop a snag. We pulled over to get a better look. It was a juvenile Crowned Eagle (sometimes known as Chaco Eagle), another critically endangered species, a life bird for our group and not one any of us had expected to see. This was a good sign: The spot was close to the proposed protected area, so our work might benefit the eagle as well.

We stopped for a family-style lunch in Guararema, where we met the rest of our group. Among them was Ricardo Moscatelli, an environmental consultant and director of the municipality's Secretariat of Environment and Urban Planning, and Marcos Grangeiro, from the conservation organization

> One of the marshes east of São Paulo where the marsh antwren is found. This marsh and the forest behind it are in the area proposed for protection. Photo by Daniel Lebbin

Guaranature. All were enthusiastic about the antwren project. With maps spread out on a table, we reviewed the surrounding area — points where the antwren had been observed and lines indicating where the reserve might be. Then we piled into our cars. Our next stop: a visit to remnant marshes nestled in a matrix of vast eucalyptus plantations, the occasional cattle pasture, and small patches of original forest.

The São Paulo Marsh Antwren typically occurs in pairs or family groups of four. The birds do not fly far and spend most of their time foraging for insects. Pairs travel close together and communicate with infrequent, short, and quiet calls. Both sexes will defend their territory.

At the first marsh we visited, we saw a male skulking; at the next stop, we spotted a pair near a waterfall, in the Woods." popular among locals as a swimming hole. In both Natural urban oases, therefore, are more essential than cases the birds traveled through dense vegetation over ever in improving the quality of life for city dwellers. water, stayed deep in the cover of shadow without Urban parks provide important spaces for recreation, venturing into the open, and vocalized softly. Being so can be crucial in ensuring clean and reliable drinking inconspicuous within a wet habitat that people might water, and can protect steep slopes from erosion and hesitate to wade into, it was not a surprise that they landslides. had remained undetected by scientists for so long.

Watching the antwrens with Ricardo, Pedro, and other local project supporters was a joyful

The city of São Paolo, Brazil. Photo by Filipe Frazao, Shutterstock experience. Sharing the sight of a rare bird at a local patch, as many birders know, can often make friends out of strangers. This gathering was even more special because we not only enjoyed a shared birding experience, but were allies in a pioneering conservation effort.

A Lasting Link with Nature

The campaign to save the antwren's habitat may seem very local, playing out over just a few hundred acres. But there's much more at stake. As people around the world increasingly live and work in cities, we are losing our connection with nature in our daily lives. Children, especially, can suffer from an affliction known as "nature deficit disorder," a term coined by sociologist Richard Louv in his 2005 book "Last Child in the Woods."

Activities are now underway by SAVE Brasil and our other partners to preserve important habitat for the



Urban Conservation: A Snapshot

Here are a few conservation projects in and near urban areas where ABC and our partners are saving birds

Galveston, Texas, USA (population

50,000): This city on Texas' Gulf Coast just 40 miles from Houston, the country's 4th-largest metropolis, puts people in close proximity with beach-nesting birds. ABC works with Houston Audubon to rope off nesting areas for Least Terns, Black Skimmers, and Snowy and Wilson's Plovers to protect them from thousands of beachgoers who otherwise might trample fragile eggs and nestlings. ABC also shares the wonder of these birds with the beachgoers, who might not realize the birds exist, and encourages them to keep their distance from nesting areas.

Bogotá, Colombia (population 8 million): The Bogotá Wetlands were once a vast network of open water, marshes, and savannas



Apolinar's Wren by Greg Homel, Natural Elements Productions

supporting diverse waterbirds. Now, only small fragments remain, including some within view of the international airport. These wetlands are severely threatened by urban encroachment, pollution, feral animals, and nest depredation from Shiny Cowbirds. In the 1970s, the Colombian Grebe, a denizen of these wetlands, disappeared forever. Other endangered species still survive such as Bogotá Rail and Apolinar's Wren. In 2014, ABC supported Fundación Humedales Bogotá to conduct surveys for Apolinar's Wren populations in the city, but found fewer birds than hoped.

