BIRDCONSERVATION

The Magazine of American Bird Conservancy

SPRING 2018

A Landmark Law for Birds, Now in Peril

A century ago, Congress passed a law to protect American birds from threats such as unregulated market hunting and the ornamental feather trade. Known as the Migratory Bird Treaty Act (MBTA), this was one of our earliest environmental laws, and also one of the most successful, since many of the species it was designed to protect quickly began to recover.

As we celebrate the MBTA's centennial and acknowledge its impressive history, this landmark law is in peril.

But as we celebrate the MBTA's centennial and acknowledge its impressive history, this landmark law is in peril. A recent legal opinion from the Department of the Interior interprets the MBTA as applying only to situations when a person or company purposefully harms or kills a migratory bird species.

This new stance reverses a longstanding U.S. Fish and Wildlife Service interpretation that the MBTA covers both deliberate killing and the "incidental take" of birds. The latter focuses on conduct known to kill birds that could be avoided by reasonable precautions. In practice, the agency has been very judicious in its enforcement of the law. Only a handful of companies have ever faced prosecution for failing to adopt best industry standards — and only after multiple warnings from the Service.

Critics of the MBTA's incidental take component say that it could theoretically be applied very widely — for example, to birds killed by cars or windows — making every member of the public potentially a criminal. In reality, though, the Fish and Wildlife Service has never done this: such bird mortality doesn't compare to the impact of leaving industrial oil pits uncovered or placing wind turbines close to eagle concentration areas.

These and many other forms of industrial infrastructure are bird traps, comparable to leaving manholes open along a city sidewalk as pedestrians rush to work. This is clearly willful negligence rather than unfortunate accident. The Service currently provides advice and support to prevent bird mortality prior to a prosecution, but companies now have little incentive to listen to this advice or be innovative in solving bird mortality problems.

The government's new position also stops penalties for even the most catastrophic disasters. If the Deepwater Horizon oil spill were to happen today, under the new interpretation, BP would not be liable for the thousands of birds that perished when more than 200 million gallons of oil spilled into the Gulf of Mexico. That means there would be none of the fines that BP was forced to pay in the aftermath to restore bird habitat — billions of dollars earmarked specifically to help affected species.

This opinion cuts right to the heart of what ABC is trying to do across multiple programs, and will hurt bird conservation significantly. We won't let this stand uncontested. If you are willing to lend your voice, please join us by going to **abcbirds.org/action/petition-mbta** to speak out.

Michael J. Parr, President
American Bird Conservancy

TOP: The MBTA oversees programs that regulate waterfowl hunting and generate millions of dollars for habitat conservation, benefitting species such as Hooded Merganser. Photo by Ray Hennessy, Shutterstock

COVER: Bald Eagle by Abhijay Wilkinson, Shutterstock

AMERICAN BIRD CONSERVANCY

ABC is dedicated to conserving birds and their habitats throughout the Americas. With an emphasis on achieving results and working in partnership, we take on the greatest problems facing birds today, innovating and building on rapid advancements in science to halt extinctions, protect habitats, eliminate threats, and build capacity for bird conservation.

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:

Florida: Division of Consumer Services, toll-free number within the state: 800-435-7352.

Maryland: For the cost of copies and postage: Office of the Secretary of State, Statehouse, Annapolis, MD 21401.

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New York: Office of the Attorney General, Department of Law, Charities Bureau, 120 Broadway, New York, NY 10271.

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BIRDCONSERVATION

Hooded Warbler, one of the bird species of concern in Wisconsin's Driftless Region. Photo @Michael Stubblefield

DEPARTMENTS

TOP: Female Araripe Manakin on nest. Photo by Ciro Albano

Millions of Albatrosses Now Lead-free on Midway

Midway Atoll, in the Northwestern Hawaiian Islands, provides essential habitat for millions of seabirds such as tropicbirds, terns, and petrels. The atoll's three islands are also home to the world's largest nesting population of Laysan Albatross, one of three albatross species that nest on Midway. (The others are Black-footed Albatross and, very occasionally, Short-tailed Albatross, a species listed as endangered in the United States.)

Laysan Albatross tending chick. Photo by Cameron Rutt

By the end of 2017 the lead cleanup was complete. This is a huge conservation win, and the USFWS and others involved should be proud of this work.

Midway is managed by the U.S. Fish and Wildlife Service (USFWS) as the Midway Atoll National Wildlife Refuge (NWR). The refuge is part of the Papahānaumokuākea Marine National Monument, among the largest marine conservation areas in the world.

The atoll served as an important air and submarine base during World War II and was the site of the Battle of Midway in 1942, a critical turning point in the war. The U.S. Navy later handed the Midway Islands over to the Department of the Interior for management. Most service personnel had left the atoll by the 1980s, leaving it to scientists and the resident birds.

The property transfer included 135 buildings, many covered with lead-based paint. Over the years, much of that paint chipped off, with paint chips sometimes picked up and eaten by young albatrosses around their nests. Chicks that accumulated toxic levels of lead in their systems experienced "droop-wing," a condition that made flight impossible and doomed tens of thousands of young birds to premature deaths.

ABC's Oceans & Islands Program Director, Brad Keitt, visited Midway in 2000 as a field assistant for his wife's dissertation research on contaminant impacts in seabirds. "Seeing these majestic birds with their wings dragging along the ground, knowing they would never survive, was devastating," said Keitt. Luckily, Keitt's wife, Myra Finkelstein, had the tools needed to sample blood from these chicks and prove definitively that lead paint was the culprit. Later, as a postdoctoral researcher funded by the Switzer Foundation, Finkelstein worked with ABC to raise awareness of the impact of lead poisoning on Laysan Albatross and search for funding to clean up lead paint.

Building on ABC's efforts, in 2004, with the help of California Audubon and the Center for Biological Diversity, the USFWS secured funding for the cleanup. As of 2016, more than 20,000 cubic yards of lead-contaminated soil had been treated and disposed of. By the end of 2017, the cleanup was complete.

"This is a huge conservation win, and the USFWS and others involved should be proud of this work," Keitt said.

Meanwhile, the last of this year's newly hatched Laysan Albatross chicks will be flying out to sea by August. And for the first time in more than 50 years, none will be left behind on Midway because of lead poisoning.

Southern Wings Investment in ABC Projects Hits $1 Million

ABC recently reached an important milestone in our efforts to promote full life-cycle bird conservation: as of 2017, we have invested $1 million in conservation projects for neotropical migrants throughout Latin America, thanks to the support of the Association of Fish and Wildlife Agencies' Southern Wings program.

Southern Wings began in 2009 as a way to help state wildlife agencies partner with organizations like ABC to invest in conservation projects for shared priority bird species in Mexico, Latin America, and the Caribbean. By focusing on migration stopover sites and wintering grounds, Southern Wings projects complement states' investment in bird breeding habitats within their own borders. They also leverage limited state funds with matching grants and in-kind contributions from ABC and our partners in these countries.

"This is an extremely effective program," said ABC President Mike Parr. "We hope even more states will contribute to migratory bird conservation through Southern Wings."

Here are some of the ABC projects funded through Southern Wings since 2009:

Migratory Bird Habitat in Saltillo, Mexico: ABC works with on-the-ground partner Pronatura Noreste to protect and restore key grassland remnants and implement conservation-friendly grazing regimes in the El Tokio Grassland Priority Conservation Area. This project aims to maximize the amount of habitat for grassland birds such as Sprague's Pipit and Mountain Plover and increase the Great Plains population of Long-billed Curlew.

