Testimony before the House Natural Resources Subcommittee on Fisheries, Wildlife and Oceans on the Decline of Migratory Bird Populations
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Madam Chairwoman and members of the Subcommittee, I am David Erickson, Assistant Director, Missouri Department of Conservation, speaking on behalf of the Association of Fish and Wildlife Agencies. I sincerely appreciate the opportunity to speak with you today about the decline of migratory birds, and the efforts going on across the country, the continent, and the hemisphere to address these disturbing declines. As you know, all 50 states are members of the Association of Fish and Wildlife Agencies.

The Association of Fish and Wildlife Agencies is the collective voice of North America's fish and wildlife agencies. The Association provides its member agencies and their senior staff with coordination services that range from migratory birds, fish habitat, and invasive species, to conservation education, leadership development, and international relations. The Association represents its state agency members on Capitol Hill and before the Administration on key conservation and management policies, and works to ensure that all fish and wildlife entities work collaboratively on the most important issues. The Association also provides management and technical assistance to both new and current fish and wildlife leaders.

Migratory birds are one of my passions. Having served as Chair of the Mississippi Flyway Council and having the honor to work with some of the top migratory bird scientists in the U.S. through the Missouri Department of Conservation, I have had the opportunity to help conserve migratory birds within Missouri, across the country, and in partnership with countries beyond our borders such as Canada, Mexico, and Honduras. The Missouri Department of Conservation recognizes that migratory birds are a shared resource. Currently, I chair a Task Force for the Association of Fish and Wildlife Agencies that is developing a program to facilitate state agency participation in conservation projects throughout the Western Hemisphere that help conserve their priority birds. Bird conservation, whether for waterfowl or other migratory species, must be comprehensive in addressing the full array of bird habitat needs in all geographies where these needs exist. Anything less forgoes a fundamental principle of the North American Bird Conservation Initiative (NABCI). Federal, state and non-governmental organizations must continue to enhance partnerships and work across programs in order to successfully conserve migratory birds.

Birds are invaluable to our society. With their relative freedom to move among suitable habitats, the relative ease of monitoring them, and their important ecosystem roles, birds are also extraordinarily useful for evaluating the effects of human and environmental impacts on ecosystems and actions taken to protect or recover them. Worldwide, birds bring people of different countries together around the common goal of conserving them

for future generations. They are essential economic and ecological components of biodiversity and are of cultural significance.

Bird-watching is the fastest growing form of outdoor recreation in the United States, and has become a major component of our tourism, travel, and sporting industries. The *2006 National Survey of Fishing Hunting and Wildlife Associated Recreation* estimated the number of people that observe birds in the U.S. at 47.7 million. The 2002 national survey on bird-watching in the United States estimated that while watching birds, and other wildlife in 2001, the public generated \$85 billion in overall economic output (about 1% of GDP), \$32 billion in retail sales, and \$13 billion in state and federal income taxes. The 2006 national survey estimated about 2.3 million migratory bird hunters who spent approximately \$1.3 billion in 2006.

However, the future of many of the 1,400 bird species that occur in North America is in jeopardy. Many populations are in decline, some moderately, some precipitously, as habitats continue to be degraded or lost throughout their ranges which can span countries, continents — even hemispheres. Three hundred and forty one (341) of the species in North America are classified as Nearctic-Neotropical migrants (or 'Neotrops') that breed in the U.S. and Canada, and winter in Latin America and the Caribbean. More than 43 percent of Neotrop species have experienced significant declines since systematic population surveys began in 1966 through the Breeding Bird Survey. Seventy-one (71) Neotrop species are on the 2007 Watchlist produced by the National Audubon Society and the American Bird Conservancy. The list overlaps significantly with the species of greatest conservation need identified in the State Wildlife Action Plans (also called Comprehensive Wildlife Conservation Strategies). Two-thirds of the bird species found in the U.S. have declined over the last half-century, many precipitously. Eastern Meadowlarks have dropped 70% over the past 30 years. Despite intensive management efforts and popularity as a game bird the Northern Bobwhite quail, has declined 70% since 1965. The downward trends we are now detecting in bird populations are signs of environmental problems that have serious implications for our society. Dramatic declines in common bird populations represent an environmental crisis throughout the Americas.

To ensure their survival, conservationists must address the threats to bird populations throughout their lifecycles. Some of the greatest threats include: (a) direct habitat loss through conversion for human uses; (b) habitat degradation; (c) food depletion for migrant birds using coasts and shorelines; (d) mortality near human population centers, such as collisions with windows and utility towers and predation by cats; and (e) habitat degradation on wintering grounds south of the U.S. border. The need is urgent and the time is right for major public-private initiatives for bird conservation.

As early as 1916, the United States and Canada recognized the need to collaborate to conserve shared bird species and established the Migratory Birds Convention. Two years later, the U.S. Congress enacted the Migratory Bird Treaty Act (MBTA) to give effect to this convention. In 1936, the United States entered into similar an agreement with Mexico. By then, wildlife management agencies and conservation groups were actively cooperating to monitor migratory waterfowl on a continental basis. The creation of the

Flyway Councils in the 1950s formalized the consultation processes for the major flyways. In 1986, the governments of Canada and the United States initiated the North American Waterfowl Management Plan (NAWMP), a tri-national collaboration to conserve dwindling wetland habitat and restore diminishing populations of ducks, geese, and swans. Mexico joined the partnership in 1994 to make it a truly continental effort.

In the 1990's, increasing concern for biodiversity conservation led to the development of international conservation initiatives for other bird species. The Western Hemisphere Shorebird Reserve Network, for example, established criteria for identifying critical shorebird habitat throughout the Americas. Partners in Flight developed science-based conservation plans for landbird populations, while representatives of the U.S. and Canadian Shorebird Plans and Waterbird Conservation for the Americas undertook similar tasks for shorebirds, seabirds, waders, and other waterbirds. Regional partnerships for resident bird species in the United States has also evolved. Most recently, many state fish and wildlife agencies are establishing bird conservation initiatives to carry out comprehensive bird conservation.

Public and private organizations alike recognized the advantages of working together at the national and international levels to coordinate and strengthen the growing number of partnerships on the continent for birds. In 1999, representatives from government and non-government organizations in Canada, the United States, and Mexico created the North American Bird Conservation Initiative (NABCI). NABCI works to advance conservation for the long-term health of the continent's native bird species and the habitats on which they depend. NABCI promotes the concept of integrated bird conservation—integrating the biological needs of all bird species through a strategic conservation framework that is coordinated across people and programs within the entire range of the species. NABCI partners have made important progress in building a science foundation for integrated bird conservation, including establishing North American Bird Conservation Regions for planning and evaluation, advancing coordinated bird monitoring and strategic habitat conservation, and identifying priority birds and habitats.

In 2005, the Minister and Secretaries of the Environment in the three countries formally recognized the ambitious vision and goals of NABCI by signing the *Declaration of Intent for the Conservation of North American Birds and their Habitat*. The Declaration is a formal, non-binding international memorandum of understanding among the three countries to cooperate in conserving the continent's birds and the landscapes they need to survive. The NABCI Declaration acknowledges that to safeguard migratory birds and their habitats for future generations, conservation must take place in every stage of a species' lifecycle — throughout the geographic range of nesting, migration, and wintering habitats — the full spectrum of bird conservation. To this end, NABCI partners developed ambitious proposals to conserve habitat for some of the most vulnerable species on the continent.

The Continentally Important Proposals cover a wide range of activities to address the conservation needs of these species. The proposals demonstrate the dire need to increase regional conservation capacity and the vital importance of tri-national collaboration to

achieve successes that will strengthen integrated bird conservation across North America and attract more funding. The proposals aim to conserve and restore over one million acres of key habitat originating with five critical areas in Mexico linked to breeding ground habitat in the U.S. and Canada. (e.g., North American grasslands, one of continent's most threatened habitats; the hypersaline ecosystems of Laguna Madre, one of only five such ecosystems in the world; and wetlands that provide critical habitat for many species and vital ecosystem services). The proposals will benefit more than 300 species, including priority species such as the Mountain Plover, Whooping Crane, Burrowing Owl, Painted Bunting, and the Golden-cheeked Warbler. The proposals represent over \$150 million worth of conservation actions and at least \$50 million in matching funds from more than 70 key partners, thus fostering continental cooperation among diverse public and private groups.

The Neotropical Migratory Bird Conservation Act (NMBCA) and the North American Wetland Conservation Act (NAWCA) are two key funding sources that exemplify the recognition that working across political borders is essential for conserving migratory birds. NMBCA funds private-public partnerships benefiting neotropical migratory birds throughout the Western Hemisphere. Annual appropriations of \$3 M—\$5 M have leveraged \$97 million in private sector matching funds since 2002, affecting approximately 3 million acres of bird habitat. NAWCA also provides significant funding and match for the conservation of wetlands and their associated species. Increased funding of NMBCA and NAWCA would leverage even more funds, and protect vastly more habitat and birds.

Joint Ventures and State Fish and Wildlife Agencies remain two of the key partners in migratory bird conservation in United States. The bird habitat joint ventures are committed to developing their capacity to become the regional delivery agents for bird habitat conservation priorities outlined in the national, regional and international bird plans. These partnerships are the most effective delivery mechanism for bird habitat conservation in history. With modest operating budgets supplied by the U.S. Fish and Wildlife Service, Joint Ventures leverage orders of magnitude more money from partners for on-the-ground conservation projects. Joint Ventures are supported by both parties in Congress every year, but they remain under-funded. They are often described as the "delivery arm" of the major migratory bird initiatives, developing the biological foundation for management at regional scales, and facilitating local habitat conservation through implementation plans designed to attain continental goals. They exemplify the intent of integrated bird conservation. They also provide some of the best examples of strategic habitat conservation or landscape scale planning. Strategic habitat conservation is a science-based approach to conservation focused on providing landscapes capable of sustaining fish and wildlife populations at objective levels in this case identified by the bird conservation initiatives.

The State Fish and Wildlife Agencies are key partners of the Joint Ventures, and their State Wildlife Action Plans represent a collective vision for the future of wildlife conservation. For the first time, states have had the opportunity to assess the full range of challenges and actions that are vital to keeping wildlife from becoming endangered.

While the wildlife action plans share a common framework of the eight required elements, they are tailored to reflect each state's unique wildlife, habitat, and conservation needs. The bird conservation information contained the State Wildlife Action Plans feed into and complement the implementation plans of the Joint Ventures. This synergy has lead to the development of numerous exciting partnerships for migratory bird conservation. State agencies are also involved in numerous regional initiatives to advance bird conservation such as the Northeast Monitoring Partnership and the Greater Sage-Grouse Comprehensive Conservation Strategy. The State Fish and Wildlife Agencies acknowledged the need to better integrate the conservation of our hunted and non-hunted bird species through the development of the Non-game Technical Sections of the Flyway Councils.

Wisconsin provides feeding, breeding, and migration habitat for over 280 native bird species, a third of which are species of greatest conservation need. Conserving rest habitat is critical to the bird health and survival, especially in the Great Lakes region. The area supports millions of migrating birds, linking breeding grounds as far north as Greenland to wintering grounds as far south as Argentina. A collaborative project between many federal, state, tribal, local, university, and other conservation partners strives to permanently conserve and manage important migratory bird sites around Lake Michigan and Lake Superior. This collaboration will conserve these birds and the vital natural areas they depend on for future generations.

Historically, the Mississippi Alluvial Basin was a vast and remote wilderness of bottomland forests and marshes. Frequent flooding played a significant role in creating and maintaining these complex wetlands. While the Mississippi Alluvial Basin region has been largely drained and converted to row crop agriculture, remnants exist that may be able to sustain the characteristic wildlife. The wildlife action plans in both Missouri and Tennessee specifically target bottomland forest restoration in the Mississippi Alluvial Basin as a conservation priority. According to the landbird conservation initiative, Partners in Flight, some of the priority breeding birds in the Mississippi Alluvial Basin include Bachman's Warbler, Swainson's Warbler, Prothonotary Warbler, Cerulean Warbler, and Swallow-tailed Kite. The Lower Mississippi Valley Joint Venture and its many partners provide guidance on the size of forest blocks needed to sustain target bird populations through Decision Support Models that aim to optimize biological efficiency. Using the population objectives from the bird conservation initiatives and the habitat objectives and modeling data from the Joint Ventures, partners are able to strategically and effectively implement conservation actions on the ground for priority bird species. Partners included multiple states and federal agencies such as the U.S. Fish and Wildlife Service and the Natural Resources Conservation Service.

