

One Hundred and Twenty-Fifth
Stated Meeting of the
American Ornithologists' Union

9 - 11 August 2007

at
The University of Wyoming, Laramie, WY

Program of papers

version 13 Aug 2007

Part 1: Plenary talks and Symposia

Thursday, 9 August

Plenary 1

08:00 Progress in resolving the avian *Tree of Life*. ALLAN J. BAKER, *Dept. Nat. Hist., Royal Ontario Mus., and Dept. Evol. & Ecol., Univ. Toronto, Toronto, ON.*

Symposium A. *Assembling, and using, the nine-primaried oscine Tree of Life* (organized by Scott M. Lanyon and F. Keith Barker, *University of Minnesota*)

- S01 09:30 Temporal and phylogenetic patterns of diversity in New World tanagers, cardinals, sparrows, blackbirds, and warblers. F. K. BARKER, *Bell Mus. Nat. Hist., Univ. Minnesota, Minneapolis, MN*, K. J. BURNS, *Dept. Biol., San Diego State Univ., San Diego, CA*, J. KLICKA, *Marjorie Barrick Mus., Univ Nevada, Las Vegas, NV*, S. M. LANYON, *Bell Mus.*, and I. J. LOVETTE, *Lab. Ornithol., Cornell Univ., Ithaca, NY.*
- S02 10:00 Using a phylogeny of tanagers to provide insight into classic subjects of evolutionary research. K. J. BURNS, W. M. MAUCK, R. SEDANO and R. KEITH, *Dept. Biol., San Diego State Univ., San Diego, CA.*
- S03 10:30 Biogeography of the New World sparrows: A tale of two continents. JOHN KLICKA, *Barrick Museum Nat. Hist., Univ. Nevada Las Vegas, Las Vegas, NV.*
- S04 11:00 Understanding the evolutionary ecology of wood-warblers via a whole-family phylogeny. IRBY J. LOVETTE, BEN WINGER and WESLEY M. HOCHACHKA, *Fuller Evol. Biol. Prog., Lab. Ornithol., Cornell Univ., Ithaca, NY.*
- S05 11:30 Exploring patterns of morphological evolution in the New World blackbirds. S. M. LANYON and F. K. BARKER, *Bell Mus. Nat. Hist., Univ. Minnesota, Minneapolis, MN.*

Symposium B. *Speciation* (organized by Darren Irwin, *University of British Columbia*)

- S06 13:00 Speciation in Darwin's Finches: the role of introgressive hybridization. B. ROSEMARY GRANT, *Princeton University*
- S07 13:30 Recent sympatric diversification of brood parasitic indigobirds: setting an upper limit on speciation times. MICHAEL D. SORENSON, HEATHER C. SHULL, KRISTINA M. SEFC, JEFFREY M. DaCOSTA, CHRISTOPHER N. BALAKRISHNAN, *Dept. Biol., Boston Univ., Boston, MA*, and ROBERT B. PAYNE, *Univ. Michigan, Ann Arbor, MI.*

- S08 14:00 Sexual selection, signal divergence and speciation in tropical birds. J. ALBERT C. UY, ADAM C. STEIN, *Dept. Biol., Syracuse Univ., Syracuse, NY*, and CHRISTOPHER E. FILARDI, *Center for Biodiversity and Conservation, Amer. Mus. Nat. Hist., New York, NY*.
- S09 15:00 A review of hybrid zones in birds. TREVOR PRICE, *Dept. Ecol. & Evol., Univ. Chicago, Chicago, IL*.
- S10 15:30 Speciation in Neotropical suboscines: the role of mating signals. NATHALIE SEDDON and JOSEPH A. TOBIAS, *Edward Grey Inst. Field Ornithol., Univ. Oxford, Oxford, UK*.
- S11 16:00 Using contact zones to infer causes of speciation: examples from the boreal forests of Asia and North America. DARREN E. IRWIN, ALAN BRELSFORD and DAVID P. L. TOEWS, *Dept. Zool., Univ. British Columbia, Vancouver, BC*.

Friday, 10 August

Plenary 2

- 08:00 Species energy theory as a framework for tailoring conservation of biodiversity to biophysical and land use gradients. ANDREW J. HANSEN, LINDA PHILLIPS, *Dept. Ecol., Montana State Univ., Bozeman, MT*, and CURTIS H. FLATHER, *Rocky Mountain Res. Sta., USDA For. Ser., Ft. Collins, CO*.

Symposium C. *Coevolution* (organized by Craig Benkman, *University of Wyoming*)

- S12 09:30 Host defense reinforces host-parasite cospeciation. DALE H. CLAYTON, *Dept. Biol., Univ. Utah, Salt Lake City, UT*, SARAH E. BUSH, *Nat. Hist. Mus., Univ. Kansas, Lawrence, KS*, and KEVIN P. JOHNSON, *Illinois Nat. Hist. Surv., Urbana, IL*.
- S13 10:00 An obligate brood parasite trapped in the within species arms race of its hosts. BRUCE E. LYON, *Dept. Ecol. & Evol. Biol., Univ. California, Santa Cruz, CA*, and JOHN McA. EADIE, *Dept. Wildl. & Fish. Conserv. Biol., Univ. California, Davis, CA*.
- S14 10:30 Pollinator generalization and specialization across a geographic mosaic: hummingbirds and heliconias of the eastern Caribbean. ETHAN J. TEMELES, *Dept. Biol., Amherst College, Amherst, MA*, and W. JOHN KRESS, *Natl. Mus. Nat. Hist., Smithsonian Inst., Washington, DC*.
- S15 11:00 The coevolution of seed dispersal mutualisms between nutcrackers and pines. ADAM SIEPELSKI, *Dept. Zool. & Physiol., Univ. Wyoming, Laramie, WY*.
- S16 11:30 The importance of coevolutionary arms races in the adaptive radiation of crossbills. CRAIG BENKMAN, *Dept. Zool. & Physiol., Univ. Wyoming, Laramie, WY*.

Symposium D. *A bird's-eye view of what constitutes a natural fire regime* (organized by Richard Hutto, *University of Montana*)

- S17 13:30 The Black-backed Woodpecker habitat distribution pattern underscores the importance of maintaining severely burned forests in the northern Rockies. RICHARD L. HUTTO, *Avian Sci. Center, Biol. Sci., Univ. Montana, Missoula, MT*.
- S18 14:00 Fire effects on breeding ecology of Western Bluebirds in the American Southwest. WILLIAM M. BLOCK, SARAH R. HURTEAU and LAURA DOLL, *Rocky Mountain*

Research Station, Flagstaff, AZ.