Golden-winged Warbler Conservation, Nicaragua: ABC and in-country partners have been working with local landowners to reduce the rate of forest loss at multiple locations to benefit overwintering Wood Thrush, Golden-winged Warbler, and other species.

To date, more than 200,000 trees have been planted on 140 coffee-growing properties to create a more bird-friendly production environment. In addition, landowners have voluntarily enrolled more than 1,900 acres of private reserves in the country's system of protected areas.

Caribbean Coast, Guatemala: ABC and partner FUNDAECO have created or expanded five protected areas totaling 8,549 acres for migrating and wintering species such as Worm-eating, Kentucky, and Cerulean warblers. Southern Wings' funding also supports reserve management and species monitoring.

Laguna Madre, Mexico: Southern Wings funding helped ABC and partner Pronatura Noreste replant 62 acres of vital mangrove habitat at this stopover and wintering site for priority shorebird and waterbird species, such as Reddish Egret and Snowy Plover.

ABC is grateful to the following states for their support through the Southern Wings program: Arkansas, Indiana, Iowa, Kansas, Missouri, Nebraska, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas, and Wisconsin.

The Tapon Creek Reserve on the Caribbean coast of Guatemala, created by partner FUNDAECO with Southern Wings funding, shelters dozens of wintering migrants such as Black-and-white, Chestnut-sided, and Hooded warblers, Wood Thrush, and Gray-cheeked Thrush (right). Photo by Jason Berry

Northwestern University Makes Windows Safe for Birds

Working with the local community and experts from ABC, Northwestern University is now using state-of-the-art solutions to keep birds from dying in collisions with glass walls and windows. The measures put Northwestern in the vanguard of a growing movement among U.S. colleges and universities to implement practical, effective, and cost-efficient strategies to reduce bird strikes, which kill up to 1 billion birds a year in the U.S. alone.

The solutions Northwestern has adopted include applying patterned window film to problematic existing windows and choosing glass with patterns visible to birds in some new construction projects. The university's location on the shore of Lake Michigan makes this work especially important. Millions of migrating birds pass along the lakeshore and through the greater Chicago area every spring and fall. Northwestern's campus sits squarely in the corridor where birds want to move and rest during their migration.

The local bird-monitoring community had been concerned about glass buildings on the Northwestern campus for decades. The newest glass building, the Kellogg Global Hub, home to the University's Kellogg School of Management, opened in March 2017. Its sleek, glass-rich design reflects sky, trees and bushes, and the lake — creating a hazard for birds that can't see the hard surfaces lurking behind the reflections.

Window solutions being put in place at Northwestern University. Photo by Allison Sloane

Pesticide Legislation Threatens Endangered Birds

Toxic pesticides are a major threat to endangered species, from California Condors to Whooping Cranes. Just last year, scientists from the U.S. Environmental Protection Agency (EPA) concluded that the insecticide chlorpyrifos harms 97 percent of endangered wildlife and causes learning disabilities and neurological problems in children.

However, in early 2017, the EPA reversed a proposed ban on chlorpyrifos recommended by agency scientists. Now lobbyists for the pesticide industry are promoting draft legislation that would gut provisions of the Endangered Species Act (ESA) that require federal agencies to consult with the USFWS and the National Marine Fisheries Service to ensure that federal actions do not jeopardize endangered species or critical habitats. The proposal would eliminate a requirement that agencies take reasonable steps to minimize harm to endangered wildlife; it would also protect agencies from liability if their actions cause harm.

The legislation could set back the recovery of hundreds of listed species and potentially cause the extinction of endangered birds, butterflies, and other wildlife.

Ask your members of Congress to oppose any bills to weaken ESA protections for species harmed by pesticides: **abcbirds.org/action/petition-esa-pesticides/**

Neonicotinoids — another type of pesticide widely used on farms, lawns, and gardens — are increasingly found in rivers across the Great Lakes region, according to a recent study in the journal *Environmental Pollution*. The study found the highest concentrations of neonicotinoids, or "neonics," in the rivers tested during the spring and summer months, when farmers and homeowners typically use large amounts of these insecticides.

Find out more about neonics, including how you can help: **abcbirds.org/neonics**

Website Helps Prevent Communications Tower Collisions

Roughly 6.8 million birds die each year from collisions with thousands of broadcast and cell towers across North America. These birds, primarily night-flying migrants such as warblers, thrushes, flycatchers, and cuckoos, are attracted to and disoriented by steady-burning lights on towers, especially when night skies are overcast or foggy.

Building on the hard work of Joelle Gehring, staff biologist at the Federal Communications Commission, a new website, Songbird Saver, makes it easier to prevent these fatal collisions. Website users can enter their ZIP code or use a map to find towers near them, then send a letter to the tower's operators requesting that they turn off or replace steady-burning lights with strobes, which are less hazardous to birds. The site can help pinpoint towers of special concern, such as those along critical flyways, near Important Bird Areas, or along specific migration routes.

Visitors to the site can also join or start a Songbird Saver Team, which focuses attention on towers in major migratory flyways within the United States and its territories.

Replacing steady lights can reduce bird mortality at towers by about 70 percent. Hundreds of tall towers across the U.S. have already updated lighting: since May 2017, approximately 9 percent of tall towers (over 350 feet) have turned off their steady-burning lights.

"We are seeing great progress and thank the operators of the thousands of towers that have already updated their lighting to help reduce mortality of birds," said Christine Sheppard, ABC's Bird Collisions Campaign Director. "But there are still tens of thousands of tall towers across the U.S. with outdated, steady-burning lights. We are asking all tower operators to make this cost- and life-saving switch to help save migratory birds."

Visit the Songbird Saver website and download the app: **songbirdsaver.org**

New Land Protection Pays Off for Araripe Manakin

ABC and Brazilian partner Aquasis are celebrating two conservation milestones benefiting the critically endangered Araripe Manakin.

In March, the State Government of Ceará announced a new wildlife refuge for the manakin covering 12,610 acres and increasing the percentage of protected habitat for the manakin from 2 percent to 34 percent. This is thanks to the advocacy of Weber Silva of Aquasis, who discovered the Araripe Manakin in the 1990s.

Seven new Araripe Manakin nests were found during the 2017-2018 breeding season at Araripe Oasis Reserve on lands purchased by ABC and Aquasis in 2017. This purchase doubled the size of the reserve to more than 310 acres and connected it to the much larger Araripe National Forest.

A well-hidden Araripe Manakin nest and eggs. Photo by Fabio Arruda

"I'm quite sure there were more nests" in addition to those found, said George Barbosa, the manager at Oasis Araripe Reserve who conducted the exploration for nests. "Nest searching is difficult, and some parts of breeding areas are not accessible."

The newer forest property includes springs and streams — essential elements for Araripe Manakin nesting success, since female manakins prefer to nest in low shrubs, near or even hanging over water.

"Araripe Manakin conservation will require widespread conservation efforts throughout the species' range, mostly on private land, but also intelligent forest protection and management on their reserve," said Bennett Hennessey, ABC's Brazil Conservation Program Coordinator. "The confirmation of seven Araripe Manakin nests in Oasis Araripe Reserve is a fantastic start to the development of a protected habitat ideal for the full life-cycle of this species."

In addition to its ongoing field research to monitor Araripe Manakin recovery, Aquasis conducts conservation activities to benefit local communities as well as birds, such as water-protection projects and reforestation.

A Race Against Time for Birds

It's a race against the clock. Time is running out for many bird species, and they need your help!

Birds face severe threats: Of the 4,400 known species in the Americas, one in 10 are already threatened with extinction.

