

RESOLUTION AUTHORIZING AND APPROVING A MEMORANDUM OF UNDERSTANDING WITH THE U.S. ARMY CORPS OF ENGINEERS, THE FOREST PRESERVE DISTRICT OF COOK COUNTY, THE U.S. FISH & WILDLIFE SERVICE, AUDUBON CHICAGO REGION AND ILLINOIS NATURE PRESERVES COMMISSION RELATED TO SPRING CREEK VALLEY

WHEREAS, the Village of Barrington Hills (“Barrington Hills”) located in the Counties of Cook, Kane, Lake and McHenry in the State of Illinois, is a home rule municipality; and

WHEREAS, the U.S. Army Corps of Engineers (“Corps”), the Forest Preserve District of Cook County (“FPDCC”), the U.S. Fish & Wildlife Service (“USFWS”), Audubon Chicago Region (“Audubon”), and Illinois Nature Preserves Commission (“INPC”) desire to cooperate with Barrington Hills in efforts to promote the restoration and conservation of Spring Creek Valley’s significant biological diversity; and

WHEREAS, the President and Board of Trustees of Barrington Hills deem it advisable, necessary, appropriate, and in the public interest and find that it would best serve the public and corporate purposes for Barrington Hills to enter into a Memorandum of Understanding among Barrington Hills, the Corps, FPDCC, USFWS, Audubon, and INPC (the “MOU”) a copy of which is attached hereto and expressly made a part hereof as Exhibit A.

NOW, THEREFORE, BE IT RESOLVED by the President and Board of Trustees of the Village of Barrington Hills, located in the Counties of Cook, Kane, Lake and McHenry in the State of Illinois, a home rule municipality as follows:

Section 1: Recitals. The foregoing recitals are hereby incorporated into this Resolution as findings of the President and Board of Trustees.

Section 2: Authorization. The President and Board of Trustees hereby authorize and approve the execution of the MOU substantially in the form attached hereto and made part hereof as Exhibit A.

Section 3: Execution and Delivery. The President and Village Clerk of the Village of Barrington Hills are hereby authorized and directed to execute and deliver to all of the other parties, the MOU substantially in the form of Exhibit A and to do all things necessary and essential, including the execution of any other documents and certificates to accomplish the agreement hereinabove authorized and set forth in the MOU.

Section 4: Effective Date. This Resolution shall be in full force an effect from and after its approval and publication according to law.

APPROVED THIS ____ day of _____, 2011

AYES: _____ NAYS: _____ ABSENT: _____

ATTEST:

Village Clerk

Village President

EXHIBIT A
MEMORANDUM OF UNDERSTANDING



DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
111 NORTH CANAL STREET
CHICAGO IL 60606-7206

MEMORANDUM OF UNDERSTANDING
BETWEEN
THE U.S. ARMY CORPS OF ENGINEERS, CHICAGO DISTRICT,
FOREST PRESERVE DISTRICT OF COOK COUNTY,
U.S. FISH & WILDLIFE SERVICE,
AUDUBON CHICAGO REGION,
ILLINOIS NATURE PRESERVES COMMISSION,
AND
VILLAGE OF BARRINGTON HILLS

1. **PURPOSE.** The purpose of this Memorandum of Understanding (MOU) is to provide a foundation for collaboration related to the protection, restoration, and management of Spring Creek Valley in Cook County, Illinois, of mutual interest to the Forest Preserve District of Cook County (FPDCC), U.S. Fish & Wildlife Service (USFWS), Audubon Chicago Region (Audubon), Illinois Nature Preserves Commission (INPS), Village of Barrington Hills (Village), and the U.S. Army Corps of Engineers, Chicago District (Corps). Activities carried out pursuant to this MOU will contribute to fulfilling natural resources stewardship objectives, and protecting and restoring habitats and ecosystems of value to birds, fish and other wildlife within the context of the Spring Creek Valley Section 206 Aquatic Ecosystem Restoration project, and in accordance with applicable laws, regulations, Army policies, and the following objectives:

- a. Promote hydrological restoration, invasive species removal, and other measures to restore and/or maintain natural ecosystem functions at sustainable levels;
- b. Encourage restoration measures that benefit migratory and resident birds, fish, other wildlife, native plants and natural communities;
- c. Monitor and document restoration efforts;
- d. Promote the gathering and sharing of scientific data and research by either entity as related to the Spring Creek Valley Section 206 project;
- e. Cooperate in public information and education efforts about Spring Creek Valley's natural resources and benefits for humanity and the region's biological diversity.

2. **RESPONSIBILITIES.** The Corps, FPDCC, USFWS, Audubon, INPS, and the Village will seek opportunities to cooperate in efforts to promote the restoration and conservation of Spring Creek Valley's significant biological diversity in accordance with applicable laws, regulations, and Army policies.

The parties, subject to the availability of resources and in accordance with applicable laws, regulations, and Army policies, will seek to:

- a. Make available to all parties, to the extent legal and practicable and as appropriate and required to accomplish the goals of this MOU, existing information on the management of plants, birds, fish and other wildlife at Spring Creek Valley;

b. Consider opportunities, as appropriate, for partnering initiatives with all parties, including ecosystem restoration, education, and recreation;

c. Provide access to Spring Creek Valley, as appropriate, to further the purpose of this MOU, subject to management plans, safety and security considerations, and compatibility with Corps operations;

d. Provide appropriate on-site recognition of all parties involvement in ecosystem restoration and/or management activities; and

e. As appropriate, enter into partnership agreements for endeavors to accomplish specific educational, habitat protection or restoration, or research projects.

3. **GENERAL PRINCIPLES.** It is mutually agreed and understood by the parties that:

a. This MOU is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement or contribution of funds between the parties to the MOU will be handled in accordance with applicable laws, regulations, and procedures. Such endeavors, if any, will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This MOU does not provide such authority. Specifically, this MOU does not establish authority for the noncompetitive award of any contract or other agreement.

b. This MOU is intended only to improve cooperation between the Corps, FPDCC, USFWS, Audubon, INPS, and the Village, and is not intended to create any right or benefit, substantive or procedural, enforceable at law by any party against the United States, its agencies, its officers, or any person.

c. Nothing in this MOU shall be construed as affording the FPDCC, USFWS, Audubon, INPS, or the Village any preferential treatment, exclusive rights, or privileges.

d. The Corps, FPDCC, USFWS, Audubon, INPS, and the Village intend to conduct the activities contemplated in this agreement in accordance with existing authorities. If any provisions of this MOU are determined to be inconsistent with existing laws or regulations or directives governing the signatories, then the provisions of this MOU not affected by a finding of inconsistency shall remain in full force and effect.

e. This MOU in no way restricts the parties from participating with other public or private agencies, organizations, and individuals. All parties recognize the importance of continuing cooperation and participation with governmental and non-governmental organizations and institutions in programs of mutual interest.

f. This MOU may be modified as necessary, by mutual agreement of both parties, by a written amendment signed and dated by an authorized representative of each party.

g. Any party may terminate this MOU by providing 45 days written notice to the others. Otherwise, this MOU will remain in force indefinitely.

