

### Signed and approved by



United States: Partners in Flight Council
Canada: Partners in Flight Canada National Working Group
Mexico: Comisión Nacional pare el Conocimiento y Uso de la Biodiversidad
(CONABIO) y Comité Mexicano de la
Iniciativa para la Conservación de las Aves en
América del Norte (ICAAN-NABCI)

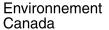
www.partnersinflight.org







Environment Canada































### Published by



### Recommended citation

Rich, T. D., C. J. Beardmore, H. Berlanga, P. J. Blancher, M. S. W. Bradstreet, G. S. Butcher, D. W. Demarest, E. H. Dunn, W. C. Hunter, E. E. Iñigo-Elias, J. A. Kennedy, A. M. Martell, A. O. Panjabi, D. N. Pashley, K. V. Rosenberg, C. M. Rustay, J. S. Wendt, T. C. Will. 2004. Partners in Flight North American Landbird Conservation Plan. Cornell Lab of Ornithology. Ithaca, NY.

Front Cover: The Painted Bunting is on Partners in Flight's Continental Watch List because of troubling declines throughout its range and multiple threats, including continued trapping for the caged-bird trade in Mexico and Cuba. Photo © Tom Vezo

Back Cover: The Mountain Bluebird is a Stewardship Species of shrubland habitats in the Intermountain West Biome. The mullein on which this bluebird is perched is one of many invasive plant species threatening the integrity of native bird habitats. Photo © Marie Read

Design and layout by Julie Hart • Printing by Cayuga Press of Ithaca Inc., Ithaca, NY.



### Signed and approved by

United States: Partners in Flight Council
Canada: Partners in Flight Canada National Working Group
Mexico: Comisión Nacional pare el Conocimiento y Uso de la Biodiversidad (CONABIO) y Comité Mexicano de la
Iniciativa para la Conservación de las Aves en
América del Norte (ICAAN-NABCI)

### Authors

Terrell D. Rich • U.S. Fish and Wildlife Service

Carol J. Beardmore • U.S. Fish and Wildlife Service

Humberto Berlanga • Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO)

Peter J. Blancher • Bird Studies Canada and Canadian Wildlife Service

Michael S. W. Bradstreet • Bird Studies Canada

Greg S. Butcher • National Audubon Society

Dean W. Demarest • U.S. Fish and Wildlife Service

Erica H. Dunn • Canadian Wildlife Service

W. Chuck Hunter • U.S. Fish and Wildlife Service

Eduardo E. Iñigo-Elias • Cornell Laboratory of Ornithology

Judith A. Kennedy • Canadian Wildlife Service

Arthur M. Martell • NABCI-Canada

Arvind O. Panjabi • Rocky Mountain Bird Observatory

David N. Pashley • American Bird Conservancy

Kenneth V. Rosenberg • Cornell Laboratory of Ornithology

Christopher M. Rustay • Playa Lakes Joint Venture

J. Steven Wendt • Canadian Wildlife Service

Tom C. Will • U.S. Fish and Wildlife Service

#### **ACKNOWLEDGMENTS**

A great many individuals, Partners in Flight (PIF) working groups, funding agencies, and other partners have contributed to the establishment and growth of PIF, building the foundation that had to exist before preparation of a North American Landbird Conservation Plan could even be contemplated. To all our partners in this endeavor, we owe a great debt of thanks.

We greatly appreciate the International Association of Fish and Wildlife Agencies for funding, through Grant Agreement No. DC M-18-PO (Federal Aid in Wildlife Restoration Program), that supported PIF Regional Coordinators during the development of regional and state bird conservation plans and through the early stages of this plan. Analysis and writing was supported by employers of all of the Plan's authors. We thank the staff of the Cornell Laboratory of Ornithology, particularly Julie Hart, who designed and laid out the document, and Allison Childs Wells and Miyoko Chu for editing. Printing costs were provided by the U.S. Fish and Wildlife Service, the U.S. Forest Service, Environment Canada, Plum Creek Timber Company, American Forest & Paper Association, Department of Defense Partners in Flight, Texas Parks and Wildlife Department, and the New Jersey Division of Fish and Wildlife, Endangered and Nongame Species Program.

For comments on draft versions of the Plan, the authors thank Bob Altman, the Arkansas Game and Fish Commission, Luc Bélanger, Roxanne Bogart, Ellen Campbell, Canadian Wildlife Service—Quebec Region, Breck Carmichael, John Confer, Brenda Dale, Martin Damus David Davis, Krista De Groot, Dave Duncan, Wendy Easton, Jane Fitzgerald, Robert Ford, Jean Gauthier, Christina Hargis, Audrey Heagy, Geoff Holroyd, Bill Howe, Marshall Howe, Mark Howery, Robbie Hunsinger, Idaho Fish and Game, Iowa Department of Natural Resources, Stephanie



The Prairie Warbler, one of 101 species identified in this Plan on Partners in Flight's continental Watch List, breeds in disturbance-dependent habitats in eastern North America and migrates to the West Indies in winter.

Jones, Rick Kearney, David Klute, Melinda Knutson, Dave Krueper, Steve Lewis, Craig Machtans, Steve Matsuoka, Allan Mueller, Larry Neel, New York State Department of Environmental Conservation, Wendy Nixon, Mike Norton, Phil Nott, Cyndi Perry, C.J. Ralph, John Robinson, Janet Ruth, Clifford Shackelford, Pam Sinclair, PIF Canada Technical Committee, Don Sutherland, Wayne Thogmartin, Utah Division of Wildlife Resources, and Jeff Walk. We thank Jon Bart for providing analysis of monitoring needs and commenting on that important section of the plan. Others too numerous to mention individually have contributed as well, through discussions of various issues addressed in the Plan. Final decisions on the methodology and content of this plan are the responsibility of the authors.

We also deeply appreciate the contributions of all individuals who reviewed species assessment scores at various geographic scales over the past decade. Without this thorough review and evaluation from hundreds of experts, this Plan simply would not have been possible. We are especially grateful to the Rocky Mountain Bird Observatory, which has supported the database with substantial staff time over the past decade.

### **TABLE OF CONTENTS**

Authors		i
Acknowle	edgments	ii
Executive	e Summary and Invitation to Action	1
Part 1. Th	he Continental Plan	4
In	ntroduction	4
As	ssessing Conservation Vulnerability	9
Sp	pecies of Continental Importance	14
Co	ontinental Landbird Objectives	23
La	andbird Monitoring and Research Needs	27
Та	aking Action	33
Part 2. Co	onservation Issues and Recommendations	. 38
Aı	rctic Avifaunal Biome	40
No	orthern Forest Avifaunal Biome	43
Pa	acific Avifaunal Biome	47
In	termountain West Avifaunal Biome	51
Sc	outhwest Avifaunal Biome	55
Pr	rairie Avifaunal Biome	59
Ea	astern Avifaunal Biome	63
Literatur	e Cited	. 67
Appendic	ces	
Al	ppendix A. Assessment scores and estimated population size of North American landbirds	69
Al	ppendix B. Methods used to estimate population sizes and percents	78
Al	ppendix C. Wetland-associated landbird Species of Continental Importance	83
	ppendix D. Species of Continental Importance in Bird Conservation Region 69—Puerto Rico	84
Tables		
Ta	able 1. PIF Species of Continental Importance for the US & Canada	18
Та	able 2. Species of Continental Importance in the Arctic Avifaunal Biome	41
Та	able 3. Species of Continental Importance in the Northern Forest Avifaunal Biome	44
Ta	able 4. Species of Continental Importance in the Pacific Avifaunal Biome	48
Та	able 5. Species of Continental Importance in the Intermountain West Avifaunal Biome	52
Та	able 6. Species of Continental Importance in the Southwest Avifaunal Biome	56
Та	able 7. Species of Continental Importance in the Prairie Avifaunal Biome	60
Та	able 8. Species of Continental Importance in the Eastern Avifaunal Biome	64



## Partners in Flight Mission

· Helping species at risk ·
· Keeping common birds common ·
· Voluntary partnerships for birds, habitats, and people ·

# Executive Summary and Invitation to Action

The Partners in Flight Vision:

*Populations of native birds* 

will occur in their natural

numbers, natural habitats, and

natural geographic ranges,

through coordinated efforts

by scientists, government, and

private citizens.

Digital range map data were provided by NatureServe in collaboration with Robert Ridgely, James Zook, The Nature Conservancy/Migratory Bird Program, Conservation International/Center for Applied Biodiversity Science, World Wildlife Fund-US, and Environment Canada/WILDSPACE. Andrew Couturier,

Bird Studies Canada, converted the maps to areas and assigned ranges to degree blocks. PIF recognizes a great debt to Chandler Robbins, who had the foresight to create the Breeding Bird Survey (BBS), and to the thousands of BBS volunteers who faithfully collect data year after year. We especially thank John Sauer for providing useful and timely analyses of BBS data that proved invaluable to

our efforts. The BBS is one of the primary data sources for PIF species assessment, and it seems that everywhere we turn, we find BBS data to be of great value in both expected and novel ways.

irds are the most familiar and widely enjoyed wildlife in North America. In 2001 in the U.S. alone, 46 million birders spent \$32 billion to observe, photograph or feed wildlife. Birds also fill critical roles in ecological systems. From predators to prey, and from pollinators to dispersers of seeds, the important functions of birds in our environment cannot be overstated. Equally important, birds have served as inspiration for our music, poetry, philosophy, and other fundamental components of human culture since the beginning of civilization itself. Yet, over the past several decades, populations of some oncecommon species have declined precipitously, and more species than ever are experiencing range reductions or becoming threatened and endangered. Although many species remain common, we must take proactive action now to preserve the full breadth of benefits that birds provide to human society.

The advent of this new millennium has seen a proliferation of conservation initiatives founded on voluntary partnerships and galvanized into action by documented declines of North American bird populations. Following the lead of the North American Waterfowl Management Plan, Partners in Flight (PIF) formed in 1990 with the collective commitment to conserve the resident, short-distance, and Neotropical migrant landbirds that occupy every major biome and habitat on the continent. Whereas the mandate to conserve waterfowl populations

was rooted in the economic importance of sport hunting, PIF's mandate is rooted in a broad constituency that represents the fastest growing and economically most important segment of outdoor nature enthusiasts in North America.

Scope and Content of the Plan

This North American Landbird Conservation Plan (hereafter Plan) provides a continental synthesis of priorities and objectives that will guide landbird conservation actions at national and international scales. While our scope for this first version is limited to the 448 native landbirds that breed in the U.S. and Canada, full participation by our Mexican

partners will add another 450 breeding species to the next iteration of the Plan. Together with plans for shore-



One of 28 landbird species in the U.S. and Canada in need of immediate conservation attention, the rapidly declining Golden-winged Warbler is nearly extirpated from its historic range in the Northeast and Appalachian regions.

birds, waterbirds, waterfowl, and other game birds, this document serves as the blueprint for continental habitat conservation under the North American Bird Conservation Initiative (NABCI).

As documented in this Plan, fully 100 landbird species in Canada and the U.S. warrant inclusion on the PIF Watch List, due to a combination of threats to their habitats, declining populations, small population sizes, or limited distributions. Of these, 28 species require immediate action to protect small remaining populations, and 44 more are in need of management to reverse long-term declines. This Plan also highlights the need for stewardship of the species and landscapes characteristic of each portion of the continent, identifying 158 species (including 66 on the Watch List) that are particularly representative of large avifaunal biomes, and whose needs should be considered in conservation planning. Taken together, the pool of Watch List and Stewardship Species represents the landbirds of greatest continental importance

for conservation action. Although the recommended actions may vary from region to region, no area in North America is without a conservation need for birds.

### Research and Monitoring Needs

A troubling finding of the Plan is that more than half the Species of Continental Importance warrant improved monitoring. Although population trend is only one of six equal assessment factors, it obviously is a key indicator. Also of concern are the many gaps in our knowledge of the causes of population declines and of the effectiveness of our conservation programs. Addressing these monitoring and research needs will be critical for prioritizing actions and evaluating their success.

### Population Estimates and Objectives

This Plan also presents the first estimates of total population size for all 448 landbird species and population objectives for the 192 Species of Continental Importance. These objectives are based on the extent of declines since the late 1960s and call for the reversal of those declines over the next 30 years. For some species it will be sufficient to maintain current population levels. For 29 Watch List species that have declined by more than 50 percent, however, our objective is to double current populations, possibly involving an increase in habitat for millions of



Breeding primarily in the Canadian Arctic and wintering in threatened grasslands of the southcentral U.S., the Smith's Longspur is a symbol of the need for international cooperation.

birds, through active management or other appropriate actions.

Most conservation action necessary to meet these ambitious population objectives will take place at regional and local scales, within states, provinces, and territories. Issues and appropriate actions differ substantially from region to region, as detailed in existing regional and state PIF plans and as summarized in Part 2 of this plan. However, local initiatives by themselves, while essential, comprise only part of a balanced and comprehensive strategy.

### A Critical Need for Strategic Approaches at the National and International Scales

The following overarching threats are faced by landbirds across all of North America, and potential solutions must be sought at national and international levels:

 Significant direct loss of major bird habitats through intensified modern land-uses. Examples include massive conversion of the boreal forest through industrial forestry, permanent removal of diverse Appalachian hardwood forests via mountaintop-removal-valley-fill mining, as well as loss of western riparian, pinyon-juniper, sagebrush, California chaparral, native prairies, and barrens.

- Fragmentation and degradation of remaining habitats due to intensified agricultural practices, inappropriate grazing, pesticide use, urban and suburban development, fire suppression, and spread of exotic vegetation. Bird-friendly practices and mitigation measures to enhance habitats exist, but these need to be explicitly tied to objectives for priority bird species and combined with economic incentives to be effective at large scales on private lands. On public lands, land use plans must be based on sustaining or restoring long-term biotic integrity of ecosystems.
- Failure to identify and properly protect or manage habitat used during spring migration, fall migration, and winter. Birds are typically both concentrated and stressed during migratory periods and require quality habitats for both food and cover. Yet we know little about the location and condition of these habitats for most species. Habitat loss and other threats continue to increase for migratory species on their wintering grounds. These critical impacts occur beyond our borders and are compounded by lack of knowledge of species' distributions, habitat needs, or effects of land-use trends. Inclusion of Mexico and Caribbean nations in future updates of this plan will focus much greater attention on wintering ground issues for many species.
- A steady, widespread increase in dispersed mortality factors, not directly related to habitat, that accompany the growth of human populations and the advance of technology. Communication towers, wind power development, feral and domestic cats, and lighted buildings in migration corridors cause ever increasing direct mortality across the continent. Although some programs exist to minimize effects from these factors, no overall plan exists to address their cumulative impact on bird populations.

Collectively, these factors contribute to a high proportion of population declines and anticipated future threats among PIF Watch List Species. Addressing these issues at the highest possible administrative levels will be essential for meeting the continental population objectives outlined in this Plan. However, the required conservation and management strategies for several hundred landbird species are far too complex and variable across North America to be treated only at a continental scale. Implementation of on-the-ground bird conservation strategies must take place at state, provincial, territorial, and local levels, guided by regional and continental planning.

### Infrastructure for Implementing the Plan

Implementation of PIF objectives for landbirds will be led by existing national councils within each home country, cooperating to form an international PIF council that will address international issues, and advised by an international science group. While this Plan outlines the scientific foundation for landbird conservation at the continental scale, national strategic plans will outline the process for implementation within each country. Partnerships are key to this process, and PIF will work with existing and new Joint Ventures, federal, state, provincial, and territorial agencies, nongovernmental organizations, academia, and individuals to further landbird conservation.

Evaluation and reassessment are necessary components of adaptive implementation and we expect that this Plan will be revised at five-year intervals to incorporate the latest biological information. Mexican partners are rapidly completing assessment and planning for all birds, and full incorporation of conservation needs for this diverse segment of the North American avifauna is anticipated by 2005. We hope that full participation by Caribbean and other Latin American partners will proceed rapidly as well.

### A Call for Collective Action by All Stakeholders

This call to action is aimed at several critical audiences, whose collective action is absolutely necessary if the Plan's goals are to be met. We ask funding entities and decision-makers at all levels to allocate resources sufficient to address the major threats faced by high-priority landbirds and their habitats. We ask land managers to incorporate the needs of landbird Species of Continental Importance into existing management plans and on-theground conservation activities. We urge ornithologists and conservation biologists to fill in the many gaps in our knowledge of North American landbirds, throughout their annual cycles, and to work toward monitoring all bird species sufficiently well for us to detect significant population changes. Finally, all the agencies, organizations, corporations, and individuals that have joined in the PIF partnership must turn rhetoric into action on the vast lands we control and manage and through the scientific, educational, and management programs we administer. Together, our actions can halt the continuing loss of our wildlife habitats, reverse the declines of our bird species, and ensure a diverse and healthy avifauna across our entire continent far into the future.