

TUNDRA TO TROPICS:
Connecting Birds, Habitats and People

Terrell D. Rich, Coro Arizmendi,
Dean W. Demarest, and Craig Thompson,
Editors



PROCEEDINGS OF THE FOURTH INTERNATIONAL
PARTNERS IN FLIGHT CONFERENCE

October
2009

Partners in Flight hereby grants permission to copy chapters (in whole or in part) appearing in these Proceedings for personal or educational use, provided that the copied material bears the statement “© 2009 Partners in Flight” and the full citation, including names of all authors. Authors may post copies of their chapters on their personal or institutional website. Any use not specifically granted here, and any use of Proceedings articles or portions thereof for advertising, republication, or commercial uses, requires prior consent from the editors.

Copyright © 2009 by Partners in Flight

TABLE OF CONTENTS

PREFACE

- Preface to the Proceedings of the Fourth International Partners in Flight Conference. 1
Terrell D. Rich, Coro Arizmendi, Dean W. Demarest, and Craig Thompson

NEEDS ASSESSMENT

- Partners in Flight Education, Outreach, and Communications Needs Assessment. 7
Ashley A. Dayer, Melissa Pitkin, and Susan Bonfield
- Partners in Flight Monitoring Needs Assessment Summary. Edward J. Laurent and 14
David Pashley
- Partners in Flight Research Needs Assessment Summary. Janet M. Ruth and 23
Kenneth V. Rosenberg

BASIC BIOLOGY

- Video Identification of Boreal Forest Songbird Nest Predators and Discordance with 37
Artificial Nest Studies. Jeffrey R. Ball, Erin M. Bayne, and Craig S. Machtans
- The Status of Wintering Golden-cheeked Warblers in Nicaragua. David I. King, Edgar 45
Herrera, Sandra Hernandez, Carol A. Lively, David W. Mehlman, John H. Rappole,
and Dana Roth
- Nest-site Attributes and Reproductive Success of White-headed and Hairy Woodpeckers 52
along the East-slope Cascades of Washington State. Jeffrey M. Kozma
- Dynamics of Passerine Migration in Veracruz, México. Eduardo Martínez Leyva, Ernesto 62
Ruelas Inzunza, Octavio Cruz Carretero, James L. Barr, Elisa Peresbarbosa Rojas, Irving
Chávez Domínguez, Gustavo Ramón Lara, Rafael Rodríguez Mesa, Alexaldo García
Miranda, and Norma Ferriz Domínguez
- Flammulated Owl (*Otus flammeolus*) Breeding Habitat Abundance in Ponderosa Pine 71
Forests of the United States. Mark D. Nelson, David H. Johnson, Brian D. Linkhart,
and Patrick D. Miles
- Addressing Regional Declines in Purple Martin Populations. John Tautin, B. Cousens, 82
K. Kostka, S. Kostka, and D. A. Airola
- Avistamiento de Actividad de Cacería Nocturna por Parte del Halcón Peregrino en la 88
Ciudad de Guatemala. E. Daniel Tenez
- Investigating the Limiting Factors of a Rare, Vulnerable Species: Bicknell's Thrush. 91
Jason M. Townsend, Christopher C. Rimmer and Kent P. McFarland
- Do the Winter Diets of Sympatric Burrowing Owl and Short-Eared Owl Overlap in West- 96
Central Mexico? Héctor E. Valdez-Gómez, Geoffrey L. Holroyd, Helen E. Trefry, and
Armando J. Contreras-Balderas

BIRD COMMUNITIES

- Estudio Preliminar de la Avifauna de la Isla del Cisne, Honduras. Francisco Aceituno and 105
David Medina
- Balancing Competing Habitat Management Needs for Northern Spotted Owls and Other 109
Bird Species in Dry Forest Landscapes. Joseph B. Buchanan
- A Bird Community on the Edge: Habitat Use of Forest Songbirds in Eastern Oklahoma. 118
Vince S. Cavalieri, Timothy J. O'Connell, and D. M. Leslie, Jr.

Prothonotary Warblers as Indicators of Hydrological Conditions in Bottomland Forests. Jeffrey P. Hoover	128
Advancing Broad Scale Ecological Assessment Using Bird Community Indicators. Timothy J. O'Connell	138
Assessing the Value of Shade Coffee for Bird Conservation in the Colombian Andes at a Local, Regional, and National Level. Lina M. Sánchez-Clavijo, Jorge E. Botero, and Rocío Espinosa	148
ANTHROPOGENIC IMPACTS	
Energy Sector Edge Effects on Songbird Nest Fate and Nest Productivity in the Boreal Forest of Western Canada: A Preliminary Analysis. Jeffrey R. Ball, Erin M. Bayne, and Craig S. Machtans	161
Is Illegal Take Affecting the Peregrine Falcon Population in Central Peru: Why and How? Oscar Beingolea Maseveu	171
Potential Impacts of Wind Farm Energy Development on Upland Game Birds: Questions and Concerns. Leonard A. Brennan, Robert M. Perez, Stephen J. DeMaso, Bart M. Ballard, and William P. Kuvlesky, Jr.	179
Wind Energy Development, Prescribed Fire and Migratory Land Birds in the Southeastern United States: Breeding, Stopover, and Wintering Habitat Relationships. Leonard A. Brennan, Bart M. Ballard, and William P. Kuvlesky, Jr.	184
Abundance of Three Grassland Songbirds in an Area of Natural Gas Infill Drilling in Alberta, Canada. Brenda C. Dale, Trevor S. Wiens, and Laura E. Hamilton	194
Impacts of Free-ranging Domestic Cats (<i>Felis catus</i>) on Birds in the United States: A Review of Recent Research with Conservation and Management Recommendations. Nico Dauphiné and Robert J. Cooper	205
Notes on the Live Bird Trade in Northern Peru. Nico Dauphiné	220
Threats Facing Bermuda's Breeding Seabirds: Measures to Assist Future Breeding Success. Andrew F. Dobson and Jeremy Madeiros	223
Afectaciones A Vertebrados por Vehiculos Automotores en 1.2 km de Carretera en el Istmo de Tehuantepec. Manuel Grosselet, Bernardino Villa-Bonilla, and Georgita Ruiz Michael	227
Monitoring Results of the Illegal Parrot Trade in the Los Pozos Market, Santa Cruz de la Sierra, Bolivia. Mauricio Herrera and Bennet Hennessey	232
The Importance of Working Wetlands as Avian Habitat in Louisiana. Jay V. Huner, Clinton W. Jeske, and Michael J. Musumeche	235
Avian Mortality at Windows: The Second Largest Human Source of Bird Mortality on Earth. Daniel Klem, Jr.	244
Estado de Conservación de Lora Nuca Amarilla (<i>Amazona auropalliata</i>) en el Corredor Biológico Paso Del Istmo, Rivas, Nicaragua. Martín Lezama-López	252
Protecting Birds While Powering America: An Overview of Efforts by the Electric Utility Industry to Reduce Bird Mortality and Improve Power Reliability. Sherry Liguori	258
Towers, Turbines, Power Lines, and Buildings—Steps Being Taken by the U.S. Fish and Wildlife Service to Avoid or Minimize Take of Migratory Birds at These Structures. Albert M. Manville, II	262

A Comparison of Breeding Birds Before and After Construction of a Recreation Site in Northern Idaho. Scott R. Robinson	273
--	-----