Grasslands are recognized by many as the most imperiled ecosystem worldwide. The unique avian assemblages associated with grasslands are likewise in danger -- grassland bird populations have shown steeper, more consistent, and more geographically widespread declines than any other guild of North American bird species. Breeding Bird Survey data from 1966-1993 indicate that almost 70% of the 29 grassland bird species adequately surveyed by the Breeding Bird Survey had negative population trends. The

need for information on abundance, productivity, habitat use, seasonal distribution, and effects of management practices is widely recognized among resource managers. Grasslands are threatened by overgrazing, conversion to croplands, frequent haying, field abandonment and a lack of fire (both of which encourage woody growth), invasive plants, resource extraction, and urbanization. The Playa Lakes Joint Venture is using strategic conservation to identify grassland habitats key to the survival of the Lesser Prairie-Chicken. In conjunction with the Natural Resources Conservation Service, they are strategically enrolling land into Farm Bill conservation programs such as the Conservation Reserve Program.

The Natural Resources Conservation Service, Wyoming Game and Fish Department, and the Intermountain West Joint Ventures have initiated an effort to focus the Environmental Quality Incentive Program to sage brush habitat in the Green River Basin of southeast Wyoming. The partnership is working with local landowners to develop conservation plans that address sage brush habitat for sage grouse and other sage brush dependent species.

In my own state of Missouri, the Department of Conservation, The Missouri Conservation Heritage Foundation, The Nature Conservancy, the McDaniel Charitable Foundation (Texas) and eight National Audubon Society chapters have formed a partnership called The Avian Conservation Alliance of the Americas. The conservationminded citizens of Missouri have embraced the concept of leveraging grassrootscontributed funds through a state-wide partnership for bird conservation in Latin America and The Caribbean based on linkages between Missouri's breeding birds and their wintering habitat in tropical America. In our first year, the partnership has leveraged funds four times within the state and anticipates leveraging the funds further through a Neotropical Migratory Bird Conservation Act grant proposal this fall, for an eight-fold increase in funds before they reach the project site in Honduras. The efficacy of the Missouri model for international bird conservation partnership through the leveraging of citizen-raised funds will be greatly enhanced by its integration with expanded federal agency programs. I hope internal and external state fish and game agency partnerships with citizen groups and governmental agencies will become the norm as we address these critical bird conservation needs in the future.

I provide these examples to stress the need for a targeted and strategic approach to conservation that spans political boundaries, bird taxa, and programs. The need to integrate our bird conservation work is more important now than ever. With increasing pressures on our natural resources, environmental challenges such as climate change, and documented declines in migratory bird populations, we need to base our conservation on strong science that leads to strategic habitat conservation on the ground implemented through partnerships. Key programs to make this happen include the State Wildlife Grants program, NMBCA, NAWCA, Joint Ventures, the migratory bird of the U.S. Fish and Wildlife Service, the Breeding Bird Survey of the U.S. Geological Survey, International Programs of the U.S. Forest Service and U.S. Fish and Wildlife Service and the Conservation Programs of the Farm Bill among many others.

A key component of strategic habitat conservation is monitoring. Bird monitoring is an activity that is used to assess conservation status, ascertain and predict immediate or cumulative effects of habitat change, establish management and conservation priorities, and determine the effects of management so that we can learn from our actions and adapt them to better meet our objectives. However, ill-conceived, monitoring can waste funds, equipment, and personnel time. Improving current and future monitoring will require a commitment to include monitoring as an integral part of management and conservation practices, from project inception to periodic program review. Monitoring and the subsequent act of evaluation are integral components of an iterative, science-based approach to bird management and conservation.

In summary, the conservation of migratory birds is essential not only to the mission of the State Fish and Wildlife Agencies, but to the core values of American society. Only through multi-scale partnerships that embrace an integrated, science-based approach to migratory bird conservation can we hope to achieve our common goals for the conservation of migratory birds and other wildlife.

Thank you for the opportunity to appear before you today to offer testimony on how the nation can collectively reverse the declines of migratory birds. I would be pleased to address any questions.