Cochabamba, Bolivia (population 630,000): The Tunari Mountains

tower immediately above the relatively flat city of Cochabamba, providing drinking water to residents below. ABC and Asociación Armonía have worked together in these mountains to restore *Polylepis* forests, educate community members about the rare and threatened birds of their region, and reduce the use of pesticides by indigenous farmers living within Tunari National Park to benefit the endangered Cochabamba Mountain-Finch and other endemic birds.

antwren and, in the process, to protect some of São Paulo's few remaining marshes for posterity. Any attempt to create a park or protected area — whether in Brazil or Baltimore — requires community support, scientific research, and formal approval from the local governing body. This effort, fortunately, already has strong support among many residents of Guararema.

Going forward, scientists will conduct baseline studies of the bird, other wildlife, and soil; supporters will determine the boundaries of the area they want the government to protect; and local officials must formally approve the plan. And we are hopeful that a major producer of eucalyptus pulp, Fibria, which owns a large amount of land within the antwren's habitat and has shown interest in the project, will support efforts to conserve important habitat.

The venture is off to a strong start. If we can create the first protected marshes in Guararema, we hope it will serve as a model and inspire the protection of additional marshes that are home to larger populations of the São Paulo Marsh Antwren. Eventually, it might even be possible to restore marshes to increase available habitat. But for now we must start somewhere — and the good political will in Guararema presents a promising opportunity.

In the grand sweep of natural history, the São Paulo Marsh Antwren is a relatively young species. Scientists think it diverged somewhere between 250,000 and 640,000 years ago from its sister species, the Paraná Antwren, another rare bird that occurs in marshes on the other side of the Serra do Mar mountain range. But thanks to the efforts of a few dedicated individuals in one of the world's largest cities, the story of its conservation is just beginning.



Daniel Lebbin is Vice President of International Programs at ABC. A lifelong birder, Daniel enjoys bird illustration and photography. He co-authored The American Bird Conservancy Guide to Bird Conservation.



HELP ABC SAVE the RAREST SPECIES!

In Brazil, the **São Paulo Marsh Antwren** numbers a scant 250 to 300 individuals and clings to existence on just 350 urban acres.

With approximately 400 individuals estimated remaining, the **Chilean Woodstar** is one of the rarest and fastest declining birds in the Americas.

The **Táchira Antipitta** – a species unseen since the mid-1950s – was recently rediscovered by an ABC-supported team of researchers in Venezuela as part of our Lost Birds campaign. But to protect them, and their disappearing habitats, we need to know more about the threats they face, their biological needs, and their populations

Halting the extinction of rare birds like these is a top ABC priority, but we need your help. **Will** you donate today to support our work with partners to protect these birds and dozens more threatened Latin American species?

Your contribution will help ABC's International Program and other efforts to protect rare birds. There is hope we can save them!

Please use the enclosed envelope to make an additional gift, or give online at **abcbirds.org**.

Research Breakthrough for the Bahama Oriole

Bahama Oriole by Rick Stanley

By Cristina Santiestevan

The Bahama Oriole is strikingly colored — and critically endangered. After disappearing from Abaco Island in the 1990s, it survives only on Andros Island in the western Bahamas. Now scientists are trying to learn more about these little-known birds in an effort to save them. Leading the research is Kevin Omland, Professor of Biological Sciences at the University of Maryland, Baltimore County. In this interview he shares some surprising discoveries from his research, supported by ABC and in coordination with the Bahamas National Trust.

Scientists are learning surprising new facts about this rare bird

The Bahama Oriole has the unusual distinction of being designated a species not once, but twice. Can you explain how this happened?

In 1890, the Bahama Oriole was originally described as a distinct species. But during the 1940s and 1950s, people became convinced that the way to define a species should be based only on ability to interbreed. So the thing they created — the Black-cowled Oriole — included the Bahama Oriole, the Cuban Oriole, and several other species. They were just lumping a bunch of very different birds together. Upon closer inspection in the 2000s, scientists realized that these birds are all quite different from each other. Their ranges don't overlap at all and they have distinct DNA and different vocalizations. It's easy to tell their plumage apart, and now we think the ecology of the Bahama Oriole is also unlike those other orioles.

So, for 50 or 60 years, the Bahama Oriole did not exist as a recognized species. Did this have any impact on what we know about the species today?

Yes. Let's say someone is a birder and they go on a trip to Belize. They see a Black-cowled Oriole and they check that name off their list. So, when they get to the Bahamas later, they're focused on seeing



That happened with thousands of species around the planet, and certainly with hundreds of birds.





the Bahama Swallow or the Great Lizard Cuckoo, but they figure they've already seen a Black-cowled Oriole. So maybe they don't make an effort to see it. It was during these years — specifically, in the 1990s — that the Bahama Oriole was extirpated from the island of Abaco. Nobody really knows when the last one was seen, by whom, or where. And I think that would have been pretty different if people

LEFT TO RIGHT: Daniel Stonko, Scott Johnson, and Alexis Scarselletta participating in Bahama



ABOVE: Feral cat on the prowl, captured by a trail cam. LEFT: Kevin Omland in the field. Photos by Daniel Stonko

were traveling to the Bahamas and checking off Bahama Oriole on their life lists.

So we don't know when the Bahama Oriole disappeared from Abaco. Do we know why?

We don't at all. It's a very complex story. There was a lot of logging done on all of these islands. Having those forests destroyed must have been very hard on the species. We now know that domestic feral cats are all over the place on these islands. There was also a disease that affected coconut palms called lethal yellowing disease. And then there was the arrival of the Shiny Cowbird, a "nest parasite" that lays its eggs in the nests of other species. These birds reduce the survival of the other species' nestlings. The bottom line is that there's a silent killer out there. Perhaps logging,

lethal yellowing disease, feral cats, and/or Shiny Cowbirds impacted the birds on Abaco.

Overall, what has surprised you the most in your research on this bird?

Our biggest breakthrough was finding them breeding in the pine forest.

Last year, we hired a local assistant, Lehron Rolle, with funding from ABC. Before I got down there, he wrote to me and said, "I think there's one nesting in a pine tree." I didn't think they would nest in a pine tree at all. But I had him show us the supposed nest, and there it was. Then one of my students, Daniel Stonko, found the birds nesting in thatch palm trees in the understory of the pine forest.

So what we're learning about the Bahama Oriole is really very



our project. It would have been a

mistake to take action based on

what we thought we knew two

Why would it have been

a mistake? Do you have

There were several important

things we had wrong with our

thought Bahama Orioles were

dependent on coconut palms.

understanding of the species. We

People didn't think they used the

There was this huge coconut palm

plantation developed on North

Andros, for instance. The people

who planted the trees were excited

because they were going to create

Bahama Oriole habitat. In order

to do that, they cut down acres

of pine forest — a forest that we thought was not necessary habitat. Now we think there were probably

several orioles that were using

that stretch of forest that was

If people had done that on a large scale we really would have been

completely clearcut.

years ago.

an example?

pine forests at all.

What's next for the Bahama **Oriole?**

We just completed the point counts from this field season, and we are optimistic that they are doing better than previous counts suggested. I would be surprised if there are not at least 600, 800, or even 1,000 individuals, up from the 140 to 260 previously estimated.

But we've only focused on one study site. If for some reason they are doing very well in our study site, but they're not doing well in other places on Andros, then my optimism would need to be tempered some.

With these and other Caribbean species — especially as the climate changes — we need to have



Bahama Oriole nest on Andros. Photo by Kevin

Omland. BELOW: Kevin Omland monitoring orioles. Photo by Daniel Stonko



"What we're learning about the Bahama Oriole is really very different from what we thought was going on at the beginning of our project."

Bahama Oriole by Steven Brezinski

good population estimates and good monitoring in place. That way, when one of them, like the Bahama Oriole, starts to be really affected by more hurricanes, drier conditions, or more fires, we are then able to see those population changes and step in to address these threats.

We're going to need to learn a lot before we can get this species on the right track, and I don't think we know what the main threats are right now. This is really a project that is just beginning. We have learned just enough to know what research we need to do next.

ABC's support of the Bahama Oriole project is made possible through the generosity of David and Patricia Davidson, the Marshall-Reynolds Foundation, Stefan Williams, *Christina Duthie, and ABC's William* Belton Conservation Fund.