DECISION SUPPORT TOOLS

Decision Support Tools: Bridging the Gap between Science and Management. John D. Alexander, Jaime L. Stephens, Geoffrey R. Geupel, and Thomas C. Will	283
Mapping Data-specific Avian Distributions Utilizing Cartographic Point Aggregating Generalization Operators in a Multi-Scale Framework. M. Thomas Auer	292
Identifying Site-based Habitat and Population Goals within Important Bird Areas. Elizabeth Ciuizio, Cristina Frank, and Troy Ettel	303
Setting Population Objectives: Biological, Historical, and Conceptual Perspectives Relevant to Regional Bird Population Objectives. Randy Dettmers	308
Conservation Priority-setting in Guatemala through the Identification of Important Bird Areas. Knut Eisermann and Claudia Avendaño	315
Test of Partners in Flight Effective Detection Distance for Cerulean Warbler. Paul B. Hamel, Melinda J. Welton, Carl G. Smith, III, and Robert P. Ford	328
Using the Spatial Filtering Process to Evaluate the Nonbreeding Range of Rusty Blackbird. Paul B. Hamel and Esra Ozdenerol	334
Historical Trends in Rusty Blackbird Nonbreeding Habitat in Forested Wetlands. Paul B. Hamel, Diane De Steven, Ted Leininger, and Randy Wilson	341
Hierarchical Population Models for the Red-cockaded Woodpecker. Mevin B. Hooten, Christopher K. Wikle, Lawrence D. Carlile, Richard E. Warner, and Donald Pitts	354
The Avian Knowledge Network: A Partnership to Organize, Analyze, and Visualize Bird Observation Data for Education, Conservation, Research, and Land Management. Marshall Iliff, Leo Salas, Ernesto Ruelas Inzunza, Grant Ballard, Denis Lepage, and Steve Kelling	365
Beyond Strategic Habitat Conservation – The Unrealized Potential of NABCI. Rex R. Johnson and Charles K. Baxter	374
A Decision Support Tool for Setting Population Objectives for Priority Landbirds in the Central Hardwoods and West Gulf Coastal Plain/Ouachitas Bird Conservation Regions. D. Todd Jones-Farrand, John M. Tirpak, Frank R. Thompson, III, Daniel J. Twedt, Charles K. Baxter, Jane A. Fitzgerald, and William B. Uihlein, III	377
Gathering, Organizing and Accessing Data for Use in Bird Conservation across the Americas. Elizabeth Martin, Bruce G. Peterjohn and Steve Kelling	388
Web Mapping for Bird Conservation: Leveraging the Avian Knowledge Network. Douglas A. Miller, Stephen R. Crawford, Terrell D. Rich, and Steve Kelling	394
Data for Developing Spatial Models: Criteria For Effective Conservation. Neal D. Niemuth, Michael E. Estey, and Ronald E. Reynolds	396
The Avian Knowledge Alliance: A Network of Non-Governmental Organizations Working Together on Bird Conservation. Jaime L. Stephens, David Hanni, John D. Alexander, Grant Ballard, Geoffrey R. Geupel, and Brian L. Sullivan	412

Data Exploration through Visualization Tools. Brian L. Sullivan, Steven T. Kelling, Christopher L. Wood, Marshall J. Iliff, Daniel Fink, Mark Herzog, Doug Moody, and Grant Ballard	415
Conservation Opportunity Assessment for Rare Birds in the Midwestern United States: A Private Lands Imperative. Wayne E. Thogmartin and Jason J. Rohweder	419
Conservation Design: Where Do We Go From Here? Wayne E. Thogmartin, Jane A. Fitzgerald, and Malcolm T. Jones	426
Bridging the Gap Between Habitat-Modeling Research and Bird Conservation with Dynamic Landscape and Population Models. Frank R. Thompson, III	437
EDUCATION, COMMUNICATION, AND OUTREACH	
Strategic Communications and Its Critical Role in Bird Habitat Conservation: Understanding the Social-Ecological Landscape. Roxanne E. Bogart, Jennifer N. Duberstein, and Debbie F. Slobe	441
A Citizen Science Approach to Ornithological Research: Twenty Years of Watching Backyard Birds. David N. Bonter and Wesley M. Hochachka	453
A Process and Tools for Evaluating Bird Banding Education Success. Amy Busch and Ashley A. Dayer	459
Teens Band: Inspiring Teen Banders as Ambassadors for Bird Conservation. Daniel Froehlich and Emily Sprong	471
The Great Texas Birding Classic: A Bird Watching Tournament that Protects and Promotes Critical Texas Gulf Coast Habitat. Carol A. Jones, Shelly Plante, and Clifford E. Shackelford	479
Conservation Through Bird Education in Texas. Mark Klym	483
A History of Birding for Conservation in Delaware. Sara F. O'Byrne	487
Engagement Of Texas Private Landowners in Bird Conservation. Brent Ortego, Matt Wagner, Tim Anderson, Wade Harrell, and Clifford Carter	491
An Integrated Community-Based Harpy Eagle and Avian Conservation Program for the Maya Mountains Massif, Belize. James A. Rotenberg, Jacob Marlin, Sam Meacham, and Sharna Tolfree	493
A Case Study of Bird Trail Development in Central America. Andrew Rothman	508
Birds Without Borders: American and Mexican University Workshop Focuses on Avian Conservation. Jill M. Russell, David E. Russell, and Rafael Herrera Herrera	512
Acres for Antpittas: Wisconsin's International Bird Conservation Program. Craig Thompson	520
The Virginia Birding and Wildlife Trail: A Land Conservation Tool for the Future. Jeffrey B. Trollinger, Louis Verner, and Sergio Harding	523
PROJECT IMPLEMENTATION	
Prioritizing Implementation at Important Bird Areas. Brian J. Byrnes and John Rogers	529
Assessing the Future Wildlife Impacts of Conservation and Development in the Mackenzie Watershed. Matthew Carlson, Erin Bayne, and Brad Stelfox	531
Borders from a Bird's-eye View: A Century of Transborder Conservation for North American Migratory Birds. Charles Chester	541

Integrating Grassland and Shrubland Bird Conservation with the Northern Bobwhite Conservation Initiative for the Central Hardwoods Bird Conservation Region. James J. Giocomo, David A. Buehler, and Jane Fitzgerald	545
Opportunities through Partnerships for Conservation and Research of Austral Migrants. Alex E. Jahn, Sara Ouly, Eliza Chiang, Douglas J. Levey, and Jose A. Clavijo	557
Using Nest Boxes for Lewis's Woodpecker Conservation in Central Oregon. Diane Kook and James D. Moodie	565
Conservación de la Avifauna en la Reserva de la Biosfera Sierra Gorda; del Pago de Servicios Ambientales a la Educación Ambiental. R. Pedraza Ruiz	569
Long-Term Conservation of Migratory Birds in México: The Veracruz River of Raptors Project. Ernesto Ruelas Inzunza, Laurie J. Goodrich, Stephen W. Hoffman, Eduardo Martínez Leyva, Jeff P. Smith, Elisa Peresbarbosa Rojas, Rafael Rodríguez Mesa, Karen L. Scheuermann, Sandra L. Mesa Ortiz, Yumei Cabrera Carrasco, Norma Ferriz, Robert Straub, M. Martín Peñaloza Pérez, and Jorge G. Barrios	577
Grassland Bird Management on Public Lands in the United States: An Example from the Northern Great Plains. Dan Svingen	590
Calculating Habitat Area Required for Priority Shorebirds in the Gulf Coast Joint Venture Region. William G. Vermillion and Brent J. Ortego	594
Priorities for Research and Monitoring, Management, and Outreach as Determined by the Swallow-tailed Kite Conservation Alliance—A Partnership to Advance Conservation of a Vulnerable Species. Gina Zimmerman	599
MONITORING	
Citizen-Science Monitoring of Landbirds in the Mississippi River Twin Cities Important Bird Area. Tania Z. Homayoun and Robert B. Blair	607
Occupancy Modeling as a Framework for Designing Avian Monitoring Programs: A Case Study along Appalachian Streams in Southern West Virginia. Brady J. Mattsson and Matthew R. Marshall	617
Tracking the Nesting Success of North America's Breeding Birds through Public Participation in NestWatch. Tina Phillips and Janis Dickson	633
Monitoring with a Conservation Goal: Principles and Practice of Raptor Migration Monitoring. Ernesto Ruelas Inzunza	641
Using the MAPS and MoSI programs to Monitor Landbirds and Inform Conservation. James F. Saracco, David F. DeSante, M. Philip Nott, and Danielle R. Kaschube	651
Integrated Bird Monitoring and the Avian Knowledge Network: Using Multiple Data Resources to Understand Spatio-temporal Variation in Demographic Processes and Abundance. James F. Saracco, David F. DeSante, M. Philip Nott, Wesley M. Hochachka, Steve Kelling, and Daniel Fink	659
Addressing Hummingbird Conservation Needs: An Initial Assessment. Susan M. Wethington and Nash Finley	662
RESPONSE TO HABITAT CHANGES	
Small-scale Response in an Avian Community to a Large-scale Thinning Project in the Southwestern United States. Karen E. Bagne and Deborah M. Finch	669

Lessons Learned from Prescribed Fire in Ponderosa Pine Forests of the Southern Sierra Nevada. Karen E. Bagne and Kathryn L. Purcell	679
Influence of Old World Bluestem (<i>Bothriochloa ischaemum</i>) Monocultures on Breeding Density of Three Grassland Songbirds in Oklahoma. Andrew D. George, Timothy J. O'Connell, Karen R. Hickman, and David M. Leslie, Jr.	691
Influence of Invasive Eastern Redcedar on Density of Breeding Warblers in Cross Timbers Forest. Jason R. Heinen and Timothy J. O'Connell	698
Nest Success Rates of Four Shrubland Specialists in Conservation-Managed Fields with Comparisons to Other Managed and Unmanaged Shrublands. Christy M. Slay and Kimberly G. Smith	705