4. **EFFECTIVE DATE.** The parties have executed this MOU as of the last date written below.

U.S. ARMY CORPS OF ENGINEERS,
CHICAGO DISTRICT

FOREST PRESERVE DISTRICT OF
COOK COUNTY

Vincent Quarles
Colonel, U.S. Army
District Commander

Arnold Randall
General Superintendent
Forest Preserve District of Cook County

Date _____

Date _____

U.S. FISH & WILDLIFE SERVICE

ILLINOIS NATURE PRESERVES
COMMISSION

Louise Clemency
Field Supervisor
U.S. Fish & Wildlife Service
Chicago, Illinois, Field Office

Steven Byers
Field Representative
Illinois Nature Preserves Commission

Date _____

Date _____

VILLAGE OF BARRINGTON HILLS

AUDUBON CHICAGO REGION

Robert Kosin
Director of Administration
Village of Barrington Hills

Stephen Packard
Director
Audubon Chicago Region

Date _____

Date _____

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release

April 16, 2010

April 16, 2010

MEMORANDUM FOR THE SECRETARY OF THE INTERIOR
THE SECRETARY OF AGRICULTURE
THE ADMINISTRATOR OF THE ENVIRONMENTAL
PROTECTION AGENCY
THE CHAIR OF THE COUNCIL ON ENVIRONMENTAL QUALITY

SUBJECT: A 21st Century Strategy for America's
Great Outdoors

Americans are blessed with a vast and varied natural heritage. From mountains to deserts and from sea to shining sea, America's great outdoors have shaped the rugged independence and sense of community that define the American spirit. Our working landscapes, cultural sites, parks, coasts, wild lands, rivers, and streams are gifts that we have inherited from previous generations. They are the places that offer us refuge from daily demands, renew our spirits, and enhance our fondest memories, whether they are fishing with a grandchild in a favorite spot, hiking a trail with a friend, or enjoying a family picnic in a neighborhood park. They also are our farms, ranches, and forests -- the working lands that have fed and sustained us for generations. Americans take pride in these places, and share a responsibility to preserve them for our children and grandchildren.

Today, however, we are losing touch with too many of the places and proud traditions that have helped to make America special. Farms, ranches, forests, and other valuable natural resources are disappearing at an alarming rate. Families are spending less time together enjoying their natural surroundings. Despite our conservation efforts, too many of our fields are becoming fragmented, too many of our rivers and streams are becoming polluted, and we are losing our connection to the parks, wild places, and open spaces we grew up with and cherish. Children, especially, are spending less time outside running and playing, fishing and hunting, and connecting to the outdoors just down the street or outside of town.

Across America, communities are uniting to protect the places they love, and developing new approaches to saving and enjoying the outdoors. They are bringing together farmers and ranchers,

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land trusts, recreation and conservation groups, sportsmen, community park groups, governments and industry, and people from all over the country to develop new partnerships and innovative programs to protect and restore our outdoors legacy. However, these efforts are often scattered and sometimes insufficient. The Federal Government, the Nation's largest land manager, has a responsibility to engage with these partners to help develop a conservation agenda worthy of the 21st Century. We must look to the private sector and nonprofit organizations, as well as towns, cities, and States, and the people who live and work in them, to identify the places that mean the most to Americans, and leverage the support of the Federal Government to help these community-driven efforts to succeed. Through these partnerships, we will work to connect these outdoor spaces to each other, and to reconnect Americans to them.

For these reasons, it is hereby ordered as follows:

Section 1. Establishment.

(a) There is established the America's Great Outdoors Initiative (Initiative), to be led by the Secretaries of the Interior and Agriculture, the Administrator of the Environmental Protection Agency, and the Chair of the Council on Environmental Quality (CEQ) and implemented in coordination with the agencies listed in section 2(b) of this memorandum. The Initiative may include the heads of other executive branch departments, agencies, and offices (agencies) as the President may, from time to time, designate.

(b) The goals of the Initiative shall be to:

(i) Reconnect Americans, especially children, to America's rivers and waterways, landscapes of national significance, ranches, farms and forests, great parks, and coasts and beaches by exploring a variety of efforts, including:

(A) promoting community-based recreation and conservation, including local parks, greenways, beaches, and waterways;

(B) advancing job and volunteer opportunities related to conservation and outdoor recreation; and

(C) supporting existing programs and projects that educate and engage Americans in our history, culture, and natural bounty.

(ii) Build upon State, local, private, and tribal priorities for the conservation of land, water, wildlife, historic, and cultural resources, creating corridors and connectivity across these outdoor spaces, and for enhancing neighborhood parks; and determine how the Federal Government can best advance those priorities through public private partnerships and locally supported conservation strategies.

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(iii) Use science-based management practices to restore and protect our lands and waters for future generations.

Sec. 2. Functions. The functions of the Initiative shall include:

(a) Outreach. The Initiative shall conduct listening and learning sessions around the country where land and waters are being conserved and community parks are being established in innovative ways. These sessions should engage the full range of interested groups, including tribal leaders, farmers and ranchers, sportsmen, community park groups, foresters, youth groups, businesspeople, educators, State and local governments, and recreation and conservation groups. Special attention should be given to bringing young Americans into the conversation. These listening sessions will inform the reports required in subsection (c) of this section.

(b) Interagency Coordination. The following agencies shall work with the Initiative to identify existing resources and align policies and programs to achieve its goals:

- (i) the Department of Defense;
- (ii) the Department of Commerce;
- (iii) the Department of Housing and Urban Development;
- (iv) the Department of Health and Human Services;
- (v) the Department of Labor;
- (vi) the Department of Transportation;
- (vii) the Department of Education; and
- (viii) the Office of Management and Budget (OMB).

(c) Reports. The Initiative shall submit, through the Chair of the CEQ, the following reports to the President:

- (i) Report on America's Great Outdoors. By November 15, 2010, the Initiative shall submit a report that includes the following:
 - (A) a review of successful and promising nonfederal conservation approaches;
 - (B) an analysis of existing Federal resources and programs that could be used to complement those approaches;
 - (C) proposed strategies and activities to achieve the goals of the Initiative; and
 - (D) an action plan to meet the goals of the Initiative.