Cristina Santiestevan is an independent writer and editor committed to sharing stories about nature and conservation in today's world. She has written about the ecology of gardens, the myriad impacts of climate change and habitat loss, and the surprising conservation value of whale poop. Visit her blog at outlawgarden.com.

CROSS-BORDER

BirdScapes at work in the Rio Grande Joint Venture



By Gemma Radko

The beautiful and diverse birds of the Rio Grande region move freely across the landscape, unaware of the political borders that divide the United States and Mexico. More than 700 species occur in this area, including at least 50 that show some combination of population declines, limited geographic distributions, or distinct threats to habitat. But the riparian forests, brushlands, grasslands, and desert these birds depend on face significant threats along both sides of the Rio Grande.

TOP: The Rio Grande in Big Bend, Texas. Photo by Dmitry Shlepkin, Shutterstock. RIGHT: Cassin's Sparrow by Greg Homel, Natural Elements Productions he Rio Grande Joint Venture (RGJV) — a partnership of conservation organizations that collaborate to protect and restore habitat for birds — is tackling these challenges, working in cooperation with a management board of state, federal, and nongovernmental organizations from two countries. ABC staff lead the RGJV with funding from the U.S. Fish and Wildlife Service.

"Some of the birds in our region are declining dramatically compared to other areas of the country," says Aimee Roberson, the RGJV Coordinator at ABC. "This is primarily due to loss and degradation of their habitats. Our partners are dedicated to working together to overcome these threats across a large, binational landscape."





The RGJV's roughly 63 million acres encompass a variety of priority bird habitats and several BirdScapes as well. BirdScapes are areas that ABC has identified as particularly important for migratory bird conservation. Each BirdScape aims to protect and restore suitable habitat for a suite of migratory and resident birds, often maintaining working lands for the people who live there.

Take a tour of the major habitats and BirdScapes of the Rio Grande on the following pages.



Green Corridors in the Desert

Accounts from the 1800s describe the Chihuahuan Desert as dominated by native grasses and scattered shrubs with riverside forests and desert wetlands called *ciénegas* forming green corridors across the landscape.

Historically, unsustainable range management contributed to the degradation and loss of these grasslands. Now the land is drying out, and shrubs are encroaching. ABC and a variety of partners including the Bird Conservancy of the Rockies and Mexico's Pronatura Noreste — are already succeeding in their efforts to address these problems in the grasslands of two of the region's BirdScapes, Valles Centrales and El Tokio, in Mexico.

Riparian corridors are the focus of conservation work within the 704,000-acre Big Bend BirdScape, in Texas, which includes portions of Big Bend National Park as well as private property. Roberson oversees this BirdScape. She works with partner organizations and agencies to rehabilitate riverside forests along Terlingua Creek and other tributaries of the Rio Grande, where cottonwood and willow forests once teemed with birds and beaver. Focal species of this area include Yellow-billed Cuckoo, Gray Hawk, and Common Black-Hawk.

Unfortunately, many of these forests were cut to provide fuel for nearby mining operations. Invasive plants have also taken over some of the degraded areas.

Roberson collaborates with the Texas Parks and Wildlife Department, National Park Service, and U.S. Fish and Wildlife Service to restore riverside forests by replanting willows, cottonwoods, and other native plants throughout the watershed, including in Big Bend National Park. The organizations also provide technical and financial assistance to



TOP: Gray Hawk by Larry Thompson. ABOVE: Planting willows along Terlingua Creek. Photo by Jeff Bennett, Big Bend National Park

private landowners who are interested in replanting vegetation along the waterways on their own properties. In a state such as Texas where most land is privately held, landowners play a critical role in restoring bird habitat. For example, on the 272,000acre O2 Ranch, which contains the headwaters of Terlingua Creek, owners Lykes Brothers, Inc. is working with the RGJV to restore both grasslands and riparian habitats to benefit wildlife.

"By working with public and private landowners throughout the watershed, we can restore habitat for bird species," Roberson says. "We want to make the creek healthy again to benefit birds and people."



Native Grasslands for Birds and Butterflies

Riparian corridors and grasslands are also important conservation priorities in the Tamaulipan Brushlands, an area spanning the U.S.-Mexico border on either side of the Rio Grande. Here, the landscape is dominated by an abundance of non-native grasslands, remnants of native grasslands, and Tamaulipan thornscrub — vegetation characterized by thorny shrubs and trees, plus grasses and cacti.