- S19 14:30 Effects of fire suppression, fire severity, and fire frequency on Buff-breasted Flycatchers and other montane forest birds in the Sky Island Mountain Ranges of southern Arizona. COURTNEY J. CONWAY and CHRIS KIRKPATRICK, *USGS Arizona Coop. Fish & Wildl. Res. Unit, School Nat. Resources, Univ. Arizona, Tucson, AZ.*
- S20 15:30 Modeling nest survival of Lewis's Woodpecker in burned and unburned forests of Idaho. VICTORIA SAAB, *USFS Rocky Mtn. Res. Station, Bozeman, MT*, KAREN NEWLON, *USFWS Red Rocks Lakes Nat. Wildf. Refuge, MT*, and JAY ROTELLA, *Dept. Ecol., Montana State Univ., Bozeman, MT.*
- S21 16:00 Bachman's Sparrow as an indicator of natural fire regimes in the longleaf pine ecosystem. JAMES W. TUCKER, *Archbold Biol. Station, Avon Park, FL*, JAMES A. COX and CLARK A. JONES, *Tall Timbers Res. Station, Tallahassee, FL.*
- S22 16:30 What fire means to me: testimonial from a Red-cockaded Woodpecker. JEFF WALTERS, *Dept. Biol., Virginia Tech Univ., Blacksburg, VA.*

Saturday, 11 August

Plenary 3

- 08:00 Old bones, ancient molecules, and the march to extinction of Hawaiian birds. HELEN F. JAMES, *Dept. Vert. Zool., Natl. Mus. Nat. Hist., Washington, DC.*

Symposium E. *Manakins as models* (organized by David McDonald, *University of Wyoming*)

- S23 09:30 Hormonal control of male *Manacus* courtship. BARNEY A. SCHLINGER, LAINY DAY and LEONIDA FUSANI, *Dept. Phys. Sci., Univ. California-Los Angeles, Los Angeles, CA.*
- S24 10:00 The evolution of sonation in *Pipra/Machaeropterus* (Pipridae). KIM BOSTWICK, *Mus. Vert., Cornell University, Ithaca, NY.*
- S25 10:30 Plumage conspicuousness and the evolution of ecological niches among manakins (Pipridae) from the *Ilicura-Corapipo* clade. MARINA ANCIAES, *Bird Collection, Instituto Nacional de Pesquisas da Amazônia (INPA), Brazil.*
- S26 11:00 Geographic variation and plumage evolution in manakins: the influence of isolation by distance, environmental constraints, and species recognition. STÉPHANIE M. DOUCET and ALLISON MISTAKIDIS, *Dept. Biol. Sci., Univ. Windsor, Windsor, ON.*
- S27 11:30 How the alpha got his spot: social network models in a manakin. DAVID McDONALD, *Dept. Zool. and Prog. Ecol., Univ. Wyoming, Laramie, WY.*

Symposium F. *Genetics of lekking* (organized by Emily DuVal, *Max Planck Institute, Germany*)

- S28 13:30 Molecular genetic data and leks: questions, mistakes and answers. ROBERT M. GIBSON, *School Biol. Sci., Univ. Nebraska, Lincoln, NB.*
- S29 14:00 Spatial structure and social organization of manakins (Pipridae): potential implications for male reproductive skew. THOMAS B. RYDER, RENATA DURÃES, WENDY P. TORI, PATRICIA G. PARKER, JOHN G. BLAKE and BETTE A. LOISELLE, *Dept. Biol., Univ. Missouri-St. Louis, St. Louis, MO.*

- S30 14:30 Genetic similarity and male reproductive success: lessons from an almost-lekking species. ALAN H. KRAKAUER, *Sect. Evol. & Ecol., Univ. California, Davis, CA.*
- S31 15:30 Male Greater Prairie-Chicken mating success is linked to genetic diversity. ANDY GREGORY, JACQUELINE K. NOOKER, BRETT K. SANDERCOCK and SAMANTHA WISELY, *Div. Biol., Kansas State Univ., Manhattan, KS.*
- S32 16:00 Polyandry at leks: female mating strategies, as reflected by genetic levels of mixed paternity. DAVID B. LANK, *Dept. Biol. Sci., Simon Fraser Univ., Burnaby, BC.*
- S33 16:30 Genetic analysis of reproductive skew on an exploded lek: sexual selection via male competition vs. female mate choice. EMILY H. DuVAL and BART KEMPENAEERS, *Dept. Behav. Ecol. & Evol. Genetics, Max Planck Institute for Ornithology, Seewiesen, Germany.*

Part 2: General Papers

Thursday, 9 August

Session 1A. Disease, parasites and immune response. Chair Jennifer C. Owen.

- 09:30 1 Nutrient reserves and helminths of Lesser Snow Geese. DAVE SHUTLER, *Dept. Biol., Acadia Univ., Wolfville, NS*, RAY T. ALISAUSKAS, *Canadian Wildl. Ser. and Dept. Biol., Univ. Saskatchewan, Saskatoon, SK*, and J. DAN McLAUGHLIN, *Concordia Univ., Montreal, QC.*
- 09:45 2 Long-term impacts of blood parasites on productivity of birds within a California coastal scrub community. CHARLES VAN RIPER III, *USGS/SBSC, Biol. Sci. East, Univ. Arizona, Tucson, AZ*, PAUL SUPER, *AHSLC, Great Smoky Mt. Natl. Park, Lake Junaluska, NC*, CHRIS O'BRIEN, *USGS/SBSC, Biol. Sci. East, Univ. Arizona*, GRANT BALLARD and GEOFF GEUPEL, *Point Reyes Bird Observ., Stinson Beach, CA.*
- 10:00 3 vacant
- 10:15 4 Effects of the introduced parasite *Philornis downsi* on nestling growth and mortality in Darwin's finches. SARAH K. HUBER, *Organ. & Evol. Biol., Univ. Massachusetts, Amherst, MA.*
- 10:30 5 Effects of migratory stress and testosterone on the recrudescence of latent West Nile virus infections in the Gray Catbird. JENNIFER C. OWEN, AMANDA J. WILLIAMS, FRANK R. MOORE, *Dept. Biol. Sci., Univ. S. Mississippi, Hattiesburg, MS*, and MARY C. GARVIN, *Dept. Biol., Oberlin Coll., Oberlin, OH.*
- 10:45 6 * Avian immunity to West Nile virus. NICOLE M. NEMETH, *Dept. Microbiol., Immun. & Path., Colorado State Univ., Ft. Collins, CO*, NICK KOMAR, *Centers for Disease Control & Prevention, Ft. Collins, CO*, and RICHARD A. BOWEN, *Dept. Biomed. Sci., Colorado State Univ.*
- 11:00 7 A model species for studying the evolution of immunity. CALDWELL HAHN, *USGS-Patuxent Wildl. Res. Center, Laurel, MD.*
- 11:15 8 Cliff Swallows and swallow bugs: do they play a role in West Nile virus transmission?