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The report should reflect the constraints in resources available in, and be consistent with, the Federal budget. It should recommend efficient and effective use of existing resources, as well as opportunities to leverage nonfederal public and private resources and nontraditional conservation programs.

(ii) Annual reports. By September 30, 2011, and September 30, 2012, the Initiative shall submit reports on its progress in implementing the action plan developed pursuant to subsection (c)(i)(D) of this section.

Sec. 3. General Provisions.

(a) This memorandum shall be implemented consistent with applicable law and subject to the availability of any necessary appropriations.

(b) This memorandum does not create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

(c) The heads of executive departments and agencies shall assist and provide information to the Initiative, consistent with applicable law, as may be necessary to carry out the functions of the Initiative. Each executive department and agency shall bear its own expenses of participating in the Initiative.

(d) Nothing in this memorandum shall be construed to impair or otherwise affect the functions of the Director of the OMB relating to budgetary, administrative, or legislative proposals.

(e) The Chair of the CEQ is authorized and directed to publish this memorandum in the *Federal Register*.

BARACK OBAMA

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THE STATE OF THE BIRDS 2011
REPORT ON PUBLIC LANDS AND WATERS
United States of America



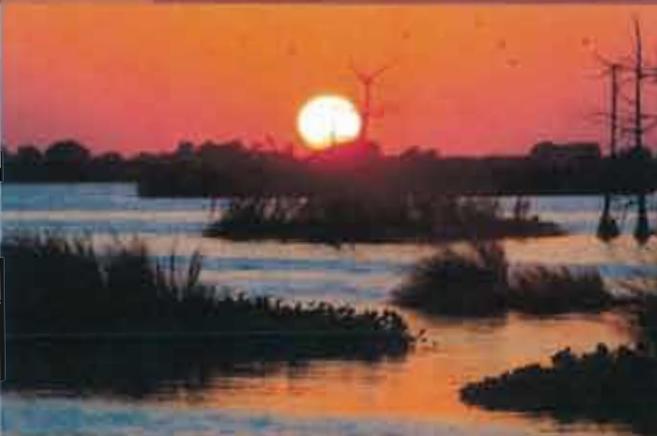


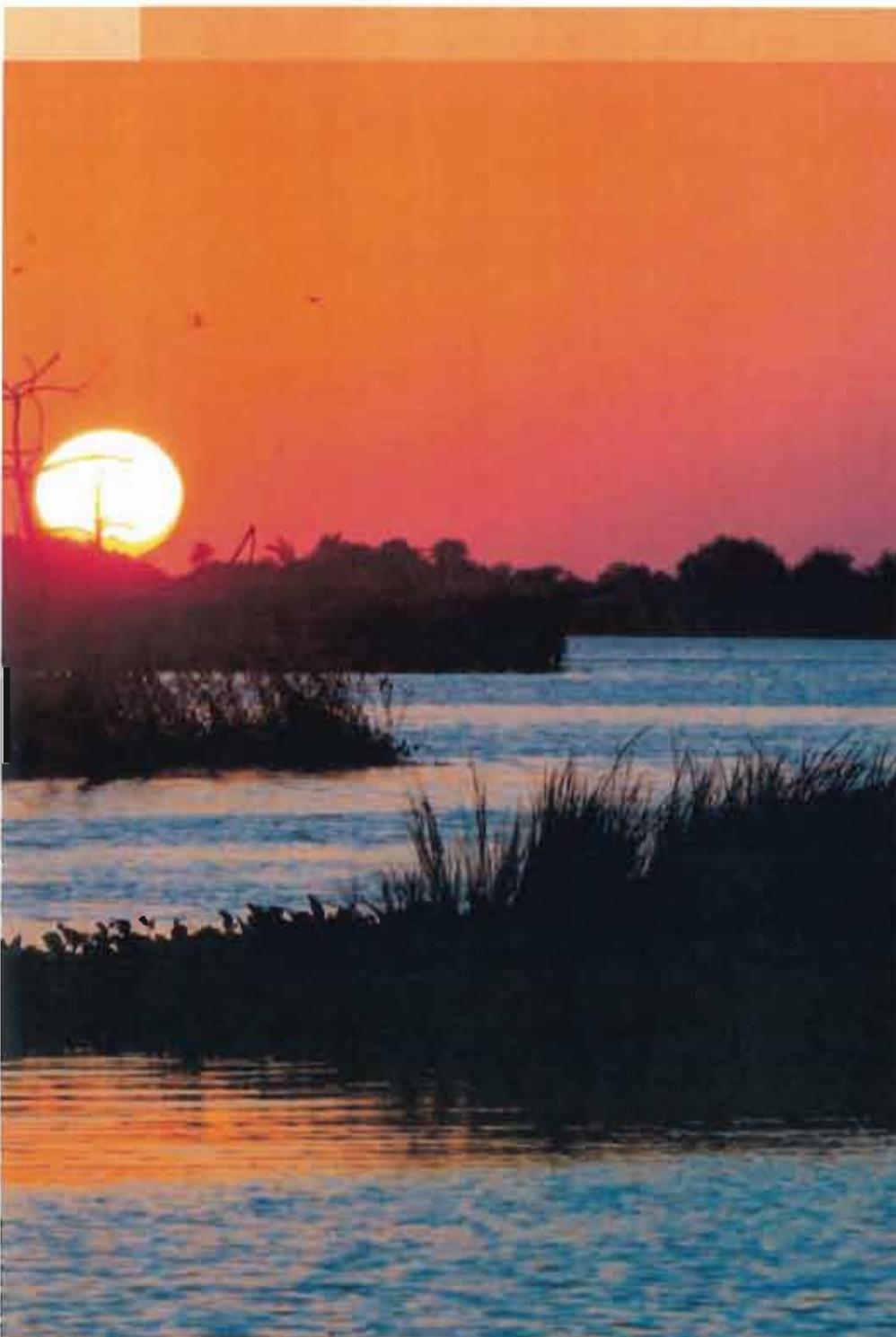
University of Idaho

The **Cornell** Lab of Ornithology



North American Waterfowl Management Plan





“Birds should be saved for utilitarian reasons; and, moreover, they should be saved because of reasons unconnected with dollars and cents... The extermination of the Passenger Pigeon meant that mankind was just so much poorer... And to lose the chance to see frigate-birds soaring in circles above the storm, or a file of pelicans winging their way homeward across the crimson afterglow of the sunset, or a myriad of terns flashing in the bright light of midday as they hover in a shifting maze above the beach—why, the loss is like the loss of a gallery of the masterpieces of the artists of old time.”

