The State of the Birds 2014
United States of America
The 2014 State of the Birds assesses the health of our nation's birds, tallies the percentage of species on the state’s list most vulnerable to extinction, and a list of the Common Birds in Steep Decline.

Habitat indicators are based on the population changes of all legal bird species—those birds restricted to a single habitat—where long-term monitoring data is available. The year's indicators report the methodology from the 2009 State of the Birds.

The Passenger Pigeon was the most abundant bird America has ever known. As they migrated on a massive scale across the eastern United States, they darkened the skies for weeks. They were once so plentiful that they could be spotted from space. A decimation of the entire population, estimated to be a billion-birds strong was said to be 300 miles long; it took 14 hours, at a speed of 10 miles per hour, to pass over skylines of New York, Boston, Chicago, Minneapolis, and St. Louis. In 1860, one flock estimated to be a billion birds strong was said to be 300 miles long: it took 14 hours, at a speed of 10 miles per hour, to pass over skylines of New York, Boston, Chicago, Minneapolis, and St. Louis.

The Passenger Pigeon vanished, America was inspired to create the best conservation and adaptive management system the world has ever seen. Now that system needs reinvestments to take on the challenges of a new century. Unlike 100 years ago, we are now building on prior conservation lessons of the Passenger Pigeon.

As the Passenger Pigeon vanished, America was inspired to create the best conservation and adaptive management system the world has ever seen. Now that system needs reinvestments to take on the challenges of a new century. Unlike 100 years ago, we are now building on prior conservation lessons of the Passenger Pigeon.

FOREWORD

"The pigeon was no mere bird, he was a biological storm." —Aldo Leopold

Since 1968, the grasslands indicator for 24 obligate breeding birds has declined by nearly 60%, with 34% of 2020’s indicator dropping below 5%. This significant decline reflects the efforts made in grassland bird conservation. Reductions in Farm Bill conservation funding over the past decade may be driven by large-scale agricultural conversion and urban and ex-urban development, changes in natural disturbance regimes including fire, and exotic insect pests and diseases.

Conservation works! Support with the Natural Fish and Wildlife Foundation and NRCS Working Lands for Wildlife initiative, state and private partners within the Appalachian Mountains Joint Venture have created 28,000 acres of early successional forest for Golden-winged Warbler and American Woodcock. Similarly, Klamath Siskiyou Oak Network partners have restored 6,000 acres of public–private partnerships creating important habitat for declining forest birds.

The wetlands indicator for 13 obligate freshwater breeding birds has increased by 32%, with a continued steady decline since 1999. Species dependent on either young forests (such as Golden-winged Warbler and Eastern Towhee) or mature forests (such as MacGillivray’s Warbler) and mature forest species (such as Pinyon Jay) are showing the steepest declines. Because 84% of eastern forests are privately owned, timber companies and other forest owners can greatly benefit bird populations by maintaining large forest blocks and participating in sustainable forest management practices that benefit both cattle and grouse. The BLM has restored 14,000 acres of wetland habitat on federal public lands. Mitigation and other wetland protection and enhancement initiatives are needed to enable these birds to persist despite ongoing pressures, such as urbanization, which may fragment wetlands and also drive species to the north. These declines are part of a larger trend observed within the Conservancy’s bird indicators—see our approach for description of bird population indicators.
COASTS Rising wintering populations along seashores.

The coasts indicator for 30 bird species that winter along U.S. coasts has steadily risen 28% above the baseline assessment in 1968, with an 8% rise over the past five years—a testament to the wise investments into more than 160 coastal national wildlife refuges and 995,000 acres of national wilderness in 10 states. Nevertheless, birds along America’s coastlines face threats from development, increased recreation use, and rising sea levels due to climate change.

Along the Pacific Coast, Black Turnstones and Black Oystercatchers show encouraging population increases. However, human-caused alterations in their foraging and breeding areas negatively affecting California populations of wintering Dunlins and threatened resident populations of Snowy Plovers.

Along the Gulf of Mexico, the Deepwater Horizon oil spill affected Black Skimmers and Wilson’s Plovers. Two coastal species already in decline; Deepwater Horizon-related funding will be critical to address environmental damage from the oil spill in a timely manner. Meanwhile, Gulf coastal wetland loss continues; coastal habitats will need additional conservation measures to mitigate loss and sea level rise.

Birds along the Atlantic Coast are squeezed for habitat in this densely populated area of the U.S. Additionally, coastal engineering projects—such as sea walls being built to defend against storm surges and floodwaters—can have an impact on foraging, breeding, and roosting areas for species such as Piping Plover and bald murrelets such as Saltonstall’s Petrel.

Conservation works!

Coastal bird populations are facing the threat of loss for the best reasons to rising waters. The U.S. Fish and Wildlife Service, New York Audubon, and the Jamestown-Yorktown Foundation are working together to protect endangered Flying Pigeons, and the projects are fighting for more habitat protection. The Superstorm Sandy Hurricane would test this area the next time it occurs in an extreme storm.

Conservation works!

In response to alarming declines among Atlantic Flyway shorebird populations, the USFWS, National Fish and Wildlife Foundation, and other conservation groups launched a National Shorebird Strategy. The strategy uses a business planning model to find ways to meet the needs of shorebirds. Migrated investments in priority action areas have already resulted in recovery for species like Black Skimmers and Oystercatchers and increased recovery across the species, the predominant cause for this rising line in the graph in the difference in numbers.

AMERICA’S BIRD HABITATS: OCEANS, COASTS, ISLANDS

OCEANS

Many seabirds face severe threats; marine protected areas and a fishing treaty can help birds on the ocean.

Because oceans are vast habitats, there isn’t enough broad bird survey data for accurate habitat indicators. However, regional surveys and research identify important habitat for seabirds, as well as potential threats—including fishing operations that deplete fish stocks, offshore energy development (thermal power generation and gas and mineral exploration), and oil spills in critical marine foraging habitats.

In the North Atlantic, colony counts of some species (such as Northern Gannets) indicate trends in seabird populations. Often (such as Arctic Terns in the Gulf of Maine) have shown long declines linked to changing productivity and changes in availability of prey fish stocks, due to changing ocean temperatures.

In Alaskan waters, USFWS surveys mostly show stable to increasing seabird populations in northeast Alaska, though Aukhion and Kittlitz’s Murrelet populations are in steep decline. Point Blue Conservation surveys in the Aleutian Islands and Maritime Surveys show Common Murre, Pigeon Guillemot, and Cassin’s Auklet populations have recovered from past breeding failures. However, Band-tailed Pigeons and Western Gulls have suffered severe population declines, signaling the depletion of important prey species such as anchovy and sardine.

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The State of the Watch List contains the 230 species most in need of conservation action. This year’s list includes some bird species that despite stark threats of overfishing, habitat loss, and climate change, are not on the federal lists. Climate change will also alter the food availability of wintering and breeding shorebirds, as well as cause extinction loss of key habitats. 

In the Northeastern Hawaiian islands, nesting habitat for seabirds continues to decline. The future of these species are threatened by rising sea levels, coastal development, and climate change, in the form of rising sea levels and stronger cyclones. 

The state of the Watch List contains the 230 species most in need of conservation action, these are the birds headed the way of the Passenger Pigeon and other now-extinct American birds, such as the Carolina Parakeet and South Hen. Watch List birds must criteria for a high risk of population decline, small geographic range, and small population size. 

The neotropical Watch List species are Neotropical migrant songbirds that breed in North America and migrate to South America. 

**Preventing Extinctions**

Shorebirds are among the most threatened groups of North American birds. Many have their own unique migration routes. Many of the Watch List, including beach-nesting Piping and Wilson’s plovers, are at risk of disappearing. Many of these shorebirds are in need of habitat restoration, some coastal and freshwater wetlands, and upland wildlife refuges. The small size of many shorebird populations, their tendency to concentrate in small areas, and their migratory nature makes them particularly vulnerable. 

**Seabirds**

The 42 Watch-list seabird species face acute and chronic threats, including habitat loss and climate change that do not just affect a single species. Coffee-growing landscapes, including endangered Piping Plover and Whooping Crane, are connected to and at risk of loss of the seabird populations of Sandwich’s Storm Petrel. Reddit Eagle. Many of these animals are not seen along our southern coasts, while Wolly’s and Double-crested Cormorant are of conservation concern. 

**Coastal**

The small size of many shorebird populations, their tendency to concentrate in small areas, and the fact that many of these species are important reservoirs of evolution. Genetic variability reduces species that created breeding habitat on U.S. islands and other pollution, and more recently from coastal development and disturbance, oil spills, and other pollution. 

**Neotropical Migrants**

Thirty Watch List seabird species face acute and chronic threats, including habitat loss and climate change that do not just affect a single species. Many of these species are important reservoirs of evolution. Genetically distinct populations within a single species, including populations of fewer than 5,000 individuals, including Palila and Alapai. 

**Arildlands / Grasslands**

Thirty Watch List species are special birds of grasslands, shrublands, and chapar. These Watch List species are threatened by habitat loss and climate change. Many of these species are important reservoirs of evolution. Genetic variability reduces species that created breeding habitat on U.S. islands and other pollution, and more recently from coastal development and disturbance, oil spills, and other pollution. 

**Hawaiian Forest**

All 32 native Hawaiian forest bird species are on the Watch List (2) and are federally endangered. These Watch-list species are an essential component of the world’s forests that have had their limited habitat further reduced by deforestation and climate change. Many of these species are important reservoirs of evolution. Genetic variability reduces species that created breeding habitat on U.S. islands and other pollution, and more recently from coastal development and disturbance, oil spills, and other pollution. 

**Distinct Populations**

Generally distinct populations within a single species are important reservoirs of evolution. Genetic variability reduces species that created breeding habitat on U.S. islands and other pollution, and more recently from coastal development and disturbance, oil spills, and other pollution.
America’s resident gamebirds are some of our most familiar and widespread birds, ranging from 2–3 billion birds to none in the wild in just 40 years. Keeping common birds common, while we still can, is an important goal of many conservationists of rare species.

Though wildlife birds are doing well overall, Black-footed and Northern Pintail are two species that do not meet watch List criteria. These birds depend on special wetland environments—wetlands that we have lost as they are largely not protected by the Clean Water Act. From 1997 to 2009, total wetland area in the U.S. has shifted toward larger operations and away from pasturing practices, which has reduced habitat for these species. In the West and Southern Plains, Scaled Quail is exhibiting broad population declines across major portions of its range. For example, Northern Bobwhite has benefitted from efforts and has increased its range in some areas, yet its declining steeply elsewhere. The best ways to reduce bird mortality include:

### CATTs: Keeping pet cats indoors and implementing policies to eliminate feral cat colonies.

### CONFLUENTS: Following bird-friendly urban practices, educating residents to avoid right lighting in and tall buildings, evening auto drivers in height collision areas, installing flashing rather than steady-burning lights on communication towers, and locating wind turbines away from areas of high bird concentration (especially areas that pose threats to particular species such as eagles).

### CHEMICALS: Limiting the broadcast spraying of pesticides and introducing integrated pest management practices (which reduce or eliminate chemical application) in agricultural areas.

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**NORTHERN VISITORS**

Birds that are absent today can undergo a massive population collapse with surprising rapidity. Pennsylvania has witnessed more than 2 billion birds in the 1960s to none in the wild in just 40 years. Keeping common birds common, while we still can, is an important goal of many conservationists of rare species.

Today there are 23 common bird species that do not meet Watch List criteria, yet are rapidly declining in many areas. (See the full list at www.stateofthebirds.org). These birds combine have lost hundreds of millions of breeding individuals over the past four decades. Most common birds in steep decline fall within five categories that indicate larger environmental trends. Addressing the conservation of these birds might result in healthier, more productive lands and waters for other birds, as well as for people.

### Gamebirds

Gamebirds are a group of birds that include pheasants, quails, and partridges. They are known for their colorful plumage and unique calls. Gamebirds are an important part of the ecosystem, providing food and habitat for many other species. However, they are facing various threats, including habitat loss, hunting, and competition with non-native species.

### Aerial Insectivores

Aerial insectivores are birds that feed on insects while in flight. They are known for their fast and agile flight patterns, which allow them to catch insects in mid-air. They play a crucial role in controlling insect populations and maintaining ecological balance.

### Rural Landscapes

Rural landscapes are characterized by vast expanses of open fields and forests. They are home to a diverse range of wildlife, including gamebirds, aerial insectivores, and other species. These landscapes are facing threats from habitat loss, fragmentation, and climate change.

### Prairie Wetlands

Prairie wetlands are a critical part of the ecosystem, providing habitat for a wide range of wildlife, including gamebirds and aerial insectivores. They are facing threats from development, agriculture, and climate change.

### Additional Drivers of Bird Declines

Habitat loss is by far the greatest cause of bird population declines. Humans also kill billions of birds in the U.S. annually through more direct actions, such as allowing outdoor cats to eat any birds. Common birds rarely undergo such noteworthy similarities. Data-driven assessments of how different human causes impact bird mortality contribute to population decline as essential for developing strategic conservation objectives and science-based policies.

Reducing or eliminating direct sources of mortality could save millions, if not billions, of birds annually. The best ways to reduce bird mortality include:

- **CATTs**: Keeping pet cats indoors and implementing policies to eliminate feral cat colonies.
- **CONFLUENTS**: Following bird-friendly urban practices, educating residents to avoid right lighting in and tall buildings, evening auto drivers in height collision areas, installing flashing rather than steady-burning lights on communication towers, and locating wind turbines away from areas of high bird concentration (especially areas that pose threats to particular species such as eagles).
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**Bar chart based on independent assessments of direct human-caused mortality in the United States.**

**Note:** The value is the estimated number of birds killed per year across the U.S. and Canada. This data is consistent with studies from various sources, including U.S. Fish and Wildlife Service, Environment Canada, and the World Wildlife Fund. The numbers reflect the latest available data and are subject to change as new research is conducted.
The population crash of the Passenger Pigeon was a result of relentless harvest for its human eye. Americans in the late-19th century could see that the great Passenger Pigeon flocks were growing thinner. But without a mechanism for population monitoring, there was no widespread recognition that the population was in full collapse.

Today scientists have such data sets for ecological monitoring. The future growth of the populations can be monitored. Allowing scientists to inventory bird populations, just as a business takes stock of its assets. Continuous monitoring, with years of data for comparison, makes it possible for scientists to gauge population fluctuations. The indicators and assessments in this and previous State of Birds reports were made possible by long-term, consistent monitoring, such as the Breeding Bird Survey, Christmas Bird Count, and others. Much of this data is now available to the public and all scientists through the Avian Knowledge Network.

Once declines are detected, causes must be diagnosed and steps taken to reverse trends in research technologies (such as geolocators small enough to fit on a songbird’s back) provide new ways to study birds not possible a decade ago. By locating where the troubles are (an breeding or wintering grounds, and how each affects the same species) and what physical phenomena play a role (such as climate change), scientists can pinpoint the limiting factors in a bird population. One of which comes the prescription for recovery. Investments in monitoring and research pay for themselves with smarter conservation that’s effective and cost-efficient—the kind that keeps species off the list. Responding to early-warning signals is far more cost effective and efficient than administering emergency care. The Passenger Pigeon is gone, but we’ve learned that bold action fly as waves of ducks and geese that course along our country’s flyways.

Today, though, our conservation dollars are stretched thin, as the problems are more complex. Climate change poses pervasive threats (changing seasonal temperatures, precipitation patterns, and water levels) that mandate full landscape management. Our challenge now is to protect the entire ecological fabric, not just individual threads. It’s time to build on the successes of the past century by updating existing revenue streams (by reevaluating a Duck Stamp tax that has not changed since 1959) and expanding the funding base beyond hunter-generated dollars. The $4 billion birds in America could be a more powerful source of conservation funding.

Wildlife management in this century took a new direction in the mid-20th century. As successful as the Endangered Species Act has been, millions of acres of the most valuable Bird legs have still not been rescued. Bald Eagles and remaining fish species to prevent extinctions, it’s time to build on the successes of the past century.
To assess the health of bird populations, we used data from several continental-scale surveys. The North American Breeding Bird Survey, the U.S. Fish and Wildlife Service’s Spring Breeding Ground Waterfowl Survey, and the American Woodcock Singing-ground Survey. A new indicator was developed from monitoring data of migrating shorebirds, using the Audubon Christmas Bird Count, the U.S. Fish and Wildlife Service’s Spring Breeding Ground Waterfowl Survey, and the American Woodcock Singing-ground Survey. These surveys were designed to assess the status of birds in North America and were first used in the 2009 State of the Birds report.

To assess species for inclusion on the Watch List, a NABCI team reviewed the conservation status of more than 800 bird species in the continental U.S., Hawai‘i, U.S. territories, and the U.S. Virgin Islands, and other U.S. island territories. The team drew on data from long-term monitoring surveys, regional assessments, and expert knowledge of species’ populations and threats to conservation status. A complete listing of Watch List species and distinct populations is available on the State of the Birds website (www.stateofthebirds.org).

To track change in U.S. bird populations, we used information from the North American Breeding Bird Survey, the Audubon Christmas Bird Count, the U.S. Fish and Wildlife Service’s Spring Breeding Ground Waterfowl Survey, and the American Woodcock Singing-ground Survey. A new indicator was developed from monitoring data of migrating shorebirds, using the Audubon Christmas Bird Count, and eBird. Without their efforts, we would not have the understanding of bird population trends that we do today. We thank the thousands of dedicated bird watchers who volunteer their time and efforts to make this work possible.

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nABOu NAncI aND tHe U.S. StATEs oF tHE BiRDS REPORtS

Russ Greenberg was one of the key scientists in the historic field of conservation biology who became alarmed by tropical deforestation. In response, he proposed the idea of the “Birds of Paradise Project” to conserve a coffee as a bird-friendly product. He believes it’s time for companies to consider the needs of threatened species and to take action in their supply chains to support conservation biology.

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