These brushlands are home to the South Texas Monarch BirdScape. That's where Jesús Franco, RGJV Assistant Coordinator, is working to establish a program that will restore native grasslands worn down by invasive brush, non-native grasses, unsustainable rangeland management, and the alteration of natural fire patterns. Improving these areas will give a boost to a number of declining birds, including Eastern Meadowlark, Cassin's Sparrow, and Northern Bobwhite. This BirdScape is also a major waystation for migrating Monarch butterflies, providing breeding and stopover habitat.

"The South Texas Monarch BirdScape covers eight counties in south Texas, mostly on private land," Franco says. "We are working with county biologists and other local and regional partners, including the Texas Parks and Wildlife Department, Natural Resources Conservation Service, and the Caesar Kleberg Wildlife Research Institute, to promote native







grassland restoration programs and determine which conservation practices are best for ranchers and grassland-dependent wildlife."

The RGJV recently received a grant from the National Fish and Wildlife Foundation to establish a Grassland Restoration Incentive Program (GRIP) — the same program being implemented by ABC's Jim Giocomo in the Oaks and Prairies Joint Venture in central and northern Texas and Oklahoma. This program encourages private landowners to use grassland management practices to improve habitat for pollinators and grassland birds such as bobwhite.

"We will adapt the GRIP program to local conditions in South Texas," Franco says. "For example, brush management practices here are more effective for grassland restoration than in other regions. Here, land managers favor mechanical or chemical removal of invasive shrubs, rather than, say, prescribed burning, which is widely used elsewhere."

Through the GRIP program, Franco says, conservationists are effectively addressing some of the issues causing the decline of grassland birds and pollinators. "Private landowners love the streamlined technical and financial assistance process. Conservation partners love the additional tool in their conservation tool box. And wildlife that depend on healthy native grasslands sure benefit from the additional usable space," he says. "It's a win-win-win situation."

> TOP: Thornscrub landscape in the South Texas Monarch BirdScape. Photo by Jesús Franco. LEFT: Northern Bobwhite by Tim Zurowski, Shutterstock; Monarch butterfly by David Byron Keener, Shutterstock



Texas Wildlife Refuge at Risk from Border Wall

As we went to press, one of the most important areas within the Rio Grande Joint Venture region was at risk. Plans to build a border wall through the Santa Ana National Wildlife Refuge in Texas had birders and conservationists alike on high alert. Federal officials and private contractors have been surveying portions of the refuge for construction.

Often called the crown jewel of the U.S. National Wildlife Refuge System, Santa Ana protects 2,088 acres of unique habitat along the banks of the Rio Grande. The refuge was created in 1943 to protect migratory birds and remains one of the top birding destinations in the United States. Some 400 bird species can be seen here, including Altamira Oriole, Groove-billed Ani, Green Jay, and many migratory warblers and raptors, along with an abundance of other wildlife.

Please **contact your members of Congress and urge them** to oppose construction in Santa Ana and other lands designated as protected areas for wildlife.

Green Jays by Betty Rizzotti



Shorebirds and More in the Coastal Prairie

The Rio Grande Joint Venture also includes important areas of coastal prairie habitat south of the Rio Grande in Mexico, where future work in the Laguna Madre BirdScape is planned. The Laguna Madre, a long, shallow, saline lagoon that spans the border, is important habitat for both resident and migratory birds.

Conservation in this BirdScape will focus on the protection and restoration of the lagoon's interior islands, plus the riparian corridors and freshwater wetlands that feed into the lagoon. Most of these riparian corridors originate in the Tamaulipan Brushlands.

ABC is already working with partners in Mexico and has identified the priority birds of this area. Reddish Egret, Black Skimmer, and Wilson's Plover are among



the focal birds of the Laguna Madre. An estimated 80 percent of the global population of another focal species, the Redhead, winters here.

A Better Future for Birds

The collaborative efforts of conservation partners within these BirdScapes are helping to achieve the Rio Grande Joint Venture's vision: ecosystems that support thriving and diverse communities of birds, other wildlife, and people across the landscape, across the border, and into the future.

"Jesús and I love our jobs because we work with a diversity of people and organizations in the U.S. and Mexico who are so enthusiastic and absolutely dedicated to conserving birds," Roberson says. "We help people find ways to work better together so that we can accomplish more than any of our organizations could alone, and we have fun doing it."



Gemma Radko is ABC's Communications and Media Manager, with over 25 years of graphic design, writing, and editing experience. Gemma is a member of both the Montgomery and Frederick chapters of the Maryland

Ornithological Society, an avid birder, and teacher of introductory ornithology classes.

FINAL GLIMPSE

Coldest Months Hold Promise for Golden-winged Warblers

By Peter Dieser

hen Golden-winged Warblers leave their breeding grounds in northern Minnesota and head south to winter in Central and South America, I often wish I could join them. But the winter months are when I roll up my sleeves to create habitat for this declining species.

My home base for this work is Tamarac National Wildlife Refuge. I have always been a Minnesota boy, but never lived quite this far north. As ABC's Minnesota Public Lands Coordinator, my job is to utilize our grant from the Minnesota Outdoor Heritage Fund to create a program to enhance habitat in northern Minnesota's public forests for the Goldenwinged Warbler and associated wildlife species.

Golden-winged Warblers nest in patches of young forest or brushy wetland openings within Minnesota's deciduous forests. These openings (often called early successional habitat) historically were created by natural disturbances, including blowdowns and localized wildfires, which aren't as prevalent today. Now we mimic them by managing timber and brush to open up breeding sites that retain a patchy mix of woody vegetation and have mature adjacent forest.

In the summer, I locate potential sites with partner agencies such as the state Department of Natural Resources and the U.S. Fish and Wildlife Service. Because these sites are often located on lowlands, the



soil is often too wet for project work to take place any other time than the winter, when the ground is frozen.

During the summer breeding season, Minnesota's northern forests are home to over 40 percent of the world's Golden-winged Warblers (and almost all of its mosquitoes, or so it seems). That makes it perhaps the most important remaining ecological region for these birds. In fact, northern Minnesota is one of the few places where Golden-winged Warblers have retained a relatively stable population in most areas. This is crucial, especially considering that the species has endured a population decline of 60 to 70 percent across its entire range in the past 50 years and is being considered for listing as a federally endangered species. A dramatic decline in the Minnesota population would put the entire species at risk.

Q.

When I joined ABC in 2013, I didn't know the scope and depth of the work ahead of me, but I did know the ecological and biological significance of the habitat I would help create. And so I dived into the work. I've now traversed northern Minnesota many times over, fighting ticks and mosquitoes in summer and frigid temperatures in winter. In four years, we have successfully completed Goldenwinged Warbler habitat restoration projects in 12 Minnesota counties totaling 2,655 acres.

Now, the warblers are heading south and another winter project season is about to begin. Acre by acre, we continue to work hard with our partners to meet our habitat goals. Robert Frost said it best: "The woods are lovely, dark and deep, but I have promises to keep, and miles to go before I sleep, and miles to go before I sleep."

Peter Dieser, based out of Minnesota, is a Golden-winged Warbler Public Lands Coordinator at ABC. He received an MS in Natural Resources Science and Management from the University of Minnesota; he previously worked as a naturalist at Eagle Bluff Environmental Learning Center.

YOUR LEGACY: a Better future for birds



Britt and I have been long-term supporters of ABC. We have always admired how ABC supports the entire bird conservation community, and their focus on creatively solving the most pressing bird conservation issues. We believe ABC provides the best insurance that birds will continue to bring pleasure to those who value their company.

We were looking for ways to continue to support ABC's programs. What better way to accomplish this than by including ABC in our will? It is a wonderful way for people like us, with a fixed income, to give to an organization that so reliably delivers conservation results for birds. We hope that others will join us in helping support ABC in perpetuity."

Steve and Britt Thal Marin County, California

If you would like more information on how to create your legacy of bird conservation with an estate gift, or if you have already included ABC in your estate plans, please contact Jack Morrison, ABC Planned Giving Director, at **540-253-5780**, or **jmorrison@abcbirds.org**.



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Bahama Oriole by Daniel C. Stonko