—Theodore Roosevelt, 1916

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COVER PHOTOS (CLOCKWISE FROM TOP LEFT): BAIT MARSH, LOUISIANA, BY GERRIE VYN; GREATER PRAIRIE-CHICKENS BY GERRIE VYN; ELEGANT TROGON BY GREG LAVATY; ROCKY MOUNTAIN NATIONAL PARK, COLORADO, BY GREG LAVATY; AUDUBON'S ORIOLE AND RUDDY DUCK BY GERRIE VYN. THIS PAGE: SUNSET OVER MISSISSIPPI RIVER DELTA, LOUISIANA, BY GERRIE VYN.

FOREWORD

Public Lands and Waters Are Essential for Birds

Each year, the State of the Birds report provides important scientific data to a broad audience with a call to action to improve the conservation status of birds and the environment. This year's report brings attention to the tremendous promise of public lands and waters for conserving America's wildlife and habitats. The United States has a long history of conservation on public lands. More than one-third of U.S. lands and all of our oceans are publicly owned, including some of our nation's most spectacular natural areas. These habitats support more than 1,000 bird species, one-third of which are endangered, threatened, or of conservation concern.

In 1864, President Abraham Lincoln established Yosemite as the first park set aside by the federal government specifically for public use and preservation. As environmental exploitation continued across unprotected lands, the Passenger Pigeon, once the world's most abundant bird, was driven to extinction in the wild by the turn of the century. Recognizing that this loss meant "mankind was just so much poorer," President Theodore Roosevelt championed the irreplaceable value of birds and other wildlife, and set aside 80 million acres for public land conservation, including the first National Wildlife Refuge in 1903.

Today, more than 850 million acres of land and 3.5 million square miles of ocean are publicly owned, including more than 245 million acres managed by the Bureau of Land Management, 6,000 State Park units, 1,600 Marine Protected Areas, 550 National Wildlife Refuges, 350 military installations, 150 National Forests, and nearly 400 National Park Service units. These areas support our native bird species, many of which are declining, as described in the 2009 and 2010 State of the Birds reports.

This year's report provides the nation's first assessment of the distribution of birds on public lands and helps public agencies identify which species have significant potential for conservation in each habitat. This assessment used high-performance computing techniques to analyze a massive data set on bird distribution from citizen-science participants across the U.S. (eBird), along with the first comprehensive database of public land ownership (Protected Areas Database of the U.S.).

The state of our birds is a measurable indicator of how well we are doing as stewards of our environment. The signal is clear. Greater conservation efforts on public lands and waters are needed to realize the vision of a nation sustained economically and spiritually by abundant natural resources and spectacular wildlife.



BICKNELL'S THRUSH NESTLINGS BY KENT MCFARLAND

President Obama's new initiative, "America's Great Outdoors," recognizes that throughout our nation's history, conservation actions have been grounded in the premise that our natural heritage belongs to the people, and that its protection is shared by all Americans. The call to action for bird conservation in this report goes hand in hand with "America's Great Outdoors," which empowers all Americans to share in the responsibility to conserve, restore, and provide better access to our lands and waters in order to leave a healthy, vibrant outdoor legacy for generations yet to come.

North American Bird Conservation Initiative, U.S. Committee
American Bird Conservancy
Association of Fish and Wildlife Agencies
Bureau of Land Management
Cornell Lab of Ornithology
Department of Defense/DoD Partners in Flight
Klamath Bird Observatory
National Audubon Society
National Oceanic and Atmospheric Administration
National Park Service
The Nature Conservancy
University of Idaho
U.S. Fish and Wildlife Service
USDA Forest Service
U.S. Geological Survey

OVERVIEW

The State of our Nation's Birds on Public Lands and Waters

Nearly 850 million acres of land and 3.5 million square miles of ocean in the U.S. are owned by the American people. These habitats are vital to more than 1,000 bird species in the U.S., 251 of which are federally threatened, endangered, or of conservation concern. More than 300 bird species have 50% or more of their U.S. distribution on public lands and waters. Public agencies therefore have a major influence on the success of conservation efforts to restore declining species and keep common birds common.

This report provides the nation's first assessment of the distribution of birds on public lands and the opportunities for public agencies in each habitat. We combined bird distribution data from the eBird citizen-science project with the Protected Areas Database of the U.S. to determine the percentage of each species' U.S. distribution on public lands. We focus on *habitat obligates*, those species restricted to a single primary habitat. We also did a qualitative analysis for birds in oceans, coasts, and wetlands.

The results highlight the critical role of public agencies in bird conservation as well as urgent needs for increased protection and management. Conservation and management of habitats and birds on public lands and waters, in partnership with private efforts, are essential to prevent the extinction of entire suites of island species, to buffer forest and aridland species from urban development and agriculture, to provide vital resources for severely declining ocean birds, and to balance our nation's need for resources from logging, mining, and energy extraction with conservation in all habitats.



SNOW GESE AT BOSQUE DEL APACHE NATIONAL WILDLIFE REFUGE, NEW MEXICO, BY MARIE READ

The Gold Standard: Wetlands Protection and Management

Our nation's acquisition and management of wetlands have contributed to a notable increase in wetland bird populations in the past 40 years. National Wildlife Refuges provide a network of 150 million acres managed for 700 bird species, including millions of ducks, geese, and shorebirds. The National Park Service and other public land managers in Florida protect the nation's largest freshwater marsh system, the Everglades, providing essential habitats for millions of wetland birds.

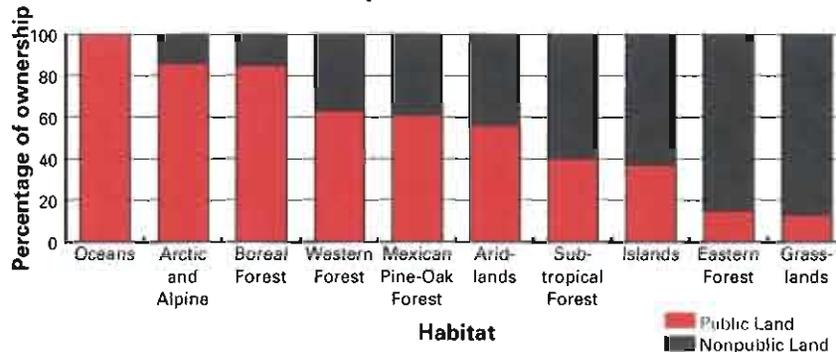
Oceans and Coasts: Vital Habitats for Birds

All U.S. marine waters are publicly owned and are home to 86 ocean bird species and 173 coastal species. Declining seabird and shorebird populations indicate stress in these ecosystems. Public agencies play an important role in conservation by managing threats such as invasive species on islands with nesting seabirds, interactions with fisheries, human disturbance and development, and pollution. More than 1,600 Marine Protected Areas conserve essential areas for many birds. Publicly owned islands and coasts provide protected areas for numerous birds of conservation concern.

Islands Essential for Nation's Most Endangered Birds

One-third of all birds listed under the Endangered Species Act occur in Hawai'i, more than anywhere else in the United States. Public lands are essential to save species that are in danger of extinction in Hawai'i, Puerto Rico, and other U.S. islands. Public lands in Hawai'i support 73% of the distribution of declining forest birds and the entire world populations of several endangered species. Intensive management is critical, such as removal of invasive species, especially on the 85% of state lands that are open to uses incompatible with bird conservation. In Puerto Rico, species such as the Puerto Rican Parrot would be extinct if not for their protection on federal and commonwealth forestland.

Public and Nonpublic Lands and Waters



Percentage of public and nonpublic ownership in primary habitats. Coasts and marshes are not depicted because of insufficient data.

Public Lands Protect Vast Arctic Tundra and Boreal Forests

Alaska has nearly as much public land as the rest of the U.S. combined. Arctic, alpine, and boreal forest-breeding birds in Alaska have more than 90% of their U.S. distribution on public lands, including 12 shorebird species. Although these vast public lands provide habitat for millions of birds, greater protections from habitat degradation are needed to ensure healthy bird populations, especially in lowland tundra, where only 6% of public land is protected to maintain natural habitats.

Stewardship Opportunities in Aridlands and Forests

Public lands support more than half of the U.S. distribution of aridland and western forest bird species during the breeding season, indicating enormous stewardship opportunities for public agencies. The Bureau of Land Management is the primary steward of habitat for Gunnison and Greater sage-grouse and other sagebrush-dependent species. The USDA Forest Service is the largest single manager of U.S. forests and supports at least 50% of the distribution of eight western forest species.

Grasslands Underrepresented on Public Lands

Grassland birds are among our nation's fastest declining species. The percentage distribution of grassland birds on public lands is low because such a small amount of U.S. grassland (less than 2%) is both publicly owned and managed primarily for conservation. Grassland bird conservation should be a higher priority on grasslands with multiple uses.

Eastern Forests Need Greater Protections from Development

Public lands in the East are often the largest blocks of remaining forest in rapidly developing urban landscapes. Expanding the network of protected lands is important for bird populations. National Parks, National Forests, and state-owned forests support core populations of eastern birds. Improved management is key for declining species that require young forests.

Public Agencies: Stewards of Our Nation's Birdlife

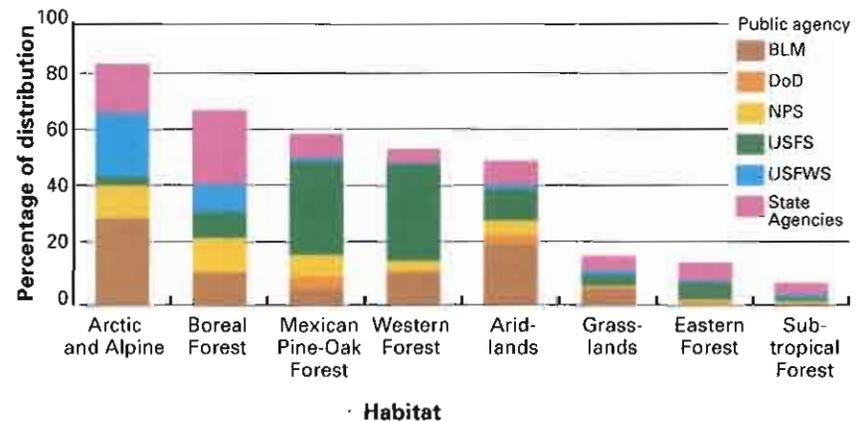
The vast acreages of public lands and waters, and proven successes in targeted conservation efforts, indicate tremendous promise for birds if management efforts can be amplified in all habitats. The Bureau of Land Management (BLM) manages 245 million acres from the arctic tundra to southwestern aridlands. The Department of Defense (DoD) manages more endangered and imperiled species per acre on its 30 million acres than any other federal agency. The National Oceanic and Atmospheric Administration (NOAA) manages coastal and deep ocean waters needed by some of

the world's most endangered seabird populations. The National Park Service (NPS) manages 88 million acres of public lands and waters in all major bird habitats across 394 units, including National Parks, National Monuments, National Seashores, and National Recreation Areas. State agencies manage 189 million acres, including more marsh than all other agencies combined. The USDA Forest Service (USFS) manages 193 million acres, 23% of which are protected to maintain habitats for birds. The U.S. Fish and Wildlife Service (USFWS) administers 553 National Wildlife Refuges that are essential for wetland birds, including many imperiled species.

Effective Management is Key to Healthy Bird Populations

Although birds benefit in part because most public lands are protected from residential and commercial development, increased protections and more effective management of habitats and bird populations are essential. Natural processes must be restored to ensure functional and resilient ecosystems through management actions such as control of nonnative species and diseases, prescribed cuts and burns to reinvigorate forests and grasslands, and water delivery and management to sustain wetlands. Many of these needs are expected to intensify because of climate change. All agencies are faced with the challenge of balancing needs for resource extraction, energy development, recreation, and other uses with the growing urgency to conserve birds and other wildlife. To succeed, they will need additional resources and greater public support to increase land protection and management. Better collaboration among agencies will also increase the effectiveness of public lands management for birds that migrate across political boundaries.

Bird Distribution on Public Lands



Percentage of the U.S. distribution of bird species dependent on public lands in each primary terrestrial habitat in the United States.

Department of Defense (DoD)



Mission: To ensure that all military departments have access to the land, sea, and air resources necessary to ensure realistic testing and training.

DoD Lands at a Glance

- Although DoD manages less than 5% of public lands, these 30 million acres are crucial to the long-term health of bird populations.
- DoD lands support more endangered and imperiled plant and animal species per acre than any other federal agency.
- Because most DoD lands were acquired before modern urban growth, these lands now represent the largest blocks of remaining bird habitats in many rapidly developing landscapes.
- DoD manages some of the highest quality bird habitat in eastern grasslands, California coastal sage, and longleaf pine and Mexican pine-oak forests.



COURTESY OF U.S. ARMY, FORT RILEY

Fort Riley (Kansas) manages the largest block of contiguous tallgrass prairie under single ownership—50,000 acres maintained by fires from military training and prescribed burns.

Stewardship of Birds

- Reestablishment and maintenance of open longleaf pine forests has benefited the endangered **Red-cockaded Woodpecker**, **Bachman's Sparrow**, **Brown-headed Nuthatch**, and other species.
- DoD lands are disproportionately important to southwestern pine-oak forest birds, including **Buff-breasted** and **Sulfur-bellied flycatchers**, **Elegant Trogon**, and **Berylline Hummingbird**.
- Army bases provide significant expanses of unbroken habitat crucial to area-sensitive grassland and prairie species, such as breeding **Henslow's Sparrow** and wintering **longspurs**.
- **Le Conte's** and **Crissal thrashers** thrive on DoD aridlands, which also provide vast expanses of wintering habitat for shrub-scrub species such as **Sage** and **Black-throated sparrows**. DoD lands such as Camp Pendleton support nearly half of all threatened **California Gnatcatchers** found on public lands.
- Beach-nesting species, including about 50% of the endangered **California Least Tern** population, use undeveloped beaches in southern California that are found largely on DoD lands.



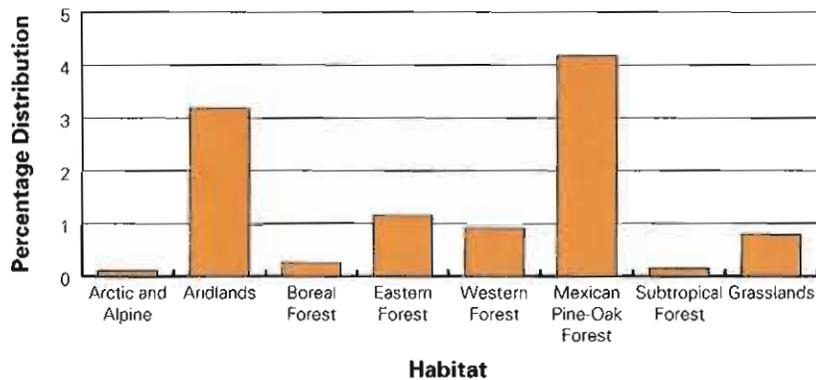
TOP TO BOTTOM: BROWN-HEADED NUTHATCH BY GREG LAVATY, BUFF-BREASTED FLYCATCHER BY CHRIS WOOD, HENSLOW'S SPARROW BY GREG LAVATY, LE CONTE'S THRASHER BY BRIAN SULLIVAN



CYRIS EBERLY

(Left) In California, Vandenberg Air Force Base maintains large, unbroken tracts of riparian habitat vital to many species of conservation concern, such as Nuttall's Woodpecker and Willow Flycatcher.

Distribution of Birds on DoD Lands



Percentage distribution of breeding bird species dependent on each habitat on DoD lands.

DoD and Bird Conservation

The Sikes Act requires the development and implementation of Integrated Natural Resources Management Plans for military installations. Prepared in cooperation with the USFWS and state fish and wildlife agencies, these plans integrate natural resources programs with military operations, training, and other programs such as master planning and cultural resources management.

DoD resource managers must balance their “compliance” mandate for listed species with the opportunity to help species with high stewardship potential before they become listed. DoD is cooperating with many public and private partners to identify and protect key habitats and species (e.g., longleaf pine, shortgrass prairie, Sonoran Desert; Rusty Blackbird, Cerulean Warbler, Northern Bobwhite, Florida Scrub-Jay) in the most cost-efficient ways possible. These efforts, plus regional partnerships (e.g., Southeast Regional Partnership for Planning and Sustainability), help DoD to maintain maximum flexibility to use its lands for mission testing and training while also ensuring the long-term health of its natural resources.

DoD will continue to explore innovative tools and technologies (radar, acoustic monitoring, geolocators, etc.) to monitor birds in inaccessible or dangerous habitats and better understand migratory connectivity to nonbreeding habitats outside the United States.

Conservation in Action

Red-cockaded Woodpecker Recovery

Prior to European settlement, more than 3 million Red-cockaded Woodpeckers nested in 90 million acres of southern longleaf pine savannas. Timber harvesting, settlement and urbanization, and fire suppression reduced longleaf ecosystems to less than 2 million acres. By 1973, the woodpecker population dropped to below 10,000.

DoD-managed lands support more than a quarter of the endangered Red-cockaded Woodpecker population in southern pine forests and have been critical for the recovery of this species. Implementation of prescribed fires, planting of seedlings, and provision of artificial nest cavities are helping recover fire-dependent longleaf ecosystems and woodpecker populations.

Army bases and Eglin Air Force Base (Florida) contributed most of the population increases in the 1990s. Fort Bragg (North Carolina) was the first public land unit to reach the population recovery goal of 350 nesting clusters, a 50% increase to its 1973 population. The North Carolina Sandhills Conservation Partnership and the Private Lands Initiative are models of public-private collaboration that have benefited Fort Bragg and this endangered species.



RED-COCKADED WOODPECKER BY GREG LAVATY

U.S. Fish and Wildlife Service (USFWS)



Mission: To work with others to conserve, protect, and enhance fish, wildlife, and plants, and their habitats, for the continuing benefit of the American people.

USFWS Lands at a Glance

- USFWS manages 553 National Wildlife Refuges and approximately 7,000 Waterfowl Production Areas, which conserve about 150 million acres from the southern Caribbean to the northernmost tip of Alaska across the Pacific Ocean to Japan.
- The first federal land stewardship effort to protect birds came in 1903 when President Theodore Roosevelt established Florida's Pelican Island as the first National Wildlife Refuge (NWR). Today, the National Wildlife Refuge System is the nation's most extensive network of public lands and waters with the primary mission to conserve wildlife and natural habitats.
- The 76.8 million acres conserved in Alaska on 16 National Wildlife Refuges, including the Arctic National Wildlife Refuge, conserves an unbroken continuum of arctic and subarctic ecosystems, including tundra, boreal forest, wetlands, and coasts.
- The National Wildlife Refuge System manages 180 marine or coastal wildlife refuges, including more than 20 million coastal acres and 30,000 coastal miles, and 7 million ocean acres, of which almost 3 million are in coral reef ecosystems.



ARCTIC NATIONAL WILDLIFE REFUGE, ALASKA, BY GERRIT VYN

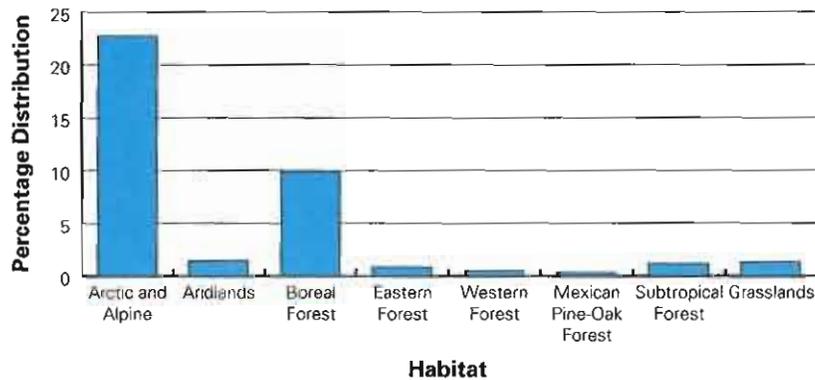
Stewardship of Birds

- More than 1 million acres of wetlands are actively managed on 356 refuges and approximately 7,000 Waterfowl Production Areas for waterfowl and other birds. USFWS lands in the Prairie Pothole Region occupy less than 2 percent of the landscape but produce nearly 23 percent of the region's waterfowl, making this region the "duck factory" of North America.
- Shorebirds depend on many of the same refuges that were established for waterfowl, including the Arctic NWR (Alaska), critical for many species of nesting shorebirds, and important stopover habitats such as Yukon Delta (Alaska), Grays Harbor (Washington), Bear River (Utah), Quivira (Kansas), and Bald Knob (Arkansas). Along the Atlantic Coast, **Red Knots** depend on coastal Refuges including Monomoy (Massachusetts), Cape May (New Jersey), and Cape Romain (South Carolina), as they migrate from the arctic to the tip of South America and back.
- Island refuges in the Bering Sea and the central Pacific provide nesting habitats for endemic seabirds and virtually all **McKay's Buntings**. Two million birds use the Midway Atoll Refuge, including the world's largest population of nesting **Laysan Albatrosses**. Islands of Alaska Maritime NWR provide essential habitats for some 40 million seabirds of more than 30 species.
- Fifty-nine National Wildlife Refuges have been established primarily to conserve threatened or endangered species; examples include Attwater's Prairie-Chicken NWR (Texas), Mississippi Sandhill Crane NWR (Mississippi), and Aransas NWR (Texas), which supports the only naturally occurring overwintering population of **Whooping Cranes**.
- Species with more than one-third of their U.S. breeding distributions on vast Alaskan NWRs include tundra-nesting **Emperor Goose, Brant, Tundra Swan, Black-bellied Plover, Bristle-thighed Curlew, and Pomarine Jaeger**, as well as boreal-forest birds such as **Rusty Blackbird, Gray Jay, and Spruce Grouse**.



TOP TO BOTTOM: NORTHERN SHOVELER, WHOOPING CRANE, RUSTY BLACKBIRD BY GERRIT VYN

Distribution of Birds on USFWS Lands



Percentage distribution of breeding bird species dependent on each habitat on USFWS lands.

USFWS and Bird Conservation

The USFWS has Congressional authority to conserve and protect migratory birds on all U.S. lands and waters through several legislative mandates. Among the first and most important is the Migratory Bird Treaty Act of 1918, which provides federal protection for 1,007 migratory species. The USFWS, in partnership with states and other organizations, is responsible for understanding population dynamics and regulating harvest of migratory game birds, including waterfowl, rails, and doves. To manage species that may negatively impact local economies or quality of life because of overabundance, the USFWS works with states and other partners to control bird species such as Double-crested Cormorant and resident Canada Geese.

In 2010, the USFWS established a National Wildlife Refuge System Inventory and Monitoring Program to strategically coordinate data and management activities with other agencies and conservation organizations. The USFWS, along with states and other partners, conducts breeding and winter waterfowl surveys, Mourning Dove "coo counts," woodcock surveys, and surveys for endangered species as needed. USFWS also works in close partnership with the U.S. Geological Survey, which oversees the Breeding Bird Survey and other bird population monitoring programs critical to the decisions of land managers. These and other programs depend on the expertise of thousands of citizen-science participants who contribute their data.

The USFWS administers the Federal Migratory Bird Hunting and Conservation Stamps, commonly known as "Duck Stamps." Originally created in 1934 as federal licenses required for hunting migratory waterfowl, Duck Stamps have generated more than \$750 million to help purchase or lease more than 5.3 million acres of waterfowl habitat, now protected within the National

Wildlife Refuge System. All bird enthusiasts and visitors to the National Wildlife Refuge System are encouraged to purchase a Duck Stamp annually for the protection of more bird habitat. Duck Stamps also provide free entry to all National Wildlife Refuges.

Because of its key role in conserving migratory birds on all U.S. lands, the USFWS administers habitat grant programs, including the North American Wetlands Conservation Act which since 1990 has generated more than \$1.08 billion in grants, plus another \$2.24 billion in partner contributions to improve 25.9 million acres of habitat in North America. Similarly, the Neotropical Migratory Bird Conservation Act supported 333 projects since 2002, generating more than \$35 million in grants and leveraging more than \$136 million in matching funds to conserve about 2 million acres of bird habitat throughout the Western Hemisphere. The USFWS also administers the Migratory Bird Joint Ventures, a national network of self-directed partnerships that implement bird conservation in ecoregions around the nation. Since the program's inception in 1986, Joint Ventures have invested \$4.5 billion to conserve 15.7 million acres of migratory bird habitat.

Conservation in Action

Birds of the Aleutian Islands

The Aleutian Islands are a Biosphere Reserve supporting globally significant seabird populations and supplying some of the finest seabird habitat in the world. For more than four decades, the USFWS has restored seabird habitat at Alaska Maritime National Wildlife Refuge by eradicating invasive species. In collaboration with Island Conservation and The Nature Conservancy, the USFWS has reclaimed 7,000 acres of habitat for native wildlife. For example, on the refuge's Rat Island, rats preyed on eggs and chicks, decimating native bird populations and altering native ecosystems. After the largest rat eradication effort in the Northern Hemisphere, Rat Island was declared rat-free in 2010. Over the long-term, burrow-nesting seabirds, including Tufted Puffins, Ancient Murrelets, and storm-petrels, are expected to recolonize the island.



RAT ISLAND, COURTESY OF USFWS

State Agencies

Mission: State fish and wildlife agencies have broad statutory and often constitutional authority over wildlife management with a mission to sustain, protect, and conserve wildlife.

State Lands at a Glance

- State agencies manage 189 million acres of land in the U.S., including wildlife management areas, state game lands, heritage preserves, natural areas, state forests, state parks, state trust lands, and recreation areas.
- State lands are diverse and include more boreal forest (34%), marsh (24%), and grassland (4%) than any single federal agency.
- State land holdings range from a few hundred acres to millions of acres. The 2.6 million-acre Adirondack Forest Preserve is the largest state-owned area in the United States.



KENNETH V. ROSENBERG

Blue Mountain Lake is part of the 2.6 million-acre Adirondack Forest Preserve—the largest area of state land in the United States.

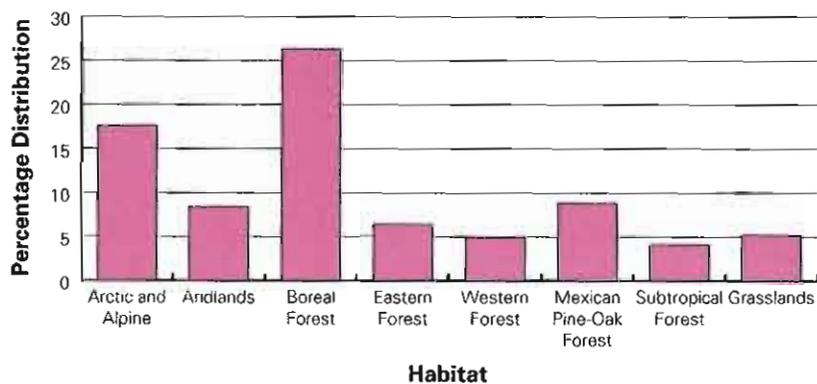
Stewardship of Birds

- In Alaska, state lands support 18% of the average U.S. distribution of arctic and alpine species. **White-tailed Ptarmigan**, **Surfbird**, **Stilt Sandpiper**, and **Snow Bunting** have greater than 30% of their distribution on state lands. In Alaska, state boreal forests support more than 50% of the U.S. distribution of **Black-backed Woodpecker**, **Blackpoll Warbler**, and **Gray-cheeked Thrush**.
- State lands in the Northeast support a disproportionate percentage of boreal bird distributions. More than 25% of the U.S. population of the **Bicknell's Thrush**, a species of conservation concern, is in Adirondack Forest Preserve and Catskill State Park, New York.
- State wildlife agencies have the primary authority for regulating and providing management recommendations for all resident game bird species. Many of the 19 native game bird species have a high percentage of their distribution on state lands, including **Spruce Grouse** (22%) and **Montezuma Quail** (14%).
- Every spring, up to a million migratory shorebirds visit Delaware Bay. During the last 10 years, Delaware and New Jersey agencies have helped conserve the **Red Knot**, a species of conservation concern. They have implemented research and monitoring projects. They have also coordinated protection of state lands, restriction of access, and harvest regulations for horseshoe crabs, a key food for Red Knots.



TOP TO BOTTOM: BLACKPOLL WARBLER BY GERRIT VYN, BICKNELL'S THRUSH BY JIM GOETZ, MONTEZUMA QUAIL BY GREG LAVATY, RED KNOT BY GERRIT VYN

Distribution of Birds on State Lands



Percentage distribution of breeding bird species dependent on each habitat on state lands.

State Agencies and Bird Conservation

All states hold acreage in public trust for purposes such as transportation, education, corrections, and cultural and natural resources. The legislative mandate of the agency holding the land dictates the amount of focus on bird conservation. In general, birds are the legislative responsibility of the natural resource agencies with a mission to sustain, protect, and conserve wildlife.

Many state wildlife agencies rely solely on hunting license revenue to fund activities and match federal grants. During 1997–2007 there was a loss of 18,579 hunters and 36,272 anglers (USFWS Online Federal License Certification). From 2008 to 2009 the USFWS reported an increase in paid license sales. The changes in license sales can impact the ability of state wildlife agencies to implement needed conservation on the ground.

Nongame programs have relied on state sales tax, public donations, car license tags, and other creative funding mechanisms. Since 2000, the State Wildlife Grants Program has aided bird conservation by requiring State Wildlife Action Plans to outline steps to conserve wildlife and habitat before they become endangered.

State wildlife agencies participate in the stewardship of migratory birds, working with Canadian and Mexican partners to conserve waterfowl populations across North America through efforts such as the North American Waterfowl Management Plan and the Flyway Councils. Many states have participated in bird conservation actions with Latin American and Caribbean partners, including through the Southern Wings Program.

Several state wildlife agencies have developed state bird conservation initiatives (AZ, FL, MI, MN, MO, MT, NE, OH, VA, and WI). For example, the 59-member Missouri Bird Conservation Initiative conserves birds across geopolitical boundaries, taxonomic groups, and landscapes. Of the \$2.8 million expended since 2004, \$1.3 million has gone to grassland and prairie restoration to conserve species such as Greater Prairie-Chicken, Henslow's Sparrow, Grasshopper Sparrow, and Upland Sandpiper.

Conservation in Action

Managing Forests for Golden-winged Warblers

Golden-winged Warblers have declined throughout their range because of habitat loss and hybridization with Blue-winged Warblers. State lands are extremely important for the conservation of golden-wings, with 16% of the species' distribution. State lands offer opportunities for intensive management for young (early successional) forests critical for the survival of the Golden-winged Warbler and other priority species such as the American Woodcock.

The Pennsylvania Breeding Bird Atlas (2004–09) found that 32% of golden-wing breeding records are on state property. Focus areas for this species include 700,000 acres of Pennsylvania Game Commission (PGC) lands. The PGC is including golden-wing management in the game land planning process and prioritizing barren-habitat restoration and management. The PGC, Indiana University of Pennsylvania (IUP), Appalachian Mountain Joint Venture/ABC, and Pennsylvania Bureau of Forestry are developing Forestland Best Management Practices for Pennsylvania and Maryland.

Many partners have contributed to management on state parks and game lands, including PGC, PA Bureau of State Parks, Ruffed Grouse Society, IUP, Wildlife Management Institute, and Woodcock Unlimited. For example, IUP

has begun work at the 5,900-acre Bald Eagle State Park, adjacent State Game Lands 92, and nearby Sproul State Forest. The project aims to remove exotics, plant native species, and use silviculture to maintain early-successional habitat. Within a year, five of the seven manipulated areas begun in 2009 already had at least one territorial Golden-winged Warbler, a promising sign that it is possible to create breeding habitat for this vulnerable species. Similar management efforts are ongoing in numerous other states.



GOLDEN-WINGED WARBLER BY GERRIT VYN