Safeguarding the rarest species has been a cornerstone of ABC's work since our inception, and right now we have a terrific opportunity to pick up the pace. This spring, several ABC board members and other supporters have teamed up to offer $250,000 in 1:1 matching funds to help ABC advance our work to protect birds, including the most threatened species throughout the hemisphere. Can you please help towards our goal so we can turn this into $500,000 for bird conservation?

There are glimmers of hope for the future. Consider the Lear's Macaw — only a few dozen existed in the late 1980s, but thanks to your help, ABC and our partners worked to protect nesting colonies, restore habitat, and curb illegal capture for the pet trade. Today the Lear's Macaw numbers more than 1,300 individuals!

Photo credits, clockwise from top: Long-whiskered Owlet by Dubi Shapiro; Araripe Manakin by Ciro Albano; Canada Warbler by Frode Jacobsen; Piping Plover chick by Betty Rizzotti; Greater Sage-Grouse by Tom Reichner, Shutterstock; Newell's Shearwater (A'o) by Jim Denny, kauaibirds.com; Whooping Cranes by Richard Seeley, Shutterstock; 'Akeke'e by Robby Kohley

Your gift will bolster our efforts to:

- Establish and expand reserves for the rarest species
- Restore key habitat
- Undertake daring translocations
- Fight for the Endangered Species Act
- Reduce collisions
- Control harmful invasive species
- Build local community engagement
- Promote sustainability

With your help, we can: start new projects for birds that do not receive enough attention, including the Cherry-throated Tanager and São Paulo Marsh Antwren in Brazil, and the Tolima Dove in Colombia; manage habitats for declining birds such as the Southwestern Willow Flycatcher, Long-billed Curlew, and Golden-winged Warbler; tackle the deadliest threats, including free-roaming cats, and collisions with glass and wind turbines; and oppose the weakening of key environmental legislation such as the Endangered Species Act and Migratory Bird Treaty Act.

You can help birds win this Race Against Time by donating to ABC today. Please don't delay. Appeal ends June 30!

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

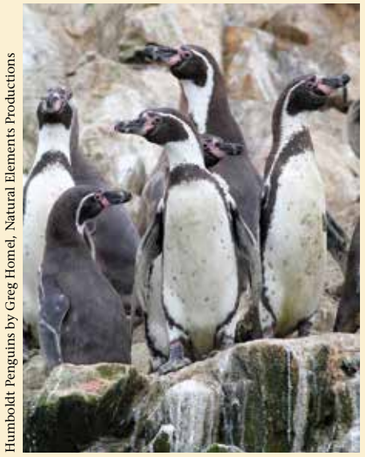
BIRDS in BRIEF

Island Restoration Benefits Chilean Seabirds

Several years of intensive restoration work on the islands of Chile's Humboldt Penguin National Reserve has restored populations of two endangered seabirds, the reserve's namesake penguin and the Peruvian Diving-Petrel. The reserve is home to large numbers of both species, including 80 percent of the world's Humboldt Penguin population.

Conservationists from Chile's National Forestry Corporation (CONAF) and Island Conservation successfully removed invasive European rabbits from several of the reserve's islands. The rabbits were introduced to the islands and have destroyed native vegetation and fragile nesting habitat.

The groups are hoping to restore habitat on other islands in Chile, such as Alejandro Selkirk in the Juan Fernández archipelago, home to the critically endangered Masafuera Rayadito.



Humboldt Penguins by Greg Homel, Natural Elements Productions

Laysan Albatross decoys stand ready in the Mokio Preserve on Moloka'i's northwest coast. Photo by Butch Haase

Laysan Albatross Colony Planned on Moloka'i

ABC is working with Hawaiian partners Moloka'i Land Trust, Maui Nui Seabird Recovery Project, Pacific Rim Conservation, and The Nature Conservancy of Hawai'i to establish a nesting colony of Laysan Albatross on the Hawaiian island of Moloka'i.

To persuade albatross to nest on Moloka'i, scientists have placed seven pairs of decoys, combined with a speaker that broadcasts albatross calls, within the 1,700-acre Mokio Preserve along the island's northwest coast. This area is considered to be above sea-level rise projections. At press time, the site had already had one visit by a prospecting albatross, giving early indication that the birds are interested.

The team hopes that once a planned predator-proof fence is built at the site, it will exclude predatory feral cats, mongoose, and rodents. Several other breeding seabird species already benefit from a temporary deer fence and predator control at the Mokio Preserve, including White-tailed and Red-tailed tropicbirds and Black Noddy.

Hummingbird Garden Opens at Brazil's Serra do Urubu Reserve

Brazil's Serra do Urubu Reserve inaugurated a new hummingbird garden in late 2017, hoping to attract people to a patch of the Atlantic Forest where they can more easily observe many of this region's remarkable hummingbirds. Visitors can see more than 20 hummingbird species in the garden, including Swallow-tailed Hummingbird, Ruby Topaz Hummingbird, and the endangered Long-tailed Woodnymph, which occurs only in this region.

The new hummingbird garden at Serra do Urubu, inaugurated in late 2017, includes a shaded pavilion for visitors. Photo by Bárbara Cavalcante

ABC and March Conservation Fund supported our partner organization SAVE Brasil in the creation of the garden, which features native plantings, nectar feeders for hummingbirds, and interpretive signs to enable visitors to learn more about the area's marvelous birds. Paying visitors will support reserve management and conservation of critically endangered species, such as the Orange-bellied Antwren.

Visit "Serra do Urubu" on YouTube for more information.

Long-tailed Woodnymph by Bennett Hennessey

Planting *Polylepis* trees during the festival. Photo by David Wiedenfeld

Festival Restores *Polylepis* Forests in Peru

Starting each December since 2014, ABC's partner, ECOAN, has held its annual Queuña Raymi (Quechua for "*Polylepis* Festival") at villages in the Vilcanota Mountains of southern Peru. During the festival, hundreds of Quechua volunteers turn out, and each group is given one hundred seedlings to plant high on the deforested mountainsides. This past season, from December 2017 to February 2018, volunteers planted 100,000 seedlings over the course of several days.

This reforestation helps the Quechua protect their water sources while also recovering habitat for threatened birds such as Royal Cinclodes and Ash-breasted Tit-Tyrant. More than 322,000 trees have been planted since the festival began. In all, more than a million trees have been planted in the Vilcanota Mountains since ABC and ECOAN started reforesting this area in 2004.

ECOAN works to improve livelihoods for rural families and communities while encouraging sustainable use of native forests.

Habitat Restoration Success in the Central Hardwoods Joint Venture

The Central Hardwoods Joint Venture (CHJV) had a record-setting year for habitat restoration in 2017. Conservationists, landowners, and land managers worked together to restore more than 230,000 acres of open-oak and pine woodlands for declining birds such as Prairie Warbler, Red-headed Woodpecker, Eastern Whip-poor-will, and Chuck-will's-widow.

The CHJV collaborates with land managers and landowners across seven Midwestern states to manage and restore bird habitat. Carefully managed prescribed fire and thinning of overly dense tree stands are the preferred tools to maintain the open-canopy and grass-shrub understory essential to these birds.

Prairie Warbler @Michael Stubblefield

Jane Fitzgerald, CHJV Coordinator at ABC, credits CHJV partner agencies and organizations whose staff do much of the actual restoration work. She reports that CHJV Delivery Coordinator Larry Heggemann conducted woodland restoration workshops across the region that reached more than 500 professional land managers.

Bicknell's Thrush by Larry Master

More Wintering Habitat Protected for Bicknell's Thrush

ABC and our Dominican partner Fundación Loma Quita Espuela (FLQE) helped add more than 700 acres of native broadleaf forest — preferred wintering habitat for the rapidly declining Bicknell's Thrush — to the Loma Quita Espuela Scientific Reserve last year.

This reserve, managed by FLQE, is in the Septentrional Mountains of the northern Dominican Republic and still contains parcels of private property. ABC assisted FLQE in compensating some of the remaining landowners within the reserve for their land, then facilitated the transfer of those properties to the national government, which owns the reserve.

ABC provided funding to close these acquisitions with the generous assistance of Dick and Nancy Eales and David and Patricia Davidson.

BEACON OF HOPE

Bald Eagles, now thriving, are the Endangered Species Act's greatest success story

by Rebecca Heisman

Bald Eagles by Jack Molan, Shutterstock

In America, there may be no greater avian icon — or impressive wildlife comeback story — than the Bald Eagle.

The shaggy, fierce-eyed bird has been our national symbol since 1782. It wasn't until the 1960s and 1970s that Bald Eagles became an emblem of the environmental movement as their numbers plummeted from the effects of the pesticide DDT. Once DDT was banned and the species was fully protected under the fledgling Endangered Species Act, however, eagle numbers began to rebound, gradually at first and then with increasing vigor. In 2007, the U.S. Fish and Wildlife Service removed the Bald Eagle from the federal endangered species list.

But what did "delisting" truly mean for Bald Eagles? And a decade later, where does the species stand?

An Icon in Trouble

Developed in the 1940s, DDT — short for dichloro-diphenyl-trichloroethane — was one of the first synthetic insecticides. Its effectiveness made it popular, but it came at a cost: DDT residue began to wash off agricultural fields and into aquatic ecosystems, and soon Bald Eagles and other large predatory birds across the country were eating contaminated fish. Ingesting the chemicals caused eagle eggshells to become so thin that large numbers of nests failed.

Rachel Carson's seminal 1962 book *Silent Spring* helped to spark the environmental movement and exposed the hazards of rampant pesticide use on birds and other wildlife. The Environmental Protection Agency eventually banned DDT a decade later, just two years after the agency was established.

Legal protection of Bald Eagles themselves proceeded in a more piecemeal fashion. It began with the passage of the federal Migratory Bird Treaty Act in 1918. Then, in 1940, the Bald Eagle Protection Act (now the Bald and Golden Eagle Protection Act) expanded the law's reach, prohibiting the killing or possession of Bald Eagles or their feathers, eggs, or nests. Some eagle populations were listed under the Endangered Species Preservation Act, which became law in 1967; this protection was maintained with the passage of the Endangered Species Act (ESA) in 1973.

Interior Secretary Dirk Kempthorne announces the Bald Eagle's delisting at a ceremony on the steps of the Jefferson Memorial in Washington, D.C. in June, 2007. Photo by Mike Parr

Finally, in 1978, ESA protection expanded to include Bald Eagles in all 48 contiguous states. (The eagle population in Alaska had remained healthy, and was never in need of listing.) The resulting efforts to restore the species went beyond the simple elimination of DDT use: eagles' nests and habitat were now strictly protected from human disturbance of all sorts.

It worked. In 1963, when the species was at its lowest ebb, there were only an estimated 417 breeding pairs of Bald Eagles in the lower 48 states. By 1997, this number had increased to more than 5,000.

The Fish and Wildlife Service proposed "delisting" the Bald Eagle in 1999, based on the fact that recovery goals for all regions of the country had largely been met a decade before — and populations were still on the rise. In 2007, it became official: the Bald Eagle was no longer endangered, or even threatened. Our national emblem was back.

Eagles on the Rise

Taking the Bald Eagle off the endangered species list didn't mean an end to federal regulations concerning the management of the species. It just meant their management was once again governed solely by the Bald and Golden Eagle Protection Act.

TIMELINE

Legal Protection of Bald Eagles

1940: The Bald Eagle Protection Act passes (the Act was extended to include the Golden Eagle in 1962).

1945: Widespread commercial and agricultural use of DDT begins; eagles begin to decline due to DDT-caused eggshell thinning.

1963: Alaskan Bald Eagle populations remain largely stable, but the Bald Eagle population in the lower 48 states falls below 500 pairs.

1967: Bald Eagles are listed under a precursor to the Endangered Species Act (ESA).

1972: The newly formed Environmental Protection Agency bans DDT.

1973: The Endangered Species Act becomes law, and in 1978 the Bald Eagle is listed as Endangered in the lower 48 states.

2007: Bald Eagle numbers in the lower 48 recover and the species is delisted by the U.S. Fish and Wildlife Service (FWS), which commits to work with states to monitor populations for at least five years.

2009: A system of five-year incidental take permits for eagles and their nests becomes law.

2013: FWS announces 30-year take permits to accommodate wind industry concerns; ABC challenges the change in court.

2016: FWS issues a final rule allowing 30-year permits but with more transparency. The permits also relax rules related to nest take, which remains controversial. A FWS assessment of sustainable take finds the Bald Eagle population is steadily increasing.

The Fish and Wildlife Service now needed to create a whole new set of regulations governing the killing, capturing, or otherwise harming of a protected species. (In regulatory terms, this is known as "take" of a species.) No one wants to see an eagle killed by human activity. The question confronting federal officials and conservationists alike was — and remains — how much take is too much?

The Bald and Golden Eagle Protection Act gives the government the ability to issue permits to take eagles as long as it's compatible with the preservation of the species. "But it didn't define what that meant," says Brian Millsap, the Fish and Wildlife Service's National Raptor Coordinator. "So when Bald Eagles were delisted, we defined the preservation of the species as maintaining stable breeding populations. That's a conservative management objective — not only are we not going to let them go extinct, we're going to try and maintain populations at at least the size they are now."

In 2016, the Fish and Wildlife Service issued updated regulations governing the take of eagles and eagle nests. ABC, which had sued the Service in 2014 over the previous version of this rule, pushed successfully for the 2016 regulation to require greater public involvement in the permitting process and that wind energy companies have independent, third-party monitoring at their facilities, which are often deadly to eagles and other birds.

"Bald Eagles are rebounding, but they're still well below their historic numbers," says Steve Holmer, ABC's Vice President of Policy. "We have to stay vigilant. And now that eagles are off the endangered species list, that means keeping a close watch on how they're being managed."

Even with new regulations in place, monitoring is crucial to ensuring everything is working as it should. An ambitious federal plan to survey the entire continent every five years to estimate the number of occupied nests stumbled due to lack of funding after its initial implementation in 2009. But even that single estimate showed a further substantial increase in the population since delisting two years before: Bald Eagles were estimated to number more than 72,000 individuals in the lower 48 states, and nearly 143,000 including Alaska. Millsap says a second round of surveys is occurring right now. The plan is to have surveys take place every three years from now on.

Immature Bald Eagle suffering the effects of lead poisoning. Photo by Marge Gibson

Other sources of data can hint at what's going on with Bald Eagles, too. The North American Breeding Bird Survey, overseen by the United States Geological Survey and their counterparts in Canada, dispatches skilled volunteers to count birds along set routes across the continent during the breeding season each spring.

The 2016 data showed a 5 percent annual increase in Bald Eagle numbers across the continent. "We'll see what that translates into in terms of nesting pairs when we complete the survey we're doing right now," Millsap says. "But the data that we have suggests that Bald Eagle populations not only increased from delisting until 2009, but that they've continued to increase since then."

On Guard for Threats Old and New

The eagle population boom will almost certainly flatten out eventually. When it does, it may be due to the species naturally hitting its carrying capacity — a term used in ecology to define the maximum population size a region's resources can sustainably support. But wildlife managers remain on the alert for new threats. While DDT may be a thing of the past, other toxins both new and old continue to worry those charged with ensuring Bald Eagles' continued success.

Although they hunt fish and other prey, Bald Eagles are also frequent scavengers, and a gut pile left behind by a game hunter represents a tempting meal. These carcasses often contain fragments of lead ammunition, which eagles and other scavengers gulp down along

While DDT may be a thing of the past, other toxins both new and old continue to worry those charged with ensuring Bald Eagles' continued success.

with the meat. Even very small amounts of lead contamination in scavenged meat can be enough to kill an eagle.

The lead problem isn't new. It helped motivate the banning of lead shot for waterfowl hunting in 1991, which reduced Bald Eagles' exposure in the wetlands and lakes that are their preferred habitat. However, as populations have grown, more and more individuals have moved into upland areas where the hunting of deer and other large animals is common. Mercury, another heavy metal, is also raising alarms for predator species around the world as it accumulates up food chains.

Other pesticides whose effects aren't yet well understood have entered the market, such as brodifacoum, one of a broader class of chemicals known as second-generation anticoagulant rodenticides, or SGARs. Although there were only five known Bald Eagle deaths from brodifacoum poisoning between 1982 and 2013, compared to 484 from lead, it's beginning to show up at chronic low levels in even the most isolated Bald Eagle populations, which wildlife managers are at a loss to explain.

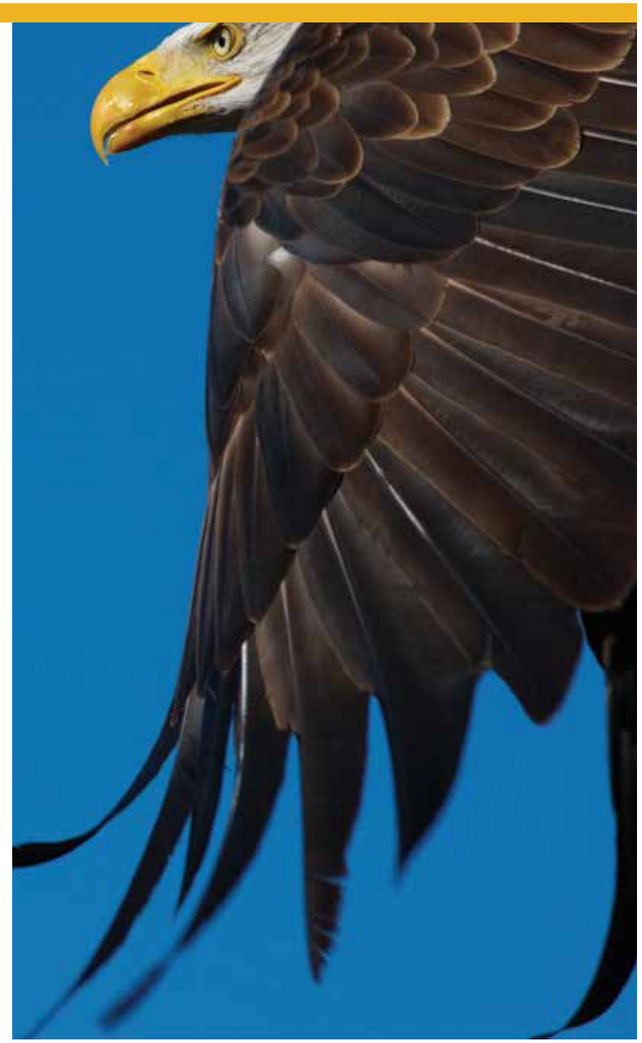
While the future is impossible to foretell, people who know Bald Eagles the best are optimistic about what's ahead. So says Bryan Watts, Director of Virginia's Center for Conservation Biology and a professor at the College of William and Mary, who studies Bald Eagles of the Chesapeake Bay region. "Eagles aren't going away," Watts says.

A Brighter Future

It's impossible to see an adult Bald Eagle soaring overhead without feeling something — a flash of recognition, or maybe even a surge of hope. Thanks to a patchwork of environmental laws and the efforts of scientists, conservationists, and government agencies, more of us have the chance to experience that today than at any time in the past half-century.

ABC's Holmer says the Bald Eagle's rebound doesn't have to be such a singular victory. There are many more success stories waiting to happen: 41 U.S. bird populations listed under the Endangered Species Act are showing upward trends, he notes, making their recovery a real possibility. For now, though, the Bald Eagle remains a star.

"Bald Eagle recovery is one of the greatest success stories in our nation's history," Watts says. "We should all be proud that we collectively made a responsible decision about the future of this species that Americans care an awful lot about."



The recovery of the Bald Eagle can serve as a model for the eventual recovery of other birds and animals listed under the Endangered Species Act. Photo by Nick Biemans, Shutterstock

Help defend the Endangered Species Act:
abcbirds.org/action/petition-esa

Rebecca Heisman is a science writer based in Walla Walla, Wash.

A Sanctuary for Cats Makes an Island Safer for Birds

By Grant Sizemore

The conflict between cats and birds is ancient. But in recent years, as domestic cats have spread from Europe, Asia, and Africa to new environments around the world, their ubiquity and predatory behavior has taken an irreparable toll on native species. Cats have contributed to the extinction of 63 wildlife species worldwide and are the top source of direct, human-caused mortality to birds in the United States and Canada.

Although cats make wonderful pets, we clearly need to care for them responsibly and minimize their impact on birds and other animals. Nowhere is this more evident than in Hawai'i, where native birds — their numbers already in decline — are very much at risk of being killed by cats.

A search for solutions to this problem recently led me to Lana'i, a serene Hawaiian island just west of Maui. There, on a remote plot of land a few miles outside

Left to right: Lana'i Cat Sanctuary staff Keoni Vaughn and Michael Hanog with ABC's Grant Sizemore. Photo by Louisa Phillips, July 2017

TOP: 'Apapane by Robby Kohley

Although cats make wonderful pets, we clearly need to care for them responsibly and minimize their impact on birds and other animals.

Hawai'i 'Amakihi by Robby Kohley

Hawaiian Coot @ Michael Stubblefield

Lana'i Cat Sanctuary's Michael Hanog showers the cats with treats and affection. Photo by Louisa Phillips, July 2017

Approximately 8,000 visitors each year flock to the peaceful sanctuary to spend time with the cats. Photo by Louisa Phillips, July 2017

Approximately 600 cats call the sanctuary home.
Photo by Louisa Phillips, July 2017

of Lana'i City, is the Lana'i Cat Sanctuary. The 3-acre sanctuary, which is run by Executive Director Keoni Vaughn, engages conservation partners and local residents to safely trap free-roaming cats and relocate them to the sanctuary.

The cats live there like royalty, enjoying regular veterinary care, plenty of food (the sanctuary goes through 75 to 80 pounds of cat food every day), secluded nooks and crannies, and lots of affection. Despite housing nearly 600 cats, the sanctuary feels completely uncrowded and has even become a tourist destination: Roughly 8,000 people visited the sanctuary in the 2016 fiscal year, Vaughn told me.

To date, 54 cats have been adopted; for nearly all of them, their new homes are off the island. Vaughn says the sanctuary has two strict policies for on-island adoptions: New owners must agree to keep the adopted cats indoors, and the sanctuary won't adopt out a cat that was trapped from an area where native or endangered birds were nesting. "This eliminates the risk of the cat escaping a home and finding its way back to the nest," Vaughn says.

When I visited Lana'i this past summer, I was struck by how pleasant the sanctuary was, how much the visitors appeared to be enjoying the cats, and how comfortable the cats — most of them previously feral — were in their new home.

It's clear that sanctuaries alone will not solve the cat crisis. After all, hundreds of thousands of feral cats are estimated to roam Hawai'i, and this solution will not work everywhere. But the serenity of this place and its success in responsibly removing so many cats from Lana'i's landscape begs the question: Could facilities like the Lana'i Cat Sanctuary help solve the age-old conflict between cats and birds?

Grant Sizemore is ABC's Director of Invasive Species Programs.

Where WOOD THRUSH Sing and JAGUARS Roam

A new project in Nicaragua aims to help migratory birds — and the Americas' largest cat

By Libby Sander

Every year, millions of Wood Thrush take to the skies and trade one chain of gentle mountains for another. They travel along the rolling ridge of the Appalachians, cross the Gulf of Mexico, and after brief sojourns to rest and refuel, alight in the humid forests of Central America. For many, Nicaragua is their final stop. They settle in for the winter.

Scientists have found that more than half of all Wood Thrush breeding populations depend on this part of Central America for food and shelter during the non-breeding part of their life-cycle. As conservationists learn more about the impact of deforestation on population declines, they are increasingly focusing their efforts on specific regions where the loss of habitat is particularly acute. The thickly forested swath of Nicaragua known as the Bosawas Biosphere Reserve is one such place.

Designated a UNESCO site in the 1990s, the Bosawas is a natural marvel, and one of the largest remaining forests in Central America. Picture hundreds of species of butterflies and orchids, few roads, and wide rivers that snake through the dense vegetation. Its tropical forests provide critical stopover and wintering habitat for hundreds of species of migratory songbirds, including Golden-winged Warbler and Bay-breasted Warbler.

The Bosawas alone contains roughly 3 percent of the planet's biodiversity. It is the second-largest stronghold in Central America for jaguars — whose historic range once stretched from southern Argentina to the southwestern United States — and is an essential key in maintaining the great cats throughout their current, more-limited range. The reserve is also one of the last places in Central America where rare species such as the giant anteater and Harpy Eagle still survive.

But there are half a million people who call the Bosawas home, too. Political changes and poverty have shaped human migration in the region over the past two decades, and the influx of people has taken a severe toll on the land. Along the edges of the reserve the Bosawas is losing forest at an alarming rate as farmers clear out trees, sell timber, and then graze cattle or grow basic crops such as maize and beans. Between 2006 and 2015, the rate of forest loss was between 6 and 11 percent across different areas of the Bosawas, with the highest rates within the buffer zone of Saslaya National Park.

Enrique Aguirre, Shutterstock

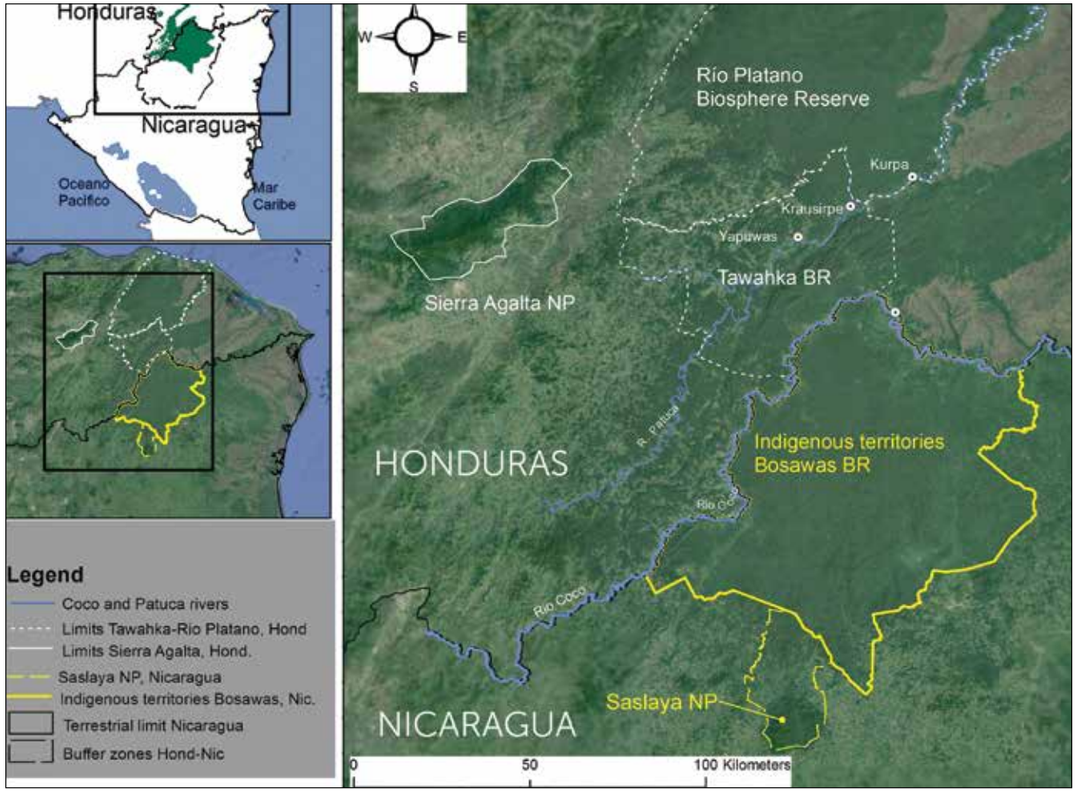
Forests in Danger

This loss of habitat is bad news for the animals that depend on these forests for shelter and food. For more than a decade, the Wildlife Conservation Society (WCS) has been working with indigenous leaders in the core of the reserve to protect habitat for jaguars. Now, a new collaboration between American Bird Conservancy and WCS is taking that work a step further and conserving habitat for migratory birds, too.

It's a complex problem that conservationists are trying to address, and the solution is a mosaic. Over the next two years, conservationists from both organizations will encourage farmers to adopt silvipasture techniques that keep trees in place where crops grow; raise the profile of bird-friendly crops such as cacao, so that farmers are inclined to grow them; and step up patrolling of the borders of Saslaya National Park, Nicaragua's oldest and largest national park, to prevent further deforestation around the park's edges.

The project marks an important point of convergence in conservation in this part of Central America, says Andrew Rothman, Director of ABC's Migratory Bird Program, who is overseeing the project.

OPPOSITE: Wintering Wood Thrush in Central America.
Photo by Chris Jimenez, www.chrisjimenez.net



MAP: Saslaya National Park sits in the southwest corner of the Bosawas Biosphere Reserve. Bosawas, together with the Tawahka Asangni, Patuca and Rio Platano Biosphere Reserves, make up the one of the largest continuous swaths of forest remaining in Central America. Map courtesy of the Wildlife Conservation Society

"You have a key wintering area for species like Wood Thrush and Golden-winged Warbler in places like Saslaya National Park. You also have what appears to be a really important stopover site for lots of other migrants that travel further south, like Bay-breasted Warbler and Scarlet Tanager. And luckily you still have jaguars," he says. "They all need the same thing. They need these large protected areas to stay intact. Our task is to work creatively to make that happen."

A Promising Partnership

The story of this project begins, fittingly, at the El Jaguar Reserve. As the warbler flies, El Jaguar is about 60 miles southeast of Saslaya National Park, the mountainous gem of the Bosawas. Liliana Chavarria and Georges Duriaux, ABC partners and the reserve's owners, who run a shade coffee farm and ecotourism reserve for migratory birds, have also been conducting

Greg Homel, Natural Elements Productions

They knew the area was important for local species like Great Curassow. But what about migratory birds?