PAUL T. OESTERLE, JEFFREY S. HALL, NICOLE MOOERS, JAMES CARLSON, ROBERT G. McLEAN and LARRY CLARK, *Natl. Wildl. Res. Center, Ft. Collins, CO.*

11:30 9 Avian malaria: testing the nest height hypothesis. CALISSA N. W. SMITH and PAUL A. CALLO, *Dept. Biol., Mary Baldwin Coll., Staunton, VA.*

11:45 10 Differential deposition of anti-microbial proteins in eggs: an unstudied maternal effect? MATTHEW D. SHAWKEY, JENNIFER M. WANG, STEVEN R. BEISSINGER, *Dept. Environ. Sci. Policy & Manage., Univ. California- Berkeley, Berkeley, CA*, KARL L. KOSCIUCH, *Dept. Biol., Kansas State Univ., Manhattan KS*, MARK LIU, *Dept. Biol. Sci., Auburn Univ. Auburn, AL*, ELIZABETH R. LOOS, *Delta Waterfowl Assoc. Portage la Prairie. MB*, and FRANK C. ROHWER, *School Renewable Nat. Res., Louisiana State Univ., Baton Rouge, LA.*

Session 1B. Habitat modeling, biodiversity and climate change. Chair Anna D. Chalfoun.

09:30 11 Monitoring change in biodiversity by hierarchical modeling of a collection of species. JOHN R. SAUER, WILLIAM A. LINK, *USGS Patuxent Wildl. Res. Center, Laurel, MD*, and DANIEL K. NIVEN, *Natl. Audubon Soc., Champaign, IL.*

09:45 12 Predicting occurrences of individual bird species and species richness using logistic regression and GARP: a comparative analysis. DENNIS G. SIEGFRIED and GARY D. SCHNELL, *Sam Noble Oklahoma Mus. Nat. Hist. & Dept. Zool., Univ. Oklahoma, Norman, OK.*

10:00 13 * Density as an indicator of habitat quality: time for a rehabilitation? AURORE PÉROT, MARC-ANDRÉ VILLARD and SAMUEL HACHÉ, *Chaire de recherche du Canada en conservation des paysages, Dept. Biol., Univ. Moncton, Moncton, NB.*

10:15 14 Assessments of habitat preferences and quality depend on spatial scale and metrics of fitness. ANNA D. CHALFOUN and THOMAS E. MARTIN, *USGS Coop. Wildl. Res. Unit, Univ. Montana, Missoula, MT.*

10:30 15 Conservation status of breeding birds in the St. Katherine Protectorate, Egypt: evidence of extirpations and population declines from recent surveys. NICO DAUPHINE, *School For. & Nat. Res., Univ. Georgia, Athens, GA*, MATTHEW L. J. WHITE, *Univ. Plymouth, UK*, ALAA E. I. MOHAMED, *S. Sinai Govt., Egypt*, and SAMY ZALAT, *Suez Canal Univ., Egypt.*

10:45 16 Testing for threshold responses to forest cover in abundance of resident breeding birds. TRISHA L. SWIFT and SUSAN J. HANNON, *Dept. Biol. Sci., Univ. Alberta, Edmonton, AB.*

11:00 17 Identifying spatial scales at which remotely-sensed habitat information predicts bird prevalence. WESLEY M. HOCHACHKA, *Lab. Ornithol., Cornell Univ., Ithaca, NY*, RICH CARUANA, *Dept. Computer Sci., Cornell Univ.*, DANIEL FINK, *Lab. Ornithol.*, DAVID HANNI, *Rocky Mtn. Bird Observ., Brighton, CO*, STEVE KELLING, *Lab. Ornithol.*, ART MUNSON, MIREK RIEDEWALD, *Dept. Computer Sci., Cornell Univ.*, BEN A SHABY, *Dept. Statistics, Cornell Univ.*, and DARIA SOROKINA, *Dept. Computer Sci., Cornell Univ.*

11:15 18 * Habitat selection, nest survival and impacts of climate warming for sympatric ptarmigan in the Yukon Territory. S. WILSON and K. MARTIN, *Centre Appl. Conserv. Res., Univ. British Columbia, Vancouver, BC.*

11:30 19 A review of management recommendations for bird populations in the face of climate change. MARNI E. KOOPMAN, LINDA A. JOYCE and CURTIS H. FLATHER, *Rocky Mountain Res. Sta., USDA For. Ser., Ft. Collins, CO.*

11:45 20 Rapid range shift in Texas birds: response to climate change? JOHN H. RAPPOLE, *Smithsonian Natl. Zool. Park, Front Royal, VA*, GENE W. BLACKLOCK, *Coastal Bend Bays & Estuaries Program, Corpus Christi, TX*, and SWEN C. RENNER, *Smithsonian Natl. Zool. Park.*

Session 1C. Functional morphology, energetics and parental investment. Chair Melissa S. Bowlin.

09:30 21 * Cost of diving for seaducks using wing and foot propulsion. SAMANTHA E. RICHMAN and JAMES R. LOVVORN, *Dept. Zool., Univ. Wyoming, Laramie, WY.*

09:45 22 Phylogenetically independent contrasts show migrants have more pointed and less convex wingtips in the avian genus *Catharus*. M. S. BOWLIN, *Dept. Ecol. & Evol. Biol., Princeton, Univ., Princeton, NJ.*

10:00 23 Re-evaluating the habitat and flight ability of *Archaeopteryx*: information from the Thermopolis specimen. S. A. HARTMAN, *Thermopolis, WY.*

10:15 24 A comparison of body morphology between introduced birds in New Zealand and their source populations in the United Kingdom. CHRISTINE A. DEBRUYNE and JAMES V. BRISKIE, *Dept. Biol., Univ. Canterbury, Christchurch, New Zealand.*

10:30 25 Food limitation and White Ibis reproductive success. HEIDI K. HERRING, MARK I. COOK, *S. Florida Water Manage. Dist., West Palm Beach, FL*, ERYNN C. CALL, *Michigan Dept. Nat. Res., Sault Sainte Marie, MI*, and R. MAC KOBZA, *S. Florida Water Manage. Dist.*

10:45 26 Is interspecific variation in provisioning strategies explained by food limitation, adult mortality, or nest predation? DANIEL C. BARTON, *Organ. Biol. & Ecol. Prog., Univ. Montana, Missoula, MT*, and THOMAS E. MARTIN, *Montana Coop. Wildl. Res. Unit., Univ. Montana, Missoula, MT.*

11:00 27 Within- and among-clutch variation of yolk hormones in Common Grackles. J. DYLAN MADDOX, *Prog. Ecol. Evol. Biol., Univ. Illinois, Urbana, IL*, RACHEL BOWDEN, *Dept. Biol. Sci., Illinois State Univ., Bloomington, IL*, and PATRICK J WEATHERHEAD, *Prog. Ecol. Evol. Biol., Univ. Illinois.*

11:15 28 Parental attendance and food supplementation in Bald Eagles. CYNTHIA J. SHANNON and JOHN T. ROTENBERRY, *Dept. Biol., Univ. California, Riverside, CA.*

11:30 29 Comparative brood-rearing behavior of Mountain Plovers in eastern Colorado. VICTORIA J. DREITZ, *Colorado Div. Wildl., Ft. Collins, CO.*

11:45 30 How male House Wrens discover that their eggs have hatched. L. SCOTT JOHNSON, BONNIE G. P. JOHNSON and JESSICA L. BRUBAKER, *Dept. Biol., Towson Univ., Towson, MD.*

Session 1D. Plumage evolution and condition dependent traits. Chair Edward H. Burt Jr.

09:30 31 Parallel evolution of plumage pattern and coloration in birds: implications for defining avian morphospace. MARK F. RIEGNER, *Environ. Stud. Prog., Prescott Coll., Prescott, AZ.*

- 09:45 32 Interactions between sexual and natural selection in the plumage divergence of the Coastal Plain Swamp Sparrow. BRIAN J. OLSEN, *Dept. Biol. Sci., Virginia Tech, Blacksburg, VA*, RUSSELL GREENBERG, *Smithsonian Migratory Bird Center, Natl. Zool. Park, Washington, DC*, IRENE A. LIU, *Dept. Biol., Univ. Maryland, College Park, MD*, JOSHUA M. FELCH, *Dept. Fish. & Wild. Sci., Virginia Tech*, and JEFFREY R. WALTERS, *Dept. Biol. Sci., Virginia Tech*.
- 10:00 33 The contribution of carotenoids and melanins to sexual dichromatism in New World orioles. CHRISTOPHER M. HOFMANN, T. W. CRONIN and K. E. OMLAND, *Dept. Biol., Univ. Maryland, College Park, MD*.
- 10:15 34 Differently colored parrot feathers are differentially resistant to bacterial degradation. EDWARD H. BURTT, Jr., *Dept. Zool., Ohio Wesleyan Univ., Delaware, OH*, MAX R. SCHROEDER, *Dept. Botany-Microbiol., Ohio Wesleyan Univ.*, LAUREN A. SMITH, *Dept. Zool., Ohio Wesleyan Univ.*, JENNA E. SROKA, *Dept. Botany-Microbiol., Ohio Wesleyan Univ.*, and KEVIN J. MCGRAW, *School Life Sci., Arizona State Univ., Tempe, AZ*.
- 10:30 35 Autoclave sterilization may confound the observed effect of feather degrading bacteria. ALICIA M. FRAME, ALEX R GUNDERSON, MARK H. FORSYTH and JOHN P SWADDLE, *Dept. Biol., Coll. of William & Mary, Williamsburg, VA*.
- 10:45 36 The effect of stress on carotenoid-based coloration in Zebra Finches. KEVIN J. MCGRAW, KRISTEN B. LEE and AMIR LEWIN, *School Life Sci., Arizona State Univ., Tempe, AZ*.
- 11:00 37 Is plumage coloration a sexually selected indicator of quality in male and female Prothonotary Warblers? M. L. BECK, H. SCHWABL and M. WEBSTER, *School Biol. Sci., Washington State Univ., Pullman, WA*.
- 11:15 38 The role of nestling mouth coloration in begging. MATTEW B. DUGAS, *Dept. Zool., Univ. Oklahoma, Norman, OK*.
- 11:30 39 Plumage color and fitness in a polymorphic bird, the Red-backed Fairy-Wren. MICHAEL WEBSTER, CLAIRE VARIAN, *School Biol. Sci., Washington State Univ., Pullman, WA*, and JORDAN KARUBIAN, *Inst. Environ., Univ. California-Los Angeles, Los Angeles, CA*.
- 11:45 40 Environmental variance but little evidence for condition dependence in a sexual signal. TIMOTHY H. PARKER, *Dept. Biol., Whitman Coll., Walla Walla, WA*, SIMON C. GRIFFITH, *Centre Integrative Study Anim. Behav., Macquarie Univ., Sydney, Australia*, IAIN R. BARR, *Dept. Biol. Sci., Univ. East Anglia, Norwich, UK*, and TEDDY A. WILKEN, *Dept. Zool, Oxford Univ., Oxford, UK*.

Session 2A. Pathogens, population dynamics, population estimation and sampling (systematics). Chair Brett L. Walker.

- 13:30 41 Molecular systematics of pygmy kingfishers (Alcedininae). ROBERT G. MOYLE, J. FUCHS, E. PASQUET and B. D. MARKS, *Nat. Hist. Mus., Univ. Kansas, Lawrence, KS*.
- 13:45 42 West Nile virus infection rates in a wild sage-grouse population. BRETT L. WALKER, DAVID E. NAUGLE, KEVIN E. DOHERTY, *Wildl. Biol. Prog., Univ. Montana, Missoula, MT*, and TODD E. CORNISH, *Wyoming State Vet. Lab., Laramie, WY*.
- 14:00 43 Greater Sage-Grouse population response to energy development. DAVID NAUGLE,

KEVIN DOHERTY, BRETT WALKER, *Wildl. Biol. Prog., Univ. Montana, Missoula, MT*, MATTHEW HOLLORAN, *Wyoming Wildlife Consultants, Laramie, WY*, and TOM RINKES, *BLM, Lander, WY*.

- 14:15 44 * Abnormalities in songbirds in northeastern Arkansas: a comparison of findings between farm and reference sites. JANE O. ANFINSON and JAMES C. BEDNARZ, *Dept. Biol. Sci., Arkansas State Univ., Jonesboro, AR*.
- 14:30 45 Estimating survivorship in a migratory passerine: effects of spatial and temporal scales. SCOTT L. DURST, EBEN H. PAXTON and MARK K. SOGGE, *USGS-SBSC, Colorado Plateau Res. Sta., Northern Arizona Univ., Flagstaff, AZ*.
- 14:45 46 Modeled distribution of highly pathogenic H5N1 transmission in Nigeria and West Africa. R. A. J. WILLIAMS, F. O. FASINA and A. T. PETERSON, *Nat. Hist. Mus. and Biodiversity Res. Center, Univ. Kansas, Lawrence, KS*.

Session 2B. Habitat and conservation of wetland and marine birds. Chair Scott A. Rush.

- 13:30 47 vacant
- 13:45 48 Effects of a recent tsunami on the islet avifunas of Vonavona Lagoon, Solomon Islands. CHRISTOPHER E. FILARDI, *Center Biodivers. & Conserv., Am. Mus. Nat. Hist., New York, NY*.
- 14:00 49 * Constraints of landscape level prey availability on physiological condition and productivity of the Great Egret and White Ibis in the Florida Everglades. GARTH HERRING and DALE E. GAWLIK, *Florida Atlantic Univ., Boca Raton, FL*.
- 14:15 50 * The effects of water depth and submerged aquatic vegetation density on wading bird foraging site selection in the Everglades. SAMANTHA M LANTZ and DALE E GAWLIK, *Dept. Biol. Sci., Florida Atlantic Univ., Boca Raton, FL*.
- 14:30 51 Avian use of a constructed saline wetland complex at the Salton Sea, California. THOMAS W. ANDERSON, M. A. RICCA, A. K. MILES, D. A. BARNUM and S. E. SPRING, *USGS Salton Sea Sci. Office, LaQuinta, CA*.
- 14:45 52 The ecology niche of Clapper Rails in Mississippi's tidal marshes. SCOTT A. RUSH, ROBERT J. COOPER, *Warnell School For. & Nat. Res., Univ. Georgia, Athens, GA*, MARK S. WOODREY, *Coastal Research & Extension Center, Mississippi State Univ., Biloxi, MS*, and AARON T. FISK, *Univ. Windsor, Windsor, ON*.

Session 2C. Parental investment and life history, foraging and energetics. Chair Joseph H. Allen.

- 13:30 53 Breeding experience and reproductive performance in Tree Swallows. MICHAEL P. LOMBARDO and PATRICK A. THORPE, *Dept. Biol., Grand Valley State Univ., Allendale, MI*.
- 13:45 54 Effects of the threat of predation on nest site abandonment in Eastern Bluebirds. NICK DiLUZIO, MARK STANBACK, AUSTIN MERCADANTE and JEAN OLBERT, *Dept. Biol., Davidson Coll., Davidson, NC*.
- 14:00 55 * Trade-offs among breeding season duration, annual fecundity and survival in two Horned Lark populations. ALAINE F. CAMFIELD, KATHY MARTIN, *CACR, Forest Sci., Univ. British Columbia, Vancouver, BC*, and SCOTT F. PEARSON, *Washington Dept. Fish & Wildl., Olympia, WA*.

- 14:15 56 Climatic variation and reproductive behavior of Orange-crowned Warblers on Santa Catalina Island. JONGMIN YOON, CAMERON K. GHALAMBOR, *Dept. Biol., Colorado State Univ., Fort Collins, CO*, and T. SCOTT SILLETT, *Smithsonian Migratory Bird Center, Natl. Zool. Park, Washington DC*.
- 14:30 57 Can differences in age-specific mortality rates account for life history differences between Orange-crowned Warbler populations? H. R. SOFAER, C. K. GHALAMBOR, J. YOON, *Colorado State Univ., Ft. Collins, CO*, and T. S. SILLETT, *Smithsonian Migratory Bird Center, Washington, DC*.
- 14:45 58 The comparative context of brood manipulation studies: variation along the slow-fast continuum. CAMERON K. GHALAMBOR, MERIBETH HUIZINGA, HELEN R SOFAER, JONGMIN YOON and JULIAN TORRES-DOWDALL. *Dept. Biol., Colorado State Univ., Ft. Collins, CO*.

Session 2D. Song and vocalizations. Chair Daniel J. Mennill.

- 13:30 59 Song and plumage evolution in the New World orioles show similar lability and convergence in patterns. J. JORDAN PRICE, NICHOLAS R. FRIEDMAN, *Dept. Biol., St. Mary's Coll. Maryland, St. Mary's City, MD*, and KEVIN E. OMLAND, *Dept. Biol. Sci., Univ. Maryland-Baltimore Co., Baltimore, MD*.
- 13:45 60 Geographic and temporal variation in Tree Swallow song repertoires: evidence for adult song learning. BENJAMIN N. TAFT, *Biol. Dept., Univ. Massachusetts. Amherst, MA*.
- 14:00 61 Congruent songs and interspecific territories in two sympatric antbirds. JOSEPH A. TOBIAS and NATHALIE SEDDON, *Dept. Zool., Univ. Oxford, Oxford, UK*.
- 14:15 62 Duets are multifunction signals in Rufous-and-white Wrens: spatial and temporal analyses of variation. DANIEL J. MENNILL, *Dept. Biol., Univ. Windsor, Windsor, ON*.
- 14:30 63 * Vocal recognition of conspecifics in Northern Mockingbirds. DUSTIN G. REICHARD and J. JORDAN PRICE, *Dept. Biol., St. Mary's Coll. Maryland, St. Mary's City, MD*.
- 14:45 64 * Honest signaling with a predator-induced call: a study of vocalization communication in Splendid Fairy-Wrens (*Malurus splendens melanotus*). EMMA I. GREIG and STEPHEN PRUETT-JONES, *Dept. Ecol. & Evol., Univ. Chicago, Chicago, IL*.

Session 3A. Pathogens, population dynamics, population estimation and sampling (systematics), continued. Chair Matthew A. Etersson.

- 15:30 65 * Is distance sampling valid in the context of aural avian point-count surveys? CHRISTOPHER P. NADEAU, *School Nat. Res., Univ. Arizona, Tucson, AZ*, and COURTNEY J. CONWAY, *USGS Arizona Coop. Fish & Wildl. Res. Unit, Univ. Arizona*.
- 15:45 66 Estimating avian population trends using a detection-corrected abundance model. MATTHEW A. ETERSSON, GERALD J. NIEMI and NICHOLAS P. DANZ, *Natl. Resources Res. Inst., Univ. Minnesota Duluth, Duluth, MN*.
- 16:00 67 Using continuous sound recordings to quantify variation in birds' availability for detection. MAIKEN WINTER, WESLEY M. HOCHACHKA and RUSS CHARIF, *Lab. Ornithol., Cornell Univ., Ithaca, NY*.

Session 3B. Habitat and conservation of wetland and marine birds, continued. Chair W. Alice Boyle.

- 15:30 68 Restoring avian communities in nutrient enriched areas of the Florida Everglades: an experimental approach. MARK I. COOK, SUE NEWMAN, SCOT E. HAGERTHEY and R. MAC KOBZA, *S. Florida Water Manage. Dist., West Palm Beach, FL.*
- 15:45 69 Gadwalls vs. godwits: landscape-level effects of waterfowl conservation on non-game birds in the U.S. Prairie Pothole Region. NEAL D. NIEMUTH, MICHAEL E. ESTEY, CHARLES R. LOESCH and RONALD E. REYNOLDS, *U.S. Fish & Wildl. Serv., Bismarck, ND.*
- 16:00 70 Estimating the breeding population of Long-billed Curlew in the United States. THOMAS R. STANLEY and SUSAN K. SKAGEN, *USGS Ft. Collins Sci. Center, Ft. Collins, CO.*

Session 3C. Parental investment and life history, foraging and energetics, continued. Chair Michael J. Kuehn.

- 15:30 71 Consequences of a diet shift in wintering Hermit Thrushes. NORA E. DIGGS, ROBERT J. COOPER, *Univ. Georgia, Athens, GA,* and PETER P MARRA, *Smithsonian Migratory Bird Center, Washington, DC.*
- 15:45 72 * Early food restriction and phenotypic development in captive American Kestrels. VITTORIA G. MARZOT and ALFRED M. DUFTY, Jr., *Dept. Biol., Boise State University, Boise, ID.*
- 16:00 73 The value of herring spawn to Pacific scoters. ERIC M. ANDERSON, JAMES R. LOVVORN, *Dept. Zool., Univ. Wyoming, Laramie, WY,* DANIEL ESLER, *Centre for Wildl. Ecol., Simon Fraser Univ., Burnaby, BC,* and W. SEAN BOYD, *Canadian Wildl. Ser., Delta, BC.*

Session 3D. Song and vocalizations, continued. Chair Robert J. Fletcher, Jr.

- 15:30 74 * Multi-modal signaling in a complex system: color and song in Chestnut-sided Warblers. KARA LOEB BELINSKY, *Grad. Prog. Organ. & Evol. Biol., Univ. Massachusetts, Amherst, MA.*
- 15:45 75 Nontarget effects from social cue manipulation: everybody hates a flycatcher. ROBERT J. FLETCHER, Jr., *Div. Biol. Sci., Univ. Montana, Missoula, MT.*
- 16:00 76 A species tree approach to avian phylogenetics and phylogeography. SCOTT V. EDWARDS, L. LIU, P. PRITO, R. BRUMFIELD and C. BALAKRISHNAN, *Dept. Organ. & Evol. Biol., Harvard Univ., and Mus. Comp. Zool., Cambridge, MA.*

Friday, 10 August

Session 4A. Ecotoxicology and mercury contamination. Chair Daniel A. Cristol.

- 09:30 77 Dickcissels, DDT, and cowbirds: an evolutionary equilibrium? BRIAN D. PEER, R. G. HARPER, J. W. RIVERS, J. W. FRICK, M. D. BENSON, M. ANDERSON, B. BLACKWELL, T. ESHEDAGHO, J. RAABE, B. WALL and E. WEAR, *Dept. Biol., Western Illinois Univ., Macomb. IL.*
- 09:45 78 Monitoring migratory shorebird exposure to cholinesterase-inhibiting pesticides. KHARA M. STRUM, BRETT K. SANDERCOCK, *Dept. Biol., Kansas State Univ., Manhattan, KS,* MICHAEL J. HOOPER, *TIEHH, Texas Tech Univ., Lubbock, TX,* MATILDE ALFARO,

Sec. Ocean., Fac. de Cien., Univ. de la Rep., Montevideo, Uruguay, KEVIN A. JOHNSON, *Dept. Chem., Southern Illinois Univ., Edwardsville, IL*, RICHARD B. LANCTOT, *U.S. Fish & Wildl. Ser., MBM, Anchorage, AK*, JULIAN TORRES-DOWDALL, *Dept. Biol., Colorado State Univ., Ft. Collins, CO*, and MARÍA ELENA ZACCAGNINI, *IRB, INTA-CIRN, Castelar, (Buenos Aires) Argentina*.

- 10:00 79 Monitoring mercury in wildlife. D. C. EVERS, *BioDiversity Res. Inst., Gorham, ME*.
- 10:15 80 Mercury contamination escapes from an aquatic ecosystem and accumulates in insectivorous birds. DANIEL A. CRISTOL, *Dept. Biol., Coll. William & Mary, Williamsburg, VA*.
- 10:30 81 A historical record of mercury contamination in Bicknell's Thrush. KENT P. McFARLAND, CHRISTOPHER C. RIMMER, *Conserv. Biol. Dept., Vermont Inst. Nat. Sci., Quechee, VT*, and ROBERT J. TAYLOR, *Trace Element Res. Lab., Texas A&M Univ., College Station, TX*.
- 10:45 82 Passerines as biosentinels for mercury in tidal wetland restoration projects of the San Francisco Bay Estuary. J. LETITIA GRENIER, JENNIFER HUNT and JOSHUA COLLINS, *San Francisco Estuary Inst., Oakland, CA*.
- 11:00 83 Using freely-available data to predict the effects of mercury and acid deposition on populations of birds breeding in the eastern U.S. RALPH S. HAMES, *Lab. Ornithol., Cornell Univ., Ithaca, NY*, CAROL L. TROCKI, *US-EPA/NHEERL, Narragansett, RI*, DANIEL FINK, *Lab. Ornithol.*, and DIANNE E. NACCI, *US-EPA/NHEERL*.
- 11:15 84 Mercury contaminating high elevation songbirds in Great Smoky Mountains National Park. REBECCA A. HYLTON and TED R. SIMONS, *USGS Coop. Res. Unit, Dept. Zool., North Carolina State Univ., Raleigh, NC*.
- 11:30 85 * Mercury levels in independent fledgling songbirds. ANNE M. CONDON and DANIEL A. CRISTOL, *Dept. Biol., Coll. William & Mary, Williamsburg, VA*.
- 11:45 86 Discussion: research priorities for the study of mercury in avian food webs. DANIEL A. CRISTOL, *Dept. Biol., Coll. William & Mary, Williamsburg, VA*, and D. C. EVERS, *BioDiversity Res. Inst., Gorham, ME*.

Session 4B. Forest and grassland habitats: survival, dynamics and conservation. Chair Sara A. Kaiser.

- 09:30 87 * Does habitat use influence survival of post-fledging mature-forest birds? ANDREW C. VITZ and AMANDA D. RODEWALD, *School Environ. & Nat. Res., Ohio State Univ., Columbus, OH*.
- 09:45 88 Fire on the mountain: upland fire and its effects on songbirds in the southern Appalachian Mountains. SCOTT A. RUSH, ROBERT J. COOPER, *Warnell School For. & Nat. Res., Univ. Georgia, Athens, GA*, and NATHAN KLAUS, *Georgia Dept. Nat. Res., Atlanta, GA*.
- 10:00 89 Bird predation on oak herbivores along an environmental gradient. KIRK W. STODOLA, *Warnell School For. & Nat. Res., Univ. Georgia, Athens, GA*, CARALYN B. ZEHNDER, *Inst. Ecol., Univ. Georgia*, ROBERT J. COOPER, *Warnell School For. & Nat. Res., Univ. Georgia*, and MARK D. HUNTER, *Dept. Ecol. & Evol. Biol., Univ. Michigan, Ann Arbor, MI*.
- 10:15 90 Assessing the conservation impacts of forest management on avian communities: what

metrics do we use? SCOTT H. STOLESON, *USFS Northern Res. Sta., Irvine, PA*, and T. NUTTLE, *Natl. Aviary, Pittsburgh, PA*.

- 10:30 91 Fledgling survival in forest songbirds: going down the drain. BRIDGET J. M. STUTCHBURY, MARGARET ENG, LEVI MOORE, *Dept. Biol., York Univ., Toronto, ON*, SCOTT RUSH, *Warnell School For. & Nat. Res., Univ. Georgia, Athens, GA*, and DAWN BURKE, *Ontario Min. Nat. Res., London, ON*.
- 10:45 92 Importance of boxthorn to nesting San Clemente Sage Sparrows. SARA A. KAISER, ERIC L. KERSHNER, *Inst. Wildl. Stud., San Diego, CA*, and DAVID K. GARCELON, *Inst. Wildl. Stud., Arcata, CA*.
- 11:00 93 Grassland birds are not viable in the largest remaining tallgrass landscape. KIMBERLY A. WITH, *Div. Biol., Kansas State Univ., Manhattan, KS*, ANTHONY W. KING, *Env. Sci. Div., Oak Ridge Natl. Lab., Oak Ridge, TN*, and WILLIAM E. JENSEN, *Dept. Biol., Emporia State Univ., Emporia, KS*.
- 11:15 94 Does a landscape's dominant vegetation define the spatial distribution of avian richness? Conservation implications. KEVIN J. GUTZWILLER, JOSEPH D. WHITE, *Dept. Biol., Baylor Univ., Waco, TX*, WYLIE C. BARROW, Jr., LORI JOHNSON-RANDALL, *USGS, Natl. Wetlands Res. Center, Lafayette, LA*, BRIAN S. CADE, *USGS, Ft. Collins Sci. Center, Ft. Collins, CO*, and LISA M. ZYGO, *Magnolia, TX*.
- 11:30 95 * Geographic variation in song of the Gray-breasted Wood-Wren in relation to habitat-dependent acoustic properties. CAROLINE DINGLE, *Zool. Dept., Univ. Cambridge, Cambridge, UK*, WOUTER HALFWERK, and HANS SLABBEKOORN, *Inst. Biol., Leiden Univ, Leiden, Netherlands*.
- 11:45 96 Sex-biased sensitivity to landscape features and social-biased dispersal distance in Red-cockaded Woodpeckers. DYLAN C. KESLER and JEFFREY R. WALTERS, *Biol. Sci. Dept., Virginia Tech, Blacksburg, VA*.

Session 4C. Demography and life history. Chair Brian D. Linkhart.

- 09:30 97 A risky position in the early life - hatching failure in relation to laying sequence in Eastern Bluebirds. MARK LIU and GEOFFREY E. HILL, *Dept. Biol., Univ. Auburn, Auburn, AL*.
- 09:45 98 * Nestling stress: correlates and influence on short and long-term survival in the Florida Scrub-Jay. MICHELLE A. RENSEL and STEPHAN J. SCHOECH, *Dept. Biol., Univ. Memphis, Memphis, TN*.
- 10:00 99 Temporal breeding/molt overlap in Barn Swallows breeding in Argentina and New York. G. H. HUBER, *Cornell Univ., Ithaca, NY*.
- 10:15 100 A long-term trend toward earlier breeding in Flammulated Owls. BRIAN D. LINKHART, DASHIELL S. FEIERABEND and MAKENDRA N. SILVERMAN, *Dept. Biol., Colorado Coll., Colorado Springs, CO*.
- 10:30 101 Demography of a recently restored population of Evermann's Rock Ptarmigan. ROBB S. A. KALER, BRETT K. SANDERCOCK, *Dept. Biol., Kansas State Univ., Manhattan, KS*, and STEVE E. EBBERT, *Alaska Maritime Natl. Wildl. Refuge, Homer, AK*.
- 10:45 102 Historical and contemporary population dynamics of North American merganser species: the value of combining mark-recapture and genetic data. JOHN M. PEARCE, *U.S. Geol. Surv., Alaska Sci. Center, Anchorage, AK*.

- 11:00 103 Demographic sensitivity of population change in the Northern Bobwhite: a life-stage simulation analysis. BRETT K. SANDERCOCK, *Div. Biol., Kansas State Univ., Manhattan, KS*, WILLIAM E. JENSEN, *Dept. Biol. Sci., Emporia State Univ., Emporia, KS*, CHRISTOPHER K. WILLIAMS, *Dept. Entomol. Wildl. Ecol., Univ. Delaware, Newark, DE*, and ROGER D. APPLIGATE, *Tenn. Wildl. Res. Agency, Nashville, TN*.
- 11:15 104 Annual and seasonal survival of Orange-crowned Warblers breeding on the Channel Islands. T. SCOTT SILLETT, *Smithsonian Migratory Bird Center, Natl. Zool. Park, Washington, DC*, SUSANA I. PELUC, *Dept. Biol., Univ. California, Riverside, CA*, JONGMIN YOON and CAMERON K. GHALAMBOR, *Dept. Biol., Colorado State Univ., Ft. Collins, CO*.
- 11:30 105 Effect of sex and forest patch size on survival of the White-ruffed Manakin in southwestern Costa Rica. VIVIANA RUIZ-GUTIERREZ, *Dept. Ecol. & Evol. Biol., Cornell Univ., Ithaca, NY*, THOMAS A. GAVIN, *Dept. Nat. Res., Cornell Univ.*, and ANDRE A. DHONDT, *Lab Ornithol., Cornell Univ.*
- 11:45 106 Survival estimates of the endangered Maui Parrotbill *Pseudonestor xanthophrys* and the Maui Alauahio *Paroreomyza montana* in high elevation rainforest of East Maui, Hawaii. JULIA C. GARVIN, KIRSTY J. SWINNERTON, *Maui Forest Bird Recov. Proj., Makawao, HI*, ERIC A. VANDERWERF, *Honolulu, HI*, JOHN P. VETTER and HALEY E. BRENISER, *Maui Forest Bird Recov. Proj., Makawao, HI*.

Session 4D. Migratory divides and population genetic structure. Chair Alice Cibois.

- 09:30 107 Historical population shifts and a migratory divide in Rusty Blackbirds. KEITH A. HOBSON, *Environ. Canada, Saskatoon, SK*, RUSS GREENBERG and CLAUDIA METTKE-HOFMANN, *Smithsonian Inst., Washington, DC*.
- 09:45 108 Philopatry and the migratory divide: does geographic isolation matter to long-distance migrants? JEREMY D. ROSS and JUAN L. BOUZAT, *Bowling Green State Univ., Bowling Green, OH*.
- 10:00 109 * Is cryptic cladogenesis facilitated by migration in the Swallow-tailed Kite? AUDREY WASHBURN, *Dept. Wildl. Ecol. Cons., Univ. Florida, Gainesville, FL*, MAURINE NEIMAN, *Dept. Biol., Univ. St. Thomas, Saint Paul, MN*, DOUGLAS R. TAYLOR, *Dept. Biol., Univ. Virginia, Charlottesville, VA*, KIM NORRIS-CANEDA, *South Carolina Center Birds of Prey, Charleston, SC*, ALLAN E. STRAND, *Dept. Biol., Coll. Charleston, Charleston, SC*, and KENNETH D. MEYER, *Avian Res. Cons. Inst., Gainesville, FL*.
- 10:15 110 Divergent colonizations of a remote Pacific archipelago by two passerine families. ALICE CIBOIS, *Nat. Hist. Mus., Geneva, Switzerland*, JEAN-CLAUDE THIBAUT, *Nat. Reg. Park, Corsica, France*, and ERIC PASQUET, *Natl. Nat. Hist. Mus., Paris, France*.
- 10:30 111 Comparative phylogeography of Eastern Arc Mountain (Tanzania) birds. RAURI C.K. BOWIE, *Mus. Vert. Zool. and Dept. Integrat. Biol., Univ. California, Berkeley, CA*, and JON FJELDSÅ, *Zool. Mus., Univ. Copenhagen, Copenhagen, Denmark*.
- 10:45 112 Clarifying the evolutionary history of a morphologically diverse species: phylogeography of the Steller's Jay. GARTH M. SPELLMAN, *Biol. Dept., Black Hills State Univ., Spearfish, SD*, CARLA CICERO, *Mus. Vert. Zool., Berkeley, CA*, KEVIN WINKER, *Univ. Alaska Mus., Fairbanks, AK*, and JOHN KLICKA, *Barrick Mus. Nat. Hist., Univ. Nevada, Las Vegas, NV*.
- 11:00 113 Phylogeography and systematics of a widespread hummingbird genus (*Anthracothorax*).

MICHAEL J. LELEVIER, MATHEW J. MILLER, KEVIN WINKER, *Dept. Biol. & Wildl., Univ. Alaska, Fairbanks, AK*, JOHN KLICKA, *Barrick Mus., Univ. Nevada, Las Vegas, NV*, and ELDRIDGE B. BERMINGHAM, *Smithsonian Tropical Res. Inst., Panama City, Panama*.

- 11:15 114 Comparative phylogeography in three species of Amazonian *Myrmotherula* antwrens. R. T. CHESSER, *USGS Patuxent Wildl. Res. Center, and Natl. Mus. Nat. Hist., Washington, DC*, M. L. ISLER, *Bird Div., Natl. Mus. Nat. Hist., Washington, DC*, and J. L. REED, *USGS Patuxent Wildl. Res. Center, Washington, DC*.
- 11:30 115 Phylogeography of the Tepui Brush Finch (*Atlapetes personatus*): Tepuis as islands. GEORGE F. BARROWCLOUGH, JEFF G. GROTH and BARTEK JABLONSKI, *Am. Mus. Nat. Hist., New York, NY*.
- 11:45 116 * Patterns of genetic structure among island populations of Song Sparrows. A. G. WILSON and P. ARCESE, *Centre Appl. Conserv. Res., Univ. British Columbia, Vancouver, BC*.

Session 5A. Incubation, brood-rearing and parental investment. Chair Joseph H. Allen.

- 13:30 117 * Movement of Mountain Plovers within and between breeding seasons. PAUL D. B. SKRADE and S. J. DINSMORE, *Dept. Nat. Res. Ecol. & Manage., Iowa State Univ., Ames, IA*.
- 13:45 118 * Factors affecting Piping Plover hatching success on Long Island. PAUL J. DOHERTY, *Biol. Dept., Hofstra Univ., Hempstead, NY*, and JULIE A. HEATH, *Dept. Biol., Boise State University, Boise, ID*.
- 14:00 119 * Scrub-jays vary onset of incubation to minimize hatching failure. ROBERT A. ALDREDGE, REED BOWMAN, RAOUL K. BOUGHTON, *Archbold Biol. Sta., Lake Placid, FL*, ELI S. BRIDGE and STEPHAN J. SCHOECH, *Univ. Memphis, Memphis, TN*.
- 14:15 120 * Wave effects on Western Grebe nest survival. JOSEPH H. ALLEN, GARY L. NUECHTERLEIN and DEBORAH BUITRON, *Dept. Biol. Sci., North Dakota State Univ, Fargo, ND*.
- 14:30 121 * Do male Yellow Warblers tradeoff parental effort for mating effort? MICHAEL J. KUEHN, *Dept. Ecol., Evol. & Marine Biol., Univ. California, Santa Barbara, CA*, JOSHUA J. TEWKSBURY, *Dept. Biol., Univ. Washington, Seattle, WA*, and MAX T. SEGAL, *Dept. Ecol., Evol. & Marine Biol., Univ. California, Santa Barbara*.
- 14:45 122 * Male provisioning may buffer incubating females from the influence of low temperatures on nest attendance. SHARON J. COE, *Dept. Biol., Univ. California, Riverside, CA*.

Session 5B. Tropical habitats: migrants, resource use, fragmentation. Chair Jared D. Wolfe.

- 13:30 123 * Migratory birds in shade coffee plantations and primary forest in the Venezuelan Andes – with an emphasis on Cerulean Warbler. MARJA H. BAKERMANS, AMANDA D. RODEWALD, *Environ. & Nat. Res., Ohio State Univ., Columbus, OH*, and C. RENGIFO, *Dept. Biol., Univ. of the Andes, Venezuela*.
- 13:45 124 * Evaluation of a novel coffee cultivation system, "Integrated Open Canopy", on avian species richness, composition and condition in Costa Rica. RICHARD B. CHANDLER,

Dept. Nat. Res. Conserv., Univ. Massachusetts, Amherst, MA, DAVID I. KING, USDF For. Ser. Northern Res. Sta., Amherst, MA, VICTOR JULIO ARCE C., Cooperativa Montes de Oro, Miramar, Costa Rica, CARLIN C. CHANDLER, Dept. Nat. Res. Conserv., Univ. Massachusetts, Amherst, MA, RAUL RAUDALES and RICH TRUBEY, Mesoamerican Develop. Inst., Lowell, MA.

- 14:00 125 Does food limitation explain altitudinal migration of manakins? W. ALICE BOYLE, *Dept. Ecol. & Evol. Biol., Univ. Arizona, Tucson, AZ.*
- 14:15 126 Prospects for change in endemic populations within a tropical highland community. MATTHEW R. GASNER, KERRY N. RABENOLD, KEILLER O. KYLE, *Dept. Biol., Purdue Univ., West Lafayette, IN*, JILL E. JANKOWSKI, *Dept. Zool., Univ. Florida, Gainesville, FL*, and ANNA L. CIECKA.
- 14:30 127 Twenty years of understory bird extinctions from Amazonian rainforest fragments: consistent trends and landscape-mediated dynamics. PHILIP C. STOUFFER, *Louisiana State Univ., Baton Rouge, LA*, CHERYL STRONG, *San Francisco Bay Bird Observ., Alviso, CA*, LUCIANO N. NAKA, *Louisiana State Univ.*, and RICHARD O. BIERREGAARD, Jr., *Univ. North Carolina, Charlotte, NC.*
- 14:45 128 Effects of habitat loss and fragmentation associated with resort development on the social and conservation ecology of the St. Lucia White-breasted Thrasher. JENNIFER L. MORTENSEN and ROBERT L. CURRY, *Dept. Biol., Villanova Univ., Villanova, PA.*

Session 5C. Population genetic structure and inbreeding. Chair Diana C. Outlaw.

- 13:30 129 * Population genetic structure in the Double-crested Cormorant. DACEY M. MERCER and SUSAN M. HAIG, *USGS-FRESC and Oregon State Univ., