

CURRICULUM VITAE...July 2009

Richard L. Hutto

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EDUCATION:

B.A. in Zoology, 1971, University of California, Los Angeles.

M.S. in Biology, 1973, Northern Arizona University, Flagstaff.
Thesis title: The coexistence of heteromyid rodents.

Ph.D. in Biology, 1977, University of California, Los Angeles.
Dissertation title: The ecology of migratory wood warblers and the habitat distribution of small migratory landbirds in western Mexico.

APPOINTMENTS

1987-present Professor of Biology and Wildlife Biology
1982-1987 Associate Professor of Zoology and Wildlife Biology
1977-1982 Assistant Professor of Zoology and Wildlife Biology
1998-2000 Connecticut Public Television—Host of “BirdWatch”, a PBS distributed series

COURSES TAUGHT:

Undergraduate: Montana Wildlife; Ornithology; Field Ornithology; Animal Ecology;
Community Ecology; Avian Census Methods; Field Ecology; Senior Thesis
Graduate: Advanced Ornithology; Advanced Animal Behavior; Evolutionary and Behavioral
Ecology; Avian Ecology; Fire Ecology; Behavioral Ecology Seminar; Ecology Seminar

AREAS OF RESEARCH INTEREST:

My research interests revolve around habitat selection, the factors that determine suitability of sites to landbirds, and the process by which birds choose to settle nonrandomly in space. Most of my research has been focused in conifer forest and riparian habitats in the northern Rockies and in northern Mexico. I am especially interested in conifer forests that have been disturbed by recent wildfires and/or timber harvesting, and in riparian systems that are subject to a variety of human alterations. In both systems I am asking how vegetation type and structure (as influenced by land use practices) and landscape context affect habitat selection and subsequent distribution patterns. Some of my main questions are: How can we use our mechanistic understanding to model the distribution pattern of any bird species? For any given species, why has natural selection led to a distribution pattern that is non-random in space? Do patterns of habitat occupancy reflect habitat suitability? How important is disturbance in maintaining diversity in these systems?

Most of my research activity is conducted in association with

(a) a 20-year-old program that is funded primarily by the Northern Region of the USFS (http://www.avianscience.org/research_landbird.htm), which we developed to provide long-term population trend monitoring, habitat-relationships, and management effects studies of forest birds on USFS lands;

(b) a program funded by PPL-Montana, BLM, Big Hole Watershed Committee, USFWS (http://www.avianscience.org/research_riparian_madison.htm) to use birds as a tool to assess restoration success along the Madison and Missouri Rivers in Montana, and to study the distribution, nest success, and re-fueling success of riparian birds in relation to riparian land-use practices;

(c) a program funded primarily by USFS/RMRS and the Joint Fire Sciences Program (http://www.avianscience.org/research_avianfire.htm), to examine the distribution of birds within and among recently burned forests to better understand what must have constituted historical fire regimes in the northern Rockies.

My lab is especially interested in putting our research results to practical use by integrating the habitat needs of landbirds into management schemes that are ecologically sound.

CURRENT GRADUATE STUDENTS:

Aaron Flesch (Ph.D.)

FORMER GRADUATE STUDENT ADVISEES:

1. **Paul D. Hampton**—"The wintering and nesting behavior of the Trumpeter Swan," M.S. in Wildlife Biology, December 1981.
2. **Nedra Klein**—"Song variability in the American Redstart (*Setophaga ruticilla*)," M.S. in Zoology, June 1982.
3. **J. Michael Reed**—"Habitat selection and territory size regulation in the Vesper Sparrow (*Pooecetes gramineus*)," M.S. in Zoology, June 1984.
4. **Nathaniel Shambaugh**—"Nesting ecology of the Townsend's Solitaire (*Myadestes townsendi*)," M.S. in Zoology, June 1986.
5. **D. Paul Hendricks**—"Foraging ecology of alpine-nesting Water Pipits," M.S. in Zoology, March 1987.
6. **Peter Hunt**—"The relationship between western spruce budworm abundance and bird community structure," M.S. in Zoology, August 1989.
7. **Amy L. Leider**—"Factors influencing courtship success in male Calliope Hummingbirds (*Stellula calliope*)," M.S. in Zoology, September 1990.

8. **L. Christine Paige**—"Population trends of songbirds in western North America," M.S. in Wildlife Biology, December 1990.
9. **Bret Tobalske**—"Bird populations, logging, and habitat suitability based on fledging success of Red-naped Sapsuckers," M.S. in Zoology, May 1991.
10. **Rebecca S. Burton**—"Red squirrel (*Tamiasciurus hudsonicus*) cache sites and cache pattern in Pattee Canyon, Montana," M.S. in Zoology, May 1991.
11. **Patricia McClelland**—"Ecology of Bald Eagles at Hungry Horse Reservoir, Montana," M.S. in Wildlife Biology, June 1992.
12. **José Fernando Villaseñor**—"The importance of agricultural border strips in the conservation of North American migratory landbirds in western Mexico," M.S. in Organismal Biology and Ecology, June 1993.
13. **Andrew Bosma**—"Foraging site selection by insectivorous forest birds in western Montana," M.S. in Organismal Biology and Ecology, December 1993.
14. **Michael A. Munts**—"A comparison of bird communities between an untreated control and two timber harvest treatments in western Montana," M.S. in Wildlife Biology, June 1994.
15. **Jeffrey S. Marks**—"Ecology of Bristle-thighed Curlews (*Numenius tahitiensis*) in the northwestern Hawaiian Islands," Ph.D. in Organismal Biology and Ecology, May 1995.
16. **John R. Hoffland**—"A comparison of bird abundance among selectively logged, old-growth, and mature second-growth ponderosa pine/Douglas-fir stands," M.S. in Environmental Studies, May 1995.
17. **Elaine L. Caton**—"Effects of fire and salvage logging on the cavity-nesting bird community in northwestern Montana," Ph.D. in Organismal Biology and Ecology, December 1996.
18. **Susan M. Hitchcox**—"Abundance and nesting success of cavity-nesting birds in unlogged and salvage-logged burned forest in northwestern Montana," M.S. in Organismal Biology and Ecology, December 1996.
19. **Jock S. Young**—"Nonlinear bird-habitat relationships in managed forests of the Swan Valley, Montana," M.S. in Organismal Biology and Ecology, December 1996.
20. **Vita Wright**—"Multi-scale analysis of Flammulated Owl habitat use: owl distribution, habitat management, and conservation," M.S. in Organismal Biology and Ecology, December 1996.
21. **Sophie A. H. Osborn**—"Factors affecting the distribution and productivity of the American

R. L. Hutto...pg. 4

Dipper (*Cinclus mexicanus*) in western Montana: does streamside development play a role?" M.S. in Organismal Biology and Ecology, May 1999.

22. **Hugh Powell**—"The influence of prey density on post-fire habitat use of the Black-backed Woodpecker," M.S. in Organismal Biology and Ecology, April 2000.
23. **Amy Cilimburg**—"Survival and dispersal of Yellow Warblers in Montana," M.S. in Wildlife Biology, March 2001.
24. **Charles Eldermire**—"A rank-specific, cost-benefit analysis of single- and mixed-species flocking in the Black-capped Chickadee," M.S. in Organismal Biology and Ecology, December 2001.
25. **Crow White**—"The influence of elk management on the Common Raven population in Jackson Hole, Wyoming," M.S. in Wildlife Biology, December 2002.
26. **Karen Short**—"Complexity and variation in the effects of low-severity fires on forest biota: a call for novel approaches to the study of prescribed fires," Ph.D. in Organismal Biology and Ecology, May 2003.
27. **Kristina Smucker**—"Changes in bird abundance and species composition in a coniferous forest following a mixed-severity wildfire," M.S. in Wildlife Biology, December 2003.
28. **Fernando Villaseñor**—"Habitat use and the effects of disturbance on wintering birds using riparian habitats in Sonora, Mexico," Ph.D. in Organismal Biology and Ecology, December 2006.
29. **Bruce Robertson**—"The roles of food and predation in shaping adaptive and maladaptive behaviors in postfire bird species," Ph.D. in Organismal Biology and Ecology, December 2006.
30. **Ty Smucker**—"Patterns of avian nest success and migratory refueling performance in relation to cottonwood riparian habitat structure," M.S. in Wildlife Biology, December 2007.

FORMER UNDERGRADUATE SENIOR THESIS ADVISEES:

Paul Hampton—"Causative factors in the timing of spring migration of ducks in western Montana," Senior Thesis, 1978.

Jim Hasbrouck—"Comparison of small mammal populations in a burned and unburned Douglas-fir forest in Pattee Canyon, Montana," Senior Thesis, Watkins Scholar, 1979.

Dale Becker—"Reproductive ecology and habitat utilization by Prairie Falcons in southeastern Montana," Senior Thesis, 1980.

R. L. Hutto...pg. 5

John Marzluff–“Forest bird habitat characteristics in western Montana,” Senior Thesis, 1980.

Sharon Gaughan–“Cooperation between male and female captive Golden Eagles during incubation and care of young,” Senior Thesis, 1981.

Kevin Cooper–“Food habits of four passerines in southcentral Alaska,” Senior Thesis, 1982.

Christine Hass–“The relationship between fox squirrels and native pine squirrels in western Montana,” Watkin's Scholar, 1983.

Jeff Birdsley–“Comparative giving-up behavior of hawking and gleaning tyrant flycatchers,” Senior Thesis, Watkins Scholar, 1986.

Vita Wright–“A preliminary study of snag attrition in clearcuts,” Senior Thesis, 1993

Lonnie Quinlan– “Effects of grazing on riparian songbirds at the Bandy Ranch, Montana,” Senior Thesis, 1994.

Suzanne Cox–“Factors determining habitat use by Timberline Sparrows (*Spizella (breweri) traverneri*) at the southern end of their range,” Senior Thesis, Watkins Scholar, 2000.

Ryan Stutzman–“The use of autonomous recording units to conduct bird surveys,” Undergraduate Research Awardee, fall 2007.

UNIVERSITY SERVICE:

Supervisor; Bird and Mammal Museum, 1977-1993

Director, Program in Organismal Biology and Ecology, 1989-1990; 1996-1998

Chair; Graduate Admissions Committee, 1978-1979, 2003, 2006

Chair; Undergraduate Affairs Committee, 1979-1984

Chair; Library Acquisitions Committee, 1983-1984

Chair; Zoology Faculty Evaluation Committee, 1989, 1990

Chair; OBE Faculty Evaluation Committee, 1993, 1996, 1997, 1998, 2002

Chair; Graduate Curriculum Committee 2000-2002; 2008-2009

Chair; Information Technology Committee 2000-2002

Member; Museum Collections Manager Search Committee, 1993

Member; Museum Advisory Committee, 1993-present

Member; DBS Building/Visions Committee, 1995-1996

Member; Search Committee, Associate Dean of Biological Sciences, 1987, 1996

Member; Search Committee, Dean of CAS, 1988-1989

Member or Chair; Faculty Search Committees (15 since 1980)

Member; Wildlife Biology Committee, 1979-present

Member; Wildlife Biology Undergraduate Committee, 1986-1991, 2000-2003

Member; Graduate Admissions Committee, 1977-1978, 1980-1982; 1999-2001; 2005

Member; Seminar Committee, 1977-1978, 1979-1980, 1994-1995

Member; Qualifying Exam Committee, 1977-1979, 1980-1981, 1983-1984, 1986-1988, 1989-1991, 1992-1993
Member; Honors Exam Committee; 1978-1980, 1982-1984, 1987, 1988
Member; College Executive Committee, 1986-1988
Member; Biological Station Executive Committee, 1982-1983, 1986-1988
Member, Human Resources Initiative Task Force, 1996
Member; Committee on Faculty Achievement Awards, 1987-1988
Member; University Sabbatical Assignment Committee, 1992-1993
Member; Biological Sciences Executive Committee, 1989-1990
Member; Academic Standards Committee, 1980-1981
Member, Life Sciences Curriculum Committee, 1980-1981
Member; University Graduate Council, 1980-1984, 1987-1988
Member; Biological Station Executive Committee, 1979-1980, 1981-1984
Member; Joint Planning Committee (Grad School & Research), 1981-1983
Member; Interdisciplinary Studies Committee, 1981-1983
Member; Sigma Xi Undergraduate Senior Award Committee, 1991-1992
Member, Associate Dean DBS Search Committee, 1996
Member, Council of Graduate Program Directors 1997-1998
Life Sciences Faculty Representative, UM Days, 1982, 1983
Faculty Advisor; UM Volleyball Club, 1981-1991
Judge; UM Science Fair, 1978-1980, 1985, 1991-1993, 1997, 1998
Judge; Wildlife Film Festival, 1980-1984
Judge and Moderator; Wildlife College Bowl, 1983

COMMUNITY SERVICE:

Member, Board of Directors; Five Valleys Audubon Society, 1980-1983
Chair; Five Valleys Audubon Student Awards Committee, 1980-1983
Member; Montana Nongame Wildlife Working Group (multi-agency), 1990-1991
Member; Board of Directors, Montana Natural History Center, 1990-1995
Member; Board of Advisors, Montana Natural History Center, 1995-present
Member; Miller Creek Vegetation and Wildlife Committee for the Missoula OCD
Member; USFS Neotropical Migratory Bird Monitoring Group; 1993-present
Member; Montana Nongame Wildlife Working Group; 1991-1999
Member; Wildlife Biologists' Breakfast Club; 1991-1993
Member; Wildlife Working Group, Bitterroot Ecosystem MRP; 1996, 1997
Member; Technical Resource Advisory Team, Five Valleys Land Trust; 1999-2000
Member; The Nature Conservancy, Montana Chapter Board of Trustees; 2004-2007
Outdoor bird-finding excursions, indoor workshops and lectures for Five Valleys Audubon Society, Bitterroot Audubon Society, Montana Natural History Center, Hellgate High School, Big Sky High School, Sussex School, Lewis and Clark Elementary School, Seeley Lake Loon and Fish Festival, 1980-present
On-the-air fund raising appearances, KUFM-TV and KUFM-radio (1999, 2000, 2001, 2002)

PROFESSIONAL AND HONORARY SOCIETIES:

R. L. Hutto...pg. 7

American Institute of Biological Sciences
American Ornithologists' Union—Elective Member, 1985; Fellow, 1995
Audubon Society
Cooper Ornithological Society
Ecological Society of America
International Association of Wildland Fire
Society for Conservation Biology

PROFESSIONAL ASSOCIATION SERVICE:

Society for Northwestern Vertebrate Biology—Vice-President, and organizer of Inland Region meetings, 1978-79, 1982-83, 1989-1990; Associate Editor for Ornithology, *Murrelet*, 1983-1987.

American Ornithologists' Union—Annual meeting Session Chair, 1981, 1987, 1995; Membership Committee, 1985; Annual Meeting Co-chair, 1994, Committee on Brewster and Coues Awards, 1995; Associate Editor, *Auk*, 1995-1998.

Cooper Ornithological Society—Board of Directors, 1985-86, 1988-92; Auction Committee Chairman, 1986; Painton Award Committee, 1988; Student Participation Committee Chairman, 1989-1993; Nominating Committee Chairman 1990; Mewaldt-King Award Committee 1993-1995; Annual Meeting Co-chair, 1994; Miller Award Committee, 2002-2003, 2008-2009.

Wilson Ornithological Society—Annual Meeting Co-chair, 1994.

Montana Natural History Center—Board of Directors, 1990-1992.

National Science Foundation—Ecology Panel Member, 1990, 2007; Conservation and Restoration Ecology Panel (declined), 1990.

Consulting Editor—Studies in Avian Biology, 1990, 1995.

Neotropical Migratory Landbird Conservation Program—Member, USFS Region I Steering Committee, 1990-1991; Vice-chair, National Research Working Group, 1993-1994.

Past and continuing reviewer of manuscripts and proposals for *American Naturalist*, *Animal Conservation*, *Avian Conservation and Ecology*, *Auk*, *Behaviour*, *Behavioral Ecology*, *Behavioral Ecology and Sociobiology*, *Biodiversity and Conservation*, *Biological Conservation*, *Bioscience*, *Biotropica*, *Bulletin of Marine Science*, The Canada Council, *Journal of Avian Biology*, *Canadian Field Naturalist*, *Canadian Journal of Forest Research*, *Canadian Journal of Zoology*, *Condor*, *Conservation Biology*, *Ecography*, *Ecology*, *Ecological Monographs*, *Ecological Applications*, *Environmental Management*, *Forest Ecology and Management*, *Forest Science*, Grand Canyon Monitoring and Research Center, *Great Basin Naturalist*, *Ibis*, *International Journal of Wildland Fire*, *Journal of Applied Ecology*, *Journal of Avian Biology*, *Journal of Environmental Management*, *Journal of Field Ornithology*, *Journal of Mammalogy*, *Journal of Tropical Biology*, *Journal of Wildlife Management*, *Landscape Ecology*, *Memoirs of the California Academy of Science*, *Montana Outdoors*, National Fish and Wildlife Foundation, National Geographic Society, National Park Service, National Science Foundation, *Natural Areas Journal*, *Northwest Science*, *Northwestern Naturalist*, *Oecologia*, *Oikos*, *Proceedings of the Montana Academy of Sciences*, *Proceedings of the National Academy of Sciences*, *Science*, *Rangeland Ecology*, Smithsonian Institution, *Southwestern Naturalist*, *Studies in Avian Biology*, USDA Forest Service, USDI Fish and Wildlife

Service, Wildlife Conservation Society, *Wildlife Society Bulletin*, *Wilson Bulletin*, World Wildlife Fund.

RESEARCH PROJECT GRANTS:

Frank M. Chapman Memorial Fund of the American Museum, 1975 – \$600; University of California Regents' Research Grant, 1975, 1977 – \$1,000; University of California Graduate Student Patent Fund, 1975 – \$600; University of Wyoming, Jackson Hole Research Station, 1975 – \$300 for studies of the migration ecology of western wood warblers.

University of Montana, Research Advisory Council, 1978; 1982—\$3,800 for studies of avian foraging behavior in relation to food availability.

USDI Fish and Wildlife Service 1979-1981—\$20,000 for study of riparian bird communities in western Montana.

McIntire-Stennis Coop. Forestry Research Grant, 1979, 1988—\$6,500 for studies of trends in populations of migratory birds in Montana, and effects of timber harvesting on bird communities.

World Wildlife Fund-U.S./Smithsonian Institution, 1983-1985—\$35,500 for study of distributional ecology of migratory landbirds in Mexico.

NSF-MONTS, 1986, 1988—\$22,100 for studies of distribution and foraging behavior of forest birds in relation to spruce budworm density.

National Geographic Committee for Research and Exploration (#4062-89), 1989-1991—\$25,000 for study of bird distribution in relation to the landscape context of forest fires.

National Fish and Wildlife Foundation (#90-061), 1990-1993—\$186,385 for study of land use effects on migratory landbirds in western Mexico.

USDA Forest Service (Coop. Agreement PSW-91-0007CA), 1991-1992—\$50,980 for modeling population trends of western neotropical migrant birds.

USDA Forest Service (RFQ 1-865), 1991-1992—\$13,000 for study of monitoring methods for neotropical migrants.

USDA Forest Service (RFQ 0353-1-8), 1991-1992—\$9,900 for bird monitoring study on the Clearwater National Forest.

National Park Service, 1992-1993—\$34,600 for study of response of cavity-nesting birds to the 1988 fires in Glacier National Park.

Bureau of Land Management, 1992—\$3,400 for study of distribution patterns of riparian birds on Hoodoo Mountain, Montana.

USDA Forest Service (Contract #53-0343-2-00207), 1991-1994—\$235,075 for modeling habitat distribution and monitoring neotropical migratory birds in Region I.

USDA Forest Service (INT-94907-RJVA), 1994-1996—\$33,000 for multi-scale analysis of habitat use by Flammulated Owls in the Bitterroot Mountains, Montana.

McIntire-Stennis Cooperative Forestry Research Program (MONZ #9504), 1995-1996—\$14,000 to study “Abundance and nest success of cavity-nesting birds in salvage-logged and uncut patches within a burned forest on the Blackfoot-Clearwater Game Range, Montana.”

USDA Forest Service (Contract #53-0343-5-00012), 1995-1996—\$151,979 for modeling habitat distribution and monitoring neotropical migratory birds in Region I.

USDI Bureau of Land Management (PO-1422EO70P50036) 1995—\$5,000 to supplement the

- USDA Forest Service-funded project on monitoring migratory songbirds.
Plum Creek Timber Company (Check 191090) 1995—\$5,000 to supplement the USDA Forest Service-funded project on monitoring migratory songbirds.
- USDA Forest Service (53-0343-7-0007), 1996-1997—\$75,000 for continuing support of project on “Monitoring population trends and habitat use of neotropical migratory landbirds in Region I.”
- USDI Bureau of Land Management (PO-1422EO70P60126) 1996—\$5,000 to supplement the USDA Forest Service-funded project on monitoring migratory songbirds
- USDA Forest Service (43-0343-7-0105), 1997—\$18,000 for analysis of tradeoffs associated with alternative monitoring protocols.
- USDA Forest Service (53-0343-7-0007), 1997-2002—\$499,271 for monitoring population trends and habitat use of neotropical migratory landbirds in Region I.
- National Fish and Wildlife Foundation, 1 January-31 December 1998—\$40,000 for support of the Northern Region Landbird Monitoring Program.
- USDI National Park Service, 1 March 1998-31 December 2000 (#98-7; #99-9)—\$12,273 for project on “Effects of management-ignited prescribed fire on birds in Saguaro National Park, Arizona.”
- National Park Foundation, 15 September 1998-14 September 2001—\$75,000 for support of Karen Short as a Canon-National Parks Science Scholar.
- USDA-CSREES Strengthening Award, 1 October 1998-30 September 1999—\$59,508 for support of “Effects of fire on wildlife populations: a synthesis of literature and a field investigation.”
- USDI National Park Service, 1 May 2000-30 September 2001—\$6,897 in support of an investigation of “The effects of surface fires on birds and arthropods in southwestern ponderosa pine forests: an experimental approach.”
- National Science Foundation, 1 June 2000-30 May 2001—\$77,632 for support of “Central computer network at the University of Montana Field Research Station at Fort Missoula,” Ken Dial, Erick Greene, Tom Martin, and Richard Hutto, co-PIs
- USDA Forest Service, Rocky Mountain Research Station, 5 September 2000-14 January 2001—\$3,750 for study on “Use of dispersal to refine survival estimates in Yellow Warblers”
- PPL-Montana, 2002-2005—\$400,000 for “A study of the distribution, nest success, and physiological condition of birds in relation to vegetation structure and land use along the Missouri and Madison river corridors”
- BLM, 2002-2005—\$100,000 for “A study of the distribution, nest success, and physiological condition of birds in relation to vegetation structure and land use along the Missouri and Madison river corridors”
- USDA Forest Service (#03-CR-11015600-019), 2003-2008—\$521,669 for agreement to conduct landbird monitoring and develop educational opportunities at the University of Montana.
- MT Department of Environmental Quality/EPA Wetland Program, 2003-2005 – \$99,813 for “Assessing the Biological Integrity of Wetlands in Montana using Bird Communities”
- USFS-RMRS, 2003-2006 – \$343,750 for study of “Patterns of plant, bird, amphibian, and small mammal occurrence in salvage-logged and unsalvaged burned conifer forests in the Bitterroot Valley, Montana” (with L. Marcum, K. Foresman and P. Alaback)
- Montana Fish, Wildlife and Parks, 2003-2005 – \$85,000 for “Montana bird conservation partnership.”

R. L. Hutto...pg. 10

- Plum Creek Timber Company, 2003-2007 – \$10,500 for helping to develop an integrated bird monitoring program.
- Great Basin Bird Observatory, 2004-2005 – \$10,000 to aid in the “establishment of a coordinated bird monitoring program in Montana.”
- Joint Fire Sciences Program (challenge cost share through the Lolo National Forest #04-CS-11011600-029), 2004-2007 – \$325,000 to study “The influence of local and landscape conditions on the occurrence and abundance of Black-backed Woodpeckers in burned forest patches,” (Deb Austin and Sallie Hejl, co-PIs).
- USDI Fish and Wildlife Service, 2004-2007 – \$50,000 for study of bird distribution and indicators of bird health in relation to riparian bottomland conditions in Sonora, Mexico.
- Montana Natural History Center (M29602), 2005 -- \$8,036 for development of a “Wildland Fire Education Program.”
- BLM, 2004-2005 -- \$10,000 for development of web site for the Montana Birding and Nature Trail.
- USDA CSREES National Research Initiative, 2006-2010 -- \$466,000 to model bird-habitat relationships and build information transfer capability at the Avian Science Center (Rob Fletcher, co-PI).
- PPL-MT, 2006-2008 -- \$78,715 to evaluate the success of a habitat restoration project on the Madison River, MT.
- PPL-Montana, 2007-2009 -- \$50,000 for “evaluating the presence and persistence of birds along previously surveyed portions of the Missouri River corridor.”
- National Park Service (Glacier NP), 2006-2008 -- \$50,000 to conduct bird survey work in association with JFSP-sponsored fire research.
- Montana Fish, Wildlife & Parks, 2006 -- \$4,598 for conducting education about river restoration via a bird-banding station at Beavertail Hill State Park.
- Montana Fish, Wildlife & Parks, 2006 -- \$3,011 for conducting bird survey in association with a multi-agency Big Hole River restoration project.
- MT Department of Justice, 2006-2007 -- \$24,995 for a “Bird’s-eye view riparian watershed education program” to be conducted in the Clark Fork River basin.
- The Nature Conservancy, 2006-2008 -- \$68,000 for development of the “Koeys Watershed Monitoring Project.”
- Montana Fish, Wildlife & Parks, 2007 -- \$5,000 for “Flammulated Owls and citizen science monitoring.”
- BLM, 2008-2012 -- \$100,000 for “Upper Missouri Bird Inventory in Montana”
- Big Hole Watershed Committee, USFWS, and MTFWP, 2007-2009 -- \$25,000 for the use of birds to assess restoration success in the Big Hole Valley, MT.
- USDA Forest Service (#03-CR-11015600-007), 2008-2009—\$100,000 for agreement to conduct landbird monitoring and develop educational opportunities at the University of Montana.
- PPL-Montana, 2008-2009 -- \$71,000 for “evaluating the restoration success on O’Dell Creek of the Madison River.”

HONORS AND AWARDS:

Elected fellow of the American Ornithologists’ Union, 1995
Host, “BirdWatch,” a PBS Television Series, 1998-2000

CONFERENCE AND INVITED PRESENTATIONS:

- 1976 “Patterns in the activity of wood warblers and their insect prey” presented at the Southwest Coast Population Biology Conference, 26-28 March, Riverside, CA.
- “Breeding and winter ecology of four Western wood warbler species” presented to the American Ornithologists' Union, 9-13 August, Haverford, PA.
- 1977 Invited speaker – “Winter habitat distribution of migratory land birds in western Mexico” presented at the Smithsonian Institution Symposium on Migrants in the Neotropics, 27-29 October, Front Royal, VA.
- 1979 “Spatial and temporal aspects of foraging in some insectivores” presented to the Pacific Northwest Bird and Mammal Society, 3 March, Missoula, MT.
- 1980 “A seasonal comparison of habitat selection by transient migratory birds in southeastern Arizona” presented to the American Ornithologists' Union, 11-15 Aug., Ft. Collins, CO.
- “The effects of grazing on land bird communities in a western Montana riparian habitat” presented (with S. L. Mosconi) to the American Ornithologists' Union, 11-15 August, Ft. Collins, CO.
- “Lateral detectability estimates for line transect bird censuses: some problems and an alternative” presented at USFWS Bird Census Symposium, 27-31 Oct., Asilomar, CA.
- 1981 “The effect of livestock grazing on land birds of a western Montana riparian habitat” presented (with S. L. Mosconi) at Wildlife-Livestock Relationships Symposium, 20-22 April, Coeur d'Alene, ID.
- Invited participant—Wildlife Society, Western Region workshop on “Management of riparian ecosystems,” 5 January 1981, Missoula, MT.
- 1982 “Factors affecting nest site location in Gila Woodpeckers” presented (with J. J. Korol) to Cooper Ornithological Society, 22-25 April, Logan, UT.
- “Multispecific heron roosts: patterns of arrival time in relation to position in the roost” presented (by R. D. Montgomerie) to Ontario Society of Ornithologists, 6 May, Ontario, Canada.
- 1983 “The attraction of social fringillids to mineral salts: an experimental study” presented (with R. Bennetts) to the Pacific Northwest Bird and Mammal Society, 5 March, Missoula, MT.
- “Seasonal changes in the habitat distribution of transient insectivorous birds: competition mediated?” presented to the American Ornithologists' Union, 26-30 September, New

R. L. Hutto...pg. 12

York, NY.

1984 “The foraging ecology of species-rich insectivorous bird flocks: Preliminary observations from the highlands of western Mexico” presented to the Animal Behavior Society, 13-17 August, Cheney, WA.

1985 “Winter foraging ecology of insectivorous birds in western Mexico” presented to the American Ornithologists' Union, 7-10 October, Tempe, AZ.

1986 “The effects of subtropical deforestation on the migratory landbirds of western Mexico” presented to the Cooper Ornithological Society, 8-13 September, Davis, CA.

Invited speaker – “Winter ecology of migratory birds: management implications” presented at the Second Annual Nongame Symposium, 26 February, Billings, MT.

1987 “Is tropical deforestation really causing a decline in songbird populations?” presented to the Pacific Northwest Bird and Mammal Society, Inland Region Meetings, 4 April, Missoula, MT.

“What are we conserving: species or natural resources?” presented to the Society for Conservation Biology, 23-26 June, Bozeman, MT.

“The effect of habitat alteration on the migratory landbirds of western Mexico: A conservation perspective” presented to the Society for Conservation Biology, 23-26 June, Bozeman, MT.

“Is tropical deforestation responsible for the reported declines in neotropical migrant populations?” presented to the American Ornithologists' Union, 10-13 August, San Francisco, CA.

Invited participant—World Wildlife Fund-U.S. workshop on “The conservation of migratory birds in the New World,” 21 September 1987, Washington, D.C.

1988 Invited speaker—“On measuring the availability of avian food resources” presented to the Cooper Ornithological Society at a symposium entitled “Food exploitation by terrestrial birds”, 17-22 March, Asilomar, CA.

Invited speaker—“Studies of foraging behavior: present status, future directions” presented to the Cooper Ornithological Society at a symposium entitled “Food exploitation by terrestrial birds”, 17-22 March, Asilomar, CA.

Invited participant—Montana Natural Areas workshop on “Wildlife and riparian issues,” 25 March 1988, Butte, MT.

“Problems associated with the measurement of food availability” presented to the Pacific Northwest Bird and Mammal Society, 2 April, Moscow, ID.

“The composition and social organization of mixed-species flocks in a west Mexican tropical deciduous forest” presented to the Animal Behavior Society, 7-13 August, Missoula, MT.

- 1989 “Activity budgets of male Calliope Hummingbirds in a Montana clearcut” presented to the Montana Nongame Symposium, 22 February, Missoula, MT.

Invited speaker—“The ecology of western migratory landbirds in winter” presented to the North American Bluebird Soc., 8 July, Missoula, MT.

Invited speaker—“On the maintenance of biological diversity” presented at the Man and Biosphere Conference, 9 August, West Glacier, MT.

Invited participant—Yellowstone National Park workshop on “Post-fire research needs,” 9 October, Mammoth, WY.

Invited speaker—“On the habitat distribution of long-distance migratory landbirds in western Mexico” presented at the Neotropical Migrant Landbird Symposium, 7-9 December, Woods Hole, MA.

- 1990 “Bird species that benefitted from the 1988 forest fires” presented to the Montana Nongame Wildlife Symposium, 28 February, Lewistown, MT.

“Landscape ecology of early post-fire bird communities” presented to the Inland Region Meeting of the Society for Northwestern Vertebrate Biology, 14 April, Missoula, MT.

“Fire-dependent bird species: Evidence from the Montana fires of 1988” presented at joint meeting of the American Ornithologists' Union and the Cooper Ornithological Society, 25-30 June, Los Angeles, CA.

Invited participant—USFS Northern Region workshop on “Biodiversity,” 11-13 September, Missoula, MT.

Invited speaker—“An approach to multi-species research and management” presented at the UM School of Forestry Biodiversity Workshop, 4-5 October, Missoula, MT.

Invited participant—Multi-agency workshop on “Strategies for conservation of neotropical migratory birds,” 10-14 December, Atlanta, GA.

- 1991 Invited speaker—“On the conservation of neotropical migratory landbirds”, presented at the USFS Northern Region Wildlife Biologists' Workshop, 26 February, Kalispell, MT.

Invited participant—"Using songbirds as management tools to maintain biological diversity on forest lands" presented to the USFS Region I Wildlife and Fisheries Biologist Workshop, 26 February, Kalispell, MT.

Invited panelist—Montana Nongame symposium panel discussion entitled, "Are we managing for all wildlife?" 8-9 April, Bozeman, MT.

"On the conservation of neotropical migratory landbirds in Montana", presented at the 7th annual Nongame Wildlife Symposium, 8-9 April, Bozeman, MT.

"Bird populations in logged and unlogged stands of western larch/Douglas-fir forest in northwest Montana", presented to Society of American Foresters, 5 August 1991, San Francisco, CA (presented by Bret Tobalske).

"Maintaining bird diversity in western larch/Douglas-fir forests" presented with B. Tobalske (presenter) and R. Shearer at a symposium on "Ecology and management of *Larix* forests: a look ahead" held from 5-9 October, Whitefish, MT.

Invited participant—USFWS-USFS joint workshop on "Developing national standards for point count monitoring methods," 5-8 November, Patuxent, MD.

1992 "Crown fires in old forests: the only way to manage for the maintenance of several bird species" presented at a symposium on "Habitat Fragmentation and Biodiversity" held at the Montana Chapter, Wildlife Society Annual Meeting, 5-7 February 1992.

Invited speaker—"The uniqueness of early post-fire bird communities in Rocky Mountain coniferous forests" presented at a symposium on "Fire as an ecological force" at the Wilson Ornithological Society annual meeting, 9-12 April, Kissimmee, FL.

Invited speaker—"Re-authorization of the Endangered Species Act: Why save species?" presented at a the Endangered Species Workshop, sponsored by the National Wildlife Federation, 2 May, Missoula, MT.

Invited participant—National training workshop on "The status and management of neotropical migratory birds," 21-25 September, Estes Park, CO.

"The importance of intense forest fires to migratory and nonmigratory songbirds" presented at the national workshop on the "Status and management of neotropical migratory birds" held 21-25 September 1992, Estes Park, CO.

"A preliminary analysis of BBS-based population trends of western neotropical migrants" presented (with J. Verner, A. Bosma, and D. Patterson) at the national workshop on the "Status and management of neotropical migratory birds" held 21-25 September 1992, Estes Park, CO.

“Wintering habitat concerns: what habitats do migrants use, and what are the most critical periods?” presented (with speaker D. Petit, R. Waide, J. Lynch, and J. Blake) at the national workshop on the “Status and management of neotropical migratory birds” held 21-25 September 1992, Estes Park, CO.

“Rocky Mountain mixed-conifer, spruce-fir, pine, and aspen” presented (with speaker S. Hejl, C. Preston, and D. Finch) at the national workshop on the “Status and management of neotropical migratory birds” held 21-25 September 1992, Estes Park, CO.

1993 “Why it is important to monitor and manage for neotropical migratory birds on Forest lands” presented to the Northern Region Fish, Wildlife, and Botany Congress held 26-28 January 1993, Missoula, MT.

“Effects of silvicultural treatments on neotropical migratory birds” presented (with S. Hejl) to the Northern Region Fish, Wildlife, and Botany Congress held 26-28 January 1993, Missoula, MT.

“The importance of intense crown fires to some Rocky Mountain coniferous forest bird species” presented at the symposium on “Fire in wilderness and park management” held 30 March-1 April 1993, Missoula, MT.

“Effects of the 1988 fires on bird communities of the northern Rockies” presented to the USFS Fire Science Laboratory, Missoula, MT, 16 June 1993.

“Studies of Swan Valley migratory songbirds in summer and winter” presented to the Flathead Audubon Society, Bigfork, MT, 13 September 1993.

Invited speaker—“Using birds as a tool for understanding the effects of timber management on wildlife” presented at the Forest Stewardship Workshop, 18 September, Lubrecht Forest, Montana.

“Coupling LANDSAT imagery with point count data to model habitat suitability for neotropical migrants” presented at the symposium on “Conservation of migratory birds in Mexico”, Los Tuxtlas, Veracruz, Mexico, 5-7 November 1993.

1994 Invited speaker—“A monitoring program for neotropical migratory songbirds” presented at the USFS Northern Region Wildlife Biology and Botany Congress, 3 February, Missoula, MT.

Invited speaker—“Neotropical migrants: the continental connection” presented at the Society of American Foresters Montana Forest Conference, Missoula, MT, 3 March.

Invited symposium speaker—“A PC-program designed to calculate population trends using the BBS database” presented with ANDREW BOSMA (speaker) and JARED

VERNER at the joint North American Ornithological Conference, 21-26 June, Missoula, MT.

Invited speaker—"Women in Ornithology: job availability/affirmative action" presented at the joint North American Ornithological Conference, 21-26 June, Missoula, MT.

Invited symposium speaker—"En-route behavior and ecology: an overview" presented as part of the migratory bird symposium at the joint North American Ornithological Conference, Missoula, MT, 21-26 June.

"A comparison of the diversity and distribution of cavity-nesting birds in salvaged-logged and uncut patches within a burned forest" presented (with Susan Hitchcox) at the joint North American Ornithological Conference, Missoula, MT, 21-26 June 1994.

1995 "Northern Region landbird monitoring program", presented with Christine Paige, Wildlife Society, Montana Chapter, Billings, MT, 2 February 1995.

1996 Invited symposium participant—"Forest structure, scales of biodiversity, and migratory songbirds" organized by the Montana Department of Natural Resource Conservation, 10-14 June 1996, Missoula, MT.

"Conservation potential of a newly established landbird monitoring program in the Northern Rocky Mountains" presented at the American Ornithologists' Union annual meeting, Boise, ID, 13-17 August 1996.

Invited speaker—"Forest structure: how it can influence the types of bird species found in your woodlands" presented at a conclave organized by the Forest Stewardship Foundation, 12 October, Lubrecht Experimental Forest, MT.

1997 Invited participant—"The use of NASA technology to meet technological problems associated with the forest products industry" organized by the Bureau of Business and Economic Research, University of Montana, 28 February, Missoula, MT.

Invited speaker—"Montana Partners in Flight" organized by the Montana Department of Fish Wildlife and Parks, 3-4 March, Missoula, MT.