Partners at the community of Rosa Grande, in the buffer zone of Saslaya National Park. Left to right: Andrew Rothman, ABC; Marcial Herrera Lopez, President of the Rosa Grande Co-op; and Joseph Luis Rojas and Jose Soza, student associates with the University of the Autonomous Regions of the Nicaraguan Caribbean Coast (URACCAN). Photo by J. Hannan, 2017

bird surveys in Saslaya. They knew the area was important for local species like Great Curassow, and they confirmed the presence of the rare Rufous-vented Ground-Cuckoo. But what about migratory birds?

Surveys revealed that migratory birds were indeed stopping over in the park or wintering there. Additional research later confirmed that collectively this region is of particular importance to Wood Thrush, with Saslaya potentially being a key stopover site. The problem was that Saslaya had become vulnerable to deforestation, with little enforcement of its unmarked borders.

During workshops that targeted expanded conservation in areas vital to Golden-winged Warbler, ABC's Rothman saw an opportunity. He began talking to scientists from WCS who had been collaborating with indigenous communities in the Bosawas region for years, and who were also working in Saslaya. Although these conservationists were focused primarily on jaguar conservation, WCS had cultivated extensive knowledge about the landscape and the communities, and with their encouragement a number of communities had agreed to manage their land differently. A promising partnership seemed possible.

The fact that WCS had been working at a landscape level was particularly appealing to Rothman. In late 2016, ABC rolled out a new approach to bird conservation called BirdScapes. To protect birds across their full life-cycles means conserving habitat on a large scale — at the landscape level — at key breeding, wintering, and stopover sites. This immense forested area was included as one of the new BirdScapes. It seemed clear: The time was right to align ongoing jaguar conservation with bird conservation and slow further habitat loss in such an important area. Since 1970, Wood Thrush and Golden-winged Warbler populations have declined by roughly 60 percent. Habitat loss on the wintering grounds is thought to be a key factor. Meanwhile, jaguars are desperate for vast acreage where they can roam freely. By joining forces, the project's organizers say, conservationists can push back against deforestation on a significant scale.

"The overwintering bird habitat is year-round jaguar habitat," says John Polisar, Coordinator of the Jaguar Conservation Program for WCS. "Jaguars, in general, need large spaces. They need freedom from persecution, and they need an adequate prey base. And the birds need large pieces of intact forest. So this is basically a forest-preservation project for birds and jaguars."

"Of course birds are more adaptable because they can fly away if need be," Rothman adds. "But eventually there are fewer and fewer places to land. If we didn't have these large areas still available, over time, migrating birds would face the same situation as jaguars."

Cacao is key. This small tree, which bears football-shaped pods that produce the seeds from which chocolate is made, grows best beneath the forest canopy.

Creating a Green Barrier

Situated on the southwestern edge of the project area, Saslaya National Park's buffer zone stretches roughly 40 miles into the core area of the Bosawas Biosphere Reserve. This represents a potentially vital corridor of forested habitat for birds and jaguars. Protecting the park's borders and persuading farmers in the buffer zone to grow bird-friendly crops such as cacao will create a green barrier to protect the park and create a vital link to the Bosawas reserve.

Cacao is key. This small tree, which bears football-shaped pods that produce the seeds from which chocolate is made, grows best beneath the forest canopy. It can thrive alongside other lucrative crops such as cinnamon or allspice.

TOP: Cacao pod and seeds. Photo by J. Hannan

LEFT: Don German Valerio Perez is a cacao producer and the former President of the Saslaya Multisector Cooperative. Don German and other producers in this cooperative carefully trim the tree canopy to allow sun to reach the cacao trees, while retaining leaf litter that forms a protective ground cover for plants and wildlife. Photo by J. Hannan, 2018

"Cacao doubles farmers' incomes," says John Hannan, a contractor on the project who has worked in Central America for decades. "They move from a dollar a day per household to six dollars. And integrating other products that are native and work well in a forest canopy — like black pepper, cardamom, cinnamon — now you have a farm that is making much more money. Most importantly, you're appealing to every farmer, because it's not just about protecting the birds and butterflies, it's about putting more food on the table for their kids."

Even so, growing cacao in this part of Nicaragua isn't a given, and part of the challenge of this new project will be to improve the quality of cacao production in the region, Rothman says. For many growers, "It's teetering right on the edge of, 'Is it worth it for me to do cacao? Or should I plant something else?' "

"If we're able to expand cacao production in areas that were previously turned into annual crops," he continues, "the cacao itself will help with the restoration of those areas. It will draw in birds, helping with seed dispersal and providing cover. And in tropical ecosystems especially, forests can grow back very fast."

Hannan agrees. The land has suffered, he says, but it's not lost. "If you have the birds dispersing seed, if you aren't mowing it down for cattle grazing or basic grains, the land will come right back," he says.

If all goes as planned, this project will maintain and even increase the amount of quality habitat available for migratory songbirds and jaguars in an area long overlooked by many conservationists. It will improve prospects for people living in one of the most economically underserved areas in all of Central America. And it will mean a significant chunk of Central America's largest remaining patch of contiguous forest will be better protected.

"We want to create healthy, sustainable livelihoods for farmers and wildlife," Rothman says. "That's really what this is about: sustaining life."

Libby Sander is ABC's Senior Writer and Editor.

In Aldo Leopold's Shadow,

Champions for Birds of the Driftless

Can landowners help save the last, largest blocks of oak forest in southern Wisconsin?

By Rebecca Heisman

Southwestern Wisconsin's oak-hickory forests are tranquil spots where conservationist Aldo Leopold once contemplated the relationship between people and nature. Located in a region called the Driftless Area, these woodlands are home to a variety of declining bird species, including Cerulean Warbler.

But these oak-hickory forests need hands-on management. Naturally occurring fires once kept the forests healthy, creating gaps between trees and allowing seedlings to grow. But today they generally require strategic timber harvesting to thrive.

A public-private partnership called My Wisconsin Woods is stepping in to help. Managed by a group of roughly two dozen partner organizations and agencies, including ABC, known as the Driftless Forest Network, this program has collaborated with private landowners since 2011 to restore the oak woodlands. By encouraging forest landowners in the region who don't currently manage their woods to take action, the effort hopes to make southern Wisconsin's woodlands healthy once again. We spoke with Steve Swenson, Director of Conservation of the Aldo Leopold Foundation, to learn more.

MAP: Covering parts of four Midwestern states, the Driftless Area and its woodlands support many declining bird species.

Map courtesy of USDA/Natural Resources Conservation Service

The Cerulean Warbler is a declining species in Wisconsin's Driftless Area. Photo by Ryan Sanderson

LEFT: A local county forester discussing management options with a landowner. Photo by Jake Elder, Wisconsin Department of Natural Resources

Rebecca Heisman: What is the Driftless Area, and how did it get such an evocative name?

Steve Swenson: Several glacial events spanning hundreds of thousands of years once covered most of Wisconsin. Each time, the Driftless Area — which also includes parts of Illinois, Iowa, and Minnesota — escaped their impacts. Glaciers carry "drift" — rocks and soil that they move like a bulldozer, flattening and filling the land. So the Driftless Area tends to be more rugged country, not smoothed by glaciers, but rather carved by streams and rivers.

And because this landscape is so diverse topographically, it supports many different habitats and species. Within several hundred feet you can have a very dry, exposed south-facing slope with prairie and savanna on it, and a north-facing slope with rich, productive soils supporting veneer-quality red oak.

RH: What interesting bird species do you find there?

SS: There's a lot of diversity. Some of the ones we're interested in include the American Woodcock, Whip-poor-will, Acadian Flycatcher, Veery, Wood Thrush, Blue-winged Warbler, Worm-eating Warbler, Hooded Warbler, and Cerulean Warbler. They're all species in decline; all of them are of special concern, threatened, or endangered in Wisconsin.

RH: What habitats in the Driftless Area are important for these species?

SS: In general, this collection of species benefits from large, forested areas. A good example is the Cerulean Warbler — it depends on large tracts of forested land, and so the work that we're doing is focused on forest conservation areas that we've identified. These are the last, largest blocks of contiguous forest in southern Wisconsin. There are eight of these in the Driftless Area, and each is many thousands of acres in size.

The Cerulean Warbler needs large, mature trees within predominantly forested landscapes in order to breed successfully. This landscape also supports oak-hickory forest, which provides nuts and foraging habitat for insect-eating birds that you don't get in the northern part of the state. Someone could look at a map of Wisconsin and ask, "If there's lots of forest up north, why isn't that good enough?" Well, it's not the same habitat. The habitat in the Driftless is unique with the abundance of oak and hickory trees.

If we can retain large forested areas with a significant oak component, we have a better chance of maintaining Cerulean Warblers and other priority species.

RH: What is My Wisconsin Woods hoping to accomplish?

SS: Ninety-six percent of the forested land in the Driftless is privately owned, and most of those landowners are inactive when it comes to their relationship to the land. Yet they have a conservation ethic. They love their land and want to do right by it, but many of them believe the best conservation strategy is, "Nature knows best; I won't touch it."

Veery by BN Singh

Worm-eating Warbler by Dan Pancamo

Blue-winged Warbler @ Michael Stubblefield

It's a common misperception. Our remaining oak-hickory forests were born out of fire, grazing elk, and trees being knocked down by powerful winds. Today we need to actively mimic these disturbances through prescribed fire, timber harvests, brush management, and other practices.

What we're trying to do is educate them on conservation and offer them opportunities to improve their land in ways that support their values. Landowners enjoy wildlife and are very willing to take steps to help, whether it's controlling invasive species, making habitat improvements, or even harvesting timber. We have had an awesome number of people raise their hands and say, "Yes, I'm interested in learning more about my woodlands."

RH: Why is timber harvesting necessary?

SS: Oak seedlings require full sun in order to reach sapling stage. A lot of landowners will walk through their forest and they'll see the mature oak trees, and underneath that a carpet of oak seedlings, and they'll think everything's fine. But almost none of those seedlings make it to the next stage, because they just don't get enough sunlight.

If we care about having oak into the future, then we need to create the conditions so that next generation of oak can grow. The act of strategic timber harvesting mimics what naturally occurring fires once would have done, roughing up the soil surface so acorns germinate and opening up the canopy for sufficient sunlight so those seedlings can reach sapling stage. Timber harvests that support oak regeneration need to have canopy gaps of at least two acres. Quite frankly, if our harvests don't create enough large canopy gaps, we are not going to retain oak on the landscape.

RH: How much land are we talking about — five acres? A hundred? Does that really make a difference for birds?

SS: We are reaching out to landowners who own at least 10 acres. The average ownership in the Driftless is about 40 acres. Across the landscape, the landowners that are most strategic for forest songbirds are within those forest conservation areas. Their 40 acres is surrounded by other forested properties. It is only within this larger context that the average-sized parcel can support songbirds dependent on large forested areas.

RH: What do you hope to see five or 10 years from now as a result of this collaboration?

SS: More woodland owners engaged in the care of their land. We'd like forest cover in southern Wisconsin that supports the biodiversity we have today, and maybe even increases it.

Aldo Leopold really captured the spirit of this type of work. "When land does well for its owner, and the owner does well by his land; when both end up better by reason of their partnership, we have conservation," he wrote in his 1939 book T*he Farmer as Conservationist*. "When one or the other grows poorer, we do not."

That's what this project is about. Landowners really want to do the right thing. They want to feel good about their ownership and leave the place better than they found it. It's just a matter of showing them how the actions we're suggesting meet that desire.

To see the full list of participants in the Driftless Forest Network, or to get involved in My Wisconsin Woods, visit **mywisconsinwoods.org**

TOP: Sparks Hill Road runs through a 30-acre property in the Driftless Area. Photo by Patricia Duren

MIDDLE: Restored oak savanna in the 460-acre Swamplovers Nature Preserve, Wisconsin. Photo by Alanna Koshollek, Aldo Leopold Foundation

Landowners Are a Lifeline to Birds of the Ponderosa Pine

One day a few years ago I went to meet a landowner on his property in the ponderosa pine forests of eastern Oregon. We got in his truck and drove for a couple miles, then stopped. He pointed off to the distance.

"See those trees on the horizon?" he said. "That's where my property ends." This man didn't own 10 acres, or even a hundred. He owned 10,000.

Ponderosa pine forests are in trouble, and landowners like him are helping us save them. Across the West, fire suppression and unsustainable timber harvesting have degraded this habitat, which is so important for cavity-nesting birds. Historically, ponderosa pines burned naturally from low-intensity fires; this would have maintained prime habitat for species such as Lewis's Woodpecker, Flammulated Owl, and White-headed Woodpecker. But as undergrowth has proliferated and fires have burned hotter, the entire makeup of these forests is changing — and the birds have nowhere to go.

Roughly half of all ponderosa pine habitat is privately owned, so landowners play a tremendous role in making these forests healthy again. This is especially true on properties that are adjacent to public lands where foresters are already engaged in careful restoration of ponderosa pine habitat.

On my visit to the Oregon landowner, we talked about the importance of dead trees — known as snags — for cavity-nesting birds. We identified a few places where he could create some snags that might appeal to Williamson's Sapsucker, a colorful bird that feeds primarily on insects in the sap of pine trees. Over the past decade, ABC and our partners have collaborated with nearly three dozen landowners to restore 32,000 acres of ponderosa pine habitat.

Flammulated Owl by Jess Findlay

Roughly half of all ponderosa pine habitat is privately owned, so landowners play a tremendous role in making these forests healthy again.

These successes have laid the groundwork for another program, started just two years ago and supported with funding from the Neotropical Migratory Bird Conservation Act, called Flammulated Friends. The initial effort is focusing on a site in central Oregon where we're working with Deschutes Land Trust to protect and restore 1,200 acres of ponderosa pine. We hope to expand this project to create partnerships between land trusts in Oregon and conservation groups in Mexico, where the Flammulated Owl winters. That way we can address the full life-cycle conservation of this migratory owl.

The will to help is there. In my decades of working as a conservationist, one of the biggest changes I've observed is a growing realization that we can't rely solely on public lands to address all of our concerns about conservation. We have to engage private landowners, too. We work to understand what they want to accomplish on their land and look for overlap with what we want to do for birds. Over time, that collaboration leads to positive changes on the landscape.

A few weeks after the visit with the Oregon landowner, for instance, I went back to check in with him. His words were just what any conservationist wants to hear.

"I was reading up on snags," he told me. "I see what you mean about how important they are. We used to just cut them down. We would take out truckload after truckload. They were just dead trees and we wanted them out of the way. I'm not going to do that anymore." I'm betting those snags will be home to a lot of birds in the future.

Bob Altman retired in late 2017 after 20 years at ABC, most recently serving as Pacific Northwest Conservation Officer.

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Three species of albatross nest on Hawai'i's Midway Islands; all are benefitting from conservation work by ABC and many partners. Shown from left to right: Laysan Albatross, Black-footed Albatross, Short-tailed Albatross. Photo by weedmandan, flickr