Invited participant—"The future of wildland fire research: A strategic vision" national workshop organized by the US Forest Service, 6-8 October, Park City, UT.

1998 "Comparison of vegetation classifications using Landsat TM and aerial photographically derived data to analyze Flammulated Owl habitat in the Rocky Mountains, Montana" presented by Vita Wright, Aldo Leopold Wilderness Research Institute, Missoula, MT, USA, Richard L. Hutto, Division of Biological Sciences, University of Montana, Missoula, MT, USA, 15 March 1998, Hamilton, MT.

Invited keynote speaker—"The making of BirdWatch series 200" presented at the Wild Birds Unlimited Annual meeting, July 1998, Hartford, CT.

- 1999 Invited symposium speaker—"Post-fire forests: avian responses and management issues in western landscapes" presented by N. B. Kotliar, S. J. Hejl, R. L. Hutto, V. Saab, C. P. Melcher, M. E. McFadzen to the Cooper Ornithological Society, 30 March, Portland, OR.

Invited symposium speaker—"Effects of changing landscape patterns on birds in conifer forests of the Inland Northwest" presented by S. J. Hejl, D. M. Evans, J. C. Bednarz, and R. L. Hutto to the Cooper Ornith. Society, 30 March, Portland, OR.

Invited panelist—"Connecting wildlife and their habitat" presented at the Wild Rockies Rendezvous, 18 September, Missoula, MT.

Invited participants – "Analysis of large-scale exploratory studies in bird-habitat relationships" presented (with Jock Young) at the symposium on "Predicting Species Occurrences: issues of scale and accuracy," 18-22 October, Snowbird, UT.

- 2000 "Uses of data from a comprehensive landbird monitoring program" presented to the Society for Conservation Biology, 12 June 2000, Missoula, MT.

Invited participant—Yellowstone to Yukon Avian Workshop, 7-10 September, Ninepipes Lodge, Ronan, MT.

Invited speaker—"Bird song in forest health assessment" presented to the 2000 National Tree Farmer Convention, 14-17 September, Missoula, MT.

Invited participant—National conference on "the Social Acceptability of Fuel Treatments on Western Public Lands," 22-25 October, Missoula, MT.

- 2001 Invited participant—Partners in Flight Western Working Group meeting on coordination of regional monitoring programs, 9-11 October, Fallon, NV.

- 2002 Symposium Session Organizer—"Introduction—regional monitoring programs" presented at the 3rd International Partners in Flight Conference, 20-24 March, Asilomar, CA.

Symposium speaker—"The USFS Northern Region Landbird Monitoring Program" presented at the 3rd International Partners in Flight Conference, 20-24 March, Asilomar, CA.

Invited symposium speaker—"Using the Internet to Access the Northern Region Landbird Monitoring Program" presented at the Third International Partners in Flight Conference, 20-24 March, Asilomar, CA.

Invited symposium participant—"Fire on the Mountain: Birds and burns in the Rockies" presented by N. Kotliar (speaker), V. Saab, and R. L. Hutto at the 3rd International Partners in Flight Conference, 20-24 March, Asilomar, CA.

Invited symposium participant—"Monitoring for adaptive management in northern Rockies coniferous forests" presented by J. S. Young (speaker), R. L. Hutto, and J. R. Hoffland at the Third International Partners in Flight Conference, 20-24 March, Asilomar, CA.

Invited symposium participant—"A preliminary conservation strategy for birds in the Yellowstone to Yukon region" presented by S. Hannon, A. Hansen, M. Mahr, D. Casey, T. Merrill, J. Muir, K. Martin, and R. L. Hutto at the Third International Partners in Flight Conference, 20-24 March, Asilomar, CA.

Invited workshop faculty—(with Sue Reel) to conduct three workshops at the Big Sky Family Summit: (1) Life After a Fire: Fire Ecology Field Trip, (2) Birdwatching for Beginners, and (3) Bagging Big Bugs, 6-12 July, Big Sky, MT.

2003 Invited participant—Crown of the Continent Learning Center roundtable discussion, 28 May, West Glacier, MT.

Banquet Speaker—"Burning for forest health: a bird's perspective" presented at the Bigfork Bird Festival, 7 June, Bigfork, MT.

Invited participant—Montana/Wyoming all-bird conservation workshop, 20-21 August, Billings, MT.

Banquet Speaker—"A bird's-eye view of the fires of 2000" presented to the Western Bird Banding Association, 30 August, Stevensville, MT.

Invited seminar speaker—"Are stand-replacement forest fires devastating events? Let's ask the birds!" presented at Northern Arizona University, 24 September, Flagstaff, AZ.

Invited participant—Montana State Wildlife Grants Program planning session, 1 October, Helena, MT.

2004 "Bird distribution in relation to vegetation structure and land use along the Missouri and Madison Rivers: 2003 summary" presented (by Rob Fletcher) to the PPL-MT Wildlife Committee Meetings, Bozeman, MT, 14 January 2004.

Workshop co-organizer—Migration Stopover Ecology of Western Avian Populations: Southwestern Migration Workshop, 19-22 January, Tucson, AZ.

“Coordinated bird monitoring in Montana” presented at the Montana Chapter of the Wildlife Society annual meetings, Bozeman, MT, 23-27 February 2004.

Invited speaker—Fire in the Crown Workshop, Glacier National Park, 15 April, West Glacier, MT.

Invited symposium participant—“Where would a wood warbler wrest in the West: an eclectic review” presented (Jeff Kelly, speaker) as part of a symposium on the ecology of en-route migrants at the Cooper Ornithological Society Meetings, 4-9 May, La Crosse, WI.

Banquet Speaker—“A bird’s-eye view of forest fires in the northern Rockies” presented to the Montana State Audubon Bird Festival, 29 May 2004, Stevensville, MT.

Invited symposium speaker—“Northern Region Landbird Monitoring Program—a USFS-University of Montana partnership designed to provide both short-term and long-term feedback for managers” presented at the Monitoring Science and Technology Symposium, 20-24 September, Denver, CO.

“Changes in bird abundance and species composition in a coniferous forest following mixed-severity wildfire” presented (by Kristina Smucker and with Brian Steele) to the Society for Conservation Biology, New York, NY, 30 July-2 August 2004.

“New Avian Science Center at the University of Montana” presented (with Rob Fletcher) to the Ecological Society of America, Portland, OR, 1-6 August 2004.

“Nest success increases with density of riparian vegetation along the Madison and Missouri Rivers in Montana” presented by Ty Smucker (speaker) and Richard Hutto at the Wildlife Society Annual Conference, Calgary, Alberta; 18-22 September 2004.

2005 Invited speaker—Glacier National Park Interpreters training session, 13 June, West Glacier, MT.

Invited seminar speaker—“Birds as indicators of ecosystem health” presented at The Nature Conservancy’s Montana Masterpieces Event, 17 June, Missoula, MT.

Invited Speaker—Waterton-Glacier Science History Conference, 18 August, Lake McDonald Lodge, Glacier National Park, MT.

“Multiple stressors to birds breeding, migrating, and wintering in riparian habitats” presented by Rob Fletcher (speaker), Ty Smucker, Fernando Villasenor, and Richard Hutto at the American Ornithologists’ Union annual meeting, Santa Barbara, CA; 23-27

R. L. Hutto...pg. 20

August 2005.

“Changes in bird abundance after wildfire: importance of fire severity and time since fire” presented by Richard Hutto (speaker) and Kristina Smucker at the American Ornithologists’ Union annual meeting, Santa Barbara, CA; 23-27 August 2005.

“New Avian Science Center takes flight at the University of Montana” presented at the American Ornithologists’ Union annual meeting, Santa Barbara, CA; 23-27 August 2005.

2006 “Distribution of birds along the Madison and Missouri Rivers in relation to various stressors” presented by Rob Fletcher and Richard Hutto at PPL-Montana Corporate Office, Butte, MT; 11 January 2006.

“Results from passive and broadcast surveys for Black-backed and Three-toed woodpeckers” presented by Kristina M. Smucker and Richard L. Hutto at the Wildlife Society Montana Chapter annual meetings, Helena, MT, 21-24 February 2006.

Co-organizer—Western NGO monitoring coordination summit; 13 March, Missoula, MT.

Keynote speaker—“Searching for the most effective use of bird data to promote wise land stewardship” presented to the Partners in Flight Western Working Group meeting, 15 March, Missoula, MT.

Participation in Science Teaching Workshop for high school teachers sponsored by UM Division of Educational Research & Service, 19 March 2006, Missoula, MT.

Invited speaker—“Monitoring with partners” presented at National Get Wild Partners meeting at Rocky Mountain Elk Foundation, 27-29 June 2006, Missoula MT.

Invited panelist—USFS Northern Region Wildlife Council meeting, 18-19 July 2006, Missoula, MT.

Invited panelist for Northern Rockies Nature Forum, Fall 2006 Series on *Salvaging Science: A look at fire and post-fire management in the Northern Rockies*, Missoula, MT; 12 September 2006.

“Evaluating habitat restoration using bird communities: a spatially explicit approach and application to aquatic systems” presented by R. J. Fletcher (speaker) and R. L. Hutto at the stream restoration conference, Missoula, MT, 29 September 2006.

Symposium participant—“Using point-count data to highlight landbird conservation needs in Mexico: a call for collaboration” presented by R. L. Hutto (speaker), J. F. Villasenor, and M. C. Arizmendi at the North American Ornithological Conference, 3-7

October 2006.

Symposium participant—“Habitat of wintering birds in Sonora, Mexico: significance of riparian woodlands” presented by J. F. Villasenor (speaker), E. Gomez-Limon, R. L. Hutto, and R. Mesta at the North American Ornithological Conference, 3-7 October 2006.

“Plant and animal species closely associated with severely burned conifer forests: are we managing for their maintenance?” presented at the 3rd International Fire Ecology and Management Congress, San Diego, CA; 13-17 November 2006.

Workshop coordinators—Amy Cilimburg, Jock Young, and Richard Hutto presented results and coordinated discussion related to the Northern Region Landbird Monitoring Program at the Annual Biologists’ Workshop, Missoula, MT; 7 December 2006.

2007 “The bird community in beetle outbreak areas: surveying for Black-backed Woodpeckers and other species” presented (with Amy Cilimburg, speaker) at the Wildlife Society Montana Chapter meetings, Bozeman, MT; 6-9 February 2007.

“Partitioning human impacts on riparian bird distribution along the Madison and Missouri Rivers, Montana” presented (with R. J. Fletcher, speaker) at the Wildlife Society Montana Chapter meetings, Bozeman, MT; 6-9 February 2007.

“Using the distribution patterns and adaptations of plants and animals to learn about the kinds of fires that occurred naturally in the past” presented to the USFS Fire Laboratory, Missoula, MT, 15 March 2007.

Invited panelist—on “Fire effects in the West” at the 2007 University of Montana Graduate Student and Faculty Research Conference, Missoula, MT, 14 April 2007.

Invited symposium speaker—“Incorporating ecological theory into models of habitat quality: the importance of variation in space and time” presented by Rob Fletcher (speaker), Jock S. Young, Anna Noson, and Richard L. Hutto at the US-International Association of Landscape Ecologists meeting in Tucson, AZ, 9-13 April 2007.

Invited speaker—“The naturalness of severe fire, and the challenge of integrating severe fire into fire management plans” presented to fire managers at a Wildland Fire Use workshop hosted by the Aldo Leopold Wilderness Institute, Lubrecht Experimental Forest, MT, 1 May 2007.

Invited speaker—“The naturalness of severe fire, and the challenge of educating the public” presented to the Glacier National Park interpreter’s training workshop, Many Glacier, MT, 13 June 2007.

Workshop participant—“Montana K-12 teacher GTEC workshop, 18 June 2007,

R. L. Hutto...pg. 22

Missoula, MT.

Symposium organizer and speaker—"Using the spatial distribution of Black-backed Woodpeckers to reconstruct historically natural fire regimes in the northern Rockies" presented as part of a symposium entitled "A bird's-eye view of natural fire regimes" at the American Ornithologists' Union meeting, 8-11 August 2007, Laramie, WY.

2008 "Black-backed Woodpeckers catch people on fire: using birds as a way to connect people to nature" presented by S. Reel (speaker) and R. L. Hutto at the 4th International Partners in Flight Conference, McAllen, TX, 13-16 February 2008.

"Birding Trails as Conservation Tools: Telling Stories about Fire" presented by S. Reel (speaker) and R. L. Hutto at the 4th International Partners in Flight Conference, McAllen, TX, 13-16 February 2008.

"Novel use of a landbird database to inform management" presented by J. S. Young (speaker), R. F. Fletcher, and R. L. Hutto at the 4th International Partners in Flight Conference, McAllen, TX, 13-16 February 2008.

"Are Montana's severe wildfires catastrophic or natural events?" presented by R. L. Hutto to the Montana Chapter meetings of the Wildlife Society, Missoula, MT, 25-29 February 2008.

22-27 September 2008—R. Hutto presented a talk entitled "The ecological necessity of severe fire: lessons from avifaunal observations" to the International Association of Wildland Fire's special conference: The '88 Fires: Yellowstone and Beyond, Jackson Hole, WY.

10 October 2008—R. Hutto presented a talk entitled "The ecological necessity of severe fire: a conservation message still not heard" at the Annual Research Symposium of the Montana Chapter of the Society of Conservation Biology, Missoula, MT.

"Partitioning the multi-scale effects of human activity on the occurrence of riparian forest birds" presented by Robert J. Fletcher (speaker) and Richard L. Hutto at the Wildlife Society Annual Conference, Maimi, FL, 8-12 November 2008.

2009 "Surviving severe fires" presented as an evening lecture to the public at the Montana Natural History Center, Missoula, MT, 25 February 2009.

"Conducting bird surveys autonomously: Are human field technicians obsolete?" presented at the OBE seminar series, University of Montana, 4 March 2009.

INVITED SEMINAR SPEAKER:

University of Montana Alumni College, 1981; University of Montana Alumni Community

Lecture Series 2001; Instituto de Ecología, Mexico City, 1984; Washington State University, 1985; University of Montana Biological Station, 1978, 1982, 1985, 1986, 1990, 2000; Five Valleys Audubon Society, 1980, 1982, 1988, 1990, 1992, 2000; Bitterroot Valley Audubon Society, 1987, 1993; Montana Audubon Council, 1988, 1993; Flathead Valley Audubon Society, 1988, 1993, 2000; Last Chance Audubon Society, 1998, 2001; Idaho State University, 1990; Pocatello Audubon Society, 1990; Colorado State University, 1990; Teton Science School, 1990, 1991; Colorado Bird Observatory, 1995; Condon Conservation Center, 1996; Flathead Bird Festival Keynote speaker, 2000; University of Alberta, 2001; UCLA, 2001; USFS Fire Sciences Laboratory, 2001; North Dakota State University, 2002—declined; Humboldt State University 2002—declined; Oregon State University, 2002—declined; Montana State University, 2002; Humboldt State University, 2003; Northern Arizona University, 2003; Cornell University, 2007

PUBLICATIONS:

1. Hutto, R. L. 1978. A mechanism for resource allocation among sympatric heteromyid rodent species. *Oecologia* 33:115-126.
2. Hutto, R. L. 1980. Winter habitat distribution of migratory land birds in western Mexico, with special reference to small, foliage-gleaning insectivores. Pp. 181-203 in A. Keast and E. S. Morton (eds.) *Migrant birds in the Neotropics: Ecology, Behavior, Distribution and Conservation*. Smithsonian Institution Press, Washington, D. C.
3. Hutto, R. L. 1980. A laboratory manual for Zoology 308--Ornithology. University of Montana Reprographics, 48 pp.
4. Hutto, R. L. 1981. Seasonal variation in the foraging behavior of some migratory western wood warblers. *Auk* 98:765-777.
5. Hutto, R. L., and S. L. Mosconi. 1981. Lateral detectability profiles for line transect bird censuses: some problems and an alternative. *Studies in Avian Biology* 6:382-387.
6. Hutto, R. L. 1981. Temporal patterns of foraging activity in some wood warblers in relation to the availability of insect prey. *Behavioral Ecology and Sociobiology* 9:195-198.
7. Mosconi, S. L., and R. L. Hutto. 1982. The effect of grazing on the land birds of a western Montana riparian habitat. Pp. 221-233 in J. M. Peek and P. D. Dalke (eds.) *Proceedings of the Wildlife-Livestock Relationships Symposium*. Forest, Wildlife and Range Experiment Station, University of Idaho, Moscow, Idaho.
8. Hutto, R. L. 1982. *Montana Wildlife*. University of Montana Reprographics, 100 pp.
9. Korol, J. J., and R. L. Hutto. 1984. Factors affecting nest site location in Gila Woodpeckers. *Condor* 86:73-78.
10. Hutto, R. L. 1985. Habitat selection by nonbreeding, migratory land birds. Pp. 455-476 in M. L. Cody (ed.) *Habitat Selection in Birds*. Academic Press, Inc., Orlando, Florida.

11. Hutto, R. L. 1985. Seasonal changes in the habitat distribution of transient insectivorous birds in southeastern Arizona: competition mediated? *Auk* 102:120-132.
12. Bennetts, R. E., and R. L. Hutto. 1985. Attraction of social fringillids to mineral salts: an experimental study. *Journal of Field Ornithology* 56:187-189.
13. Hutto, R. L., P. Hendricks, and S. Pletschet. 1985. Un censo invernal de las aves de la Estación de Biología Chamela, Jalisco México. *An. Inst. Biol. Univ. Nat. Autón. Méx* 56:945-954.
14. Hutto, R. L. 1986. Migratory landbirds in western Mexico: a vanishing habitat. *Western Wildlands* 11:12-16.
15. Hutto, R. L., S. M. Pletschet, and P. Hendricks. 1986. A fixed-radius point count method for nonbreeding and breeding season use. *Auk* 103:593-602.
16. Hutto, R. L. (ed.) 1986 (revised 1994). *Bonham and Cooper's birds of west-central Montana. Five Valleys Audubon Society*, 24 pp.
17. Hutto, R. L., J. R. McAuliffe, and L. Hogan. 1986. Distributional associates of the saguaro (*Carnegiea gigantea*). *Southwestern Naturalist* 31:469-476.
18. Hutto, R. L. 1987. Scale of measurement in ecology: a review. *Bull. Ecol. Soc. Amer.* 68:57-58.
19. Hutto, R. L. 1987. A description of mixed-species insectivorous bird flocks in western Mexico. *Condor* 89:282-292.
20. Hutto, R. L. 1987. Effect of systemic pesticide implants on the level of Western spruce budworm infestation: treatment and post-treatment years. *Forest Ecology and Management* 21:231-235.
21. Hutto, R. L., S. Reel, and P. B. Landres. 1987. A critical evaluation of the species approach to biological conservation. *Endangered Species Update* 4:1-4.
22. Hutto, R. L. 1987. Nearctic migrants in the Neotropics: a review. *Auk* 104:578-579.
23. Hutto, R. L. 1988. Foraging behavior patterns suggest a possible cost associated with participation in mixed-species bird flocks. *Oikos* 51:79-83.
24. Hutto, R. L. 1988. "Birds of the northern Rockies" by T. J. Ulrich: a review. *Ibis* 130:145.
25. Hutto, R. L. 1988. "Birds of the Rocky Mountains" by P. A. Johnsgard: a review. *Ibis*

R. L. Hutto...pg. 25

130:319.

26. Hutto, R. L. 1988. Is tropical deforestation responsible for the reported declines in neotropical migrant populations? *American Birds* 42:375-379.
27. Hutto, R. L. 1989. The effect of habitat alteration on migratory land birds in a west Mexican tropical deciduous forest: a conservation perspective. *Conservation Biology* 3:138-148.
28. Hutto, R. L. 1989. Pygmy Nuthatch *Sitta pygmaea*. Pp. 92-93 in Rare, sensitive, and threatened species of the Greater Yellowstone Ecosystem (Clark, T. W., A. H. Harvey, R. D. Dorn, D. L. Genter, and C. Groves, eds.). Northern Rockies Conservation Cooperative, Montana Natural Heritage Program, The Nature Conservancy, and Mountain West Environmental Services.
29. Hutto, R. L. 1990. Measuring the availability of food resources. *Studies in Avian Biology* 13:20-28.
30. Hutto, R. L. 1990. Studies of foraging behavior: central to understanding the ecological consequences of variation in food abundance. *Studies in Avian Biology* 13:389-390.
31. Tobalske, B. W., R. L. Hutto, and R. C. Shearer. 1990. The effects of timber harvesting on the reproductive success of Red-naped Sapsuckers (*Sphyrapicus nuchalis*). *The Northwest Environmental Journal* 6:398-399.
32. Tobalske, B. W., R. C. Shearer, and R. L. Hutto. 1991. Bird populations in logged and unlogged western larch/Douglas-fir forest in northwestern Montana. Research Paper INT-442. USDA Forest Service, Intermountain Research Station, Ogden, UT, 12 pp.
33. Pletscher, D. L., and R. L. Hutto. 1991. Wildlife management and the maintenance of biodiversity. *Western Wildlands* 17:8-12.
34. Hutto, R. L. 1991. "American Warblers" by D. H. Morse: a review. *Ibis* 133:431.
35. Hutto, R. L. 1992. Habitat distributions of migratory landbird species in western Mexico. Pp. 221-239 in Ecology and conservation of neotropical migrant landbirds (J. M. Hagan III and D. W. Johnston, eds.), Smithsonian Institution Press, Washington, D.C.
36. Hutto, R. L., S. J. Hejl, C. R. Preston, and D. M. Finch. 1993. Effects of silvicultural treatments on forest birds in the Rocky Mountains: implications and management recommendations. Pp. 386-391 in Finch, D. M., and P. W. Stangel (eds.), Status and management of neotropical migratory birds. USDA For. Serv. Gen. Tech. Rep. RM-229.
37. Petit, D. R., J. F. Lynch, R. L. Hutto, J. G. Blake, and R. B. Waide. 1993. Management and conservation of migratory landbirds overwintering in the Neotropics. Pp. 70-92 in D. M.

- Finch and P. W. Stangel (eds.), Status and management of neotropical migratory birds. USDA For. Serv. Gen. Tech. Rep. RM-229.
38. Hutto, R. L. 1994. The composition and social organization of mixed-species flocks in a tropical deciduous forest in western Mexico. *Condor* 96:105-118.
 39. Hutto, R. L., S. J. Hejl, J. F. Kelley, and S. M. Pletschet. 1995. A comparison of bird detection rates derived from on-road versus off-road point counts in northern Montana. Pp. 103-110 in C. J. Ralph, J. R. Sauer, and S. Droege (tech. eds.) *Monitoring bird populations by point counts*. USDA For. Serv. Gen. Tech. Rep. PSW-GTR-149, Albany, CA.
 40. Tobalske, B. W., R. C. Shearer, and R. L. Hutto. 1995. Maintaining bird diversity in western larch/Douglas-fir forests. Pp 505-507 in W. C. Schmidt and K. J. McDonald (compilers) *Ecology and management of Larix forests: a look ahead*. USDA For. Serv. Gen. Tech. Rep. INT-GTR-319, Ogden, UT.
 41. Hutto, R. L. 1995. The composition of bird communities following stand-replacement fires in northern Rocky Mountain (U.S.A.) conifer forests. *Conservation Biology* 9:1041-1058.
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R. L. Hutto...pg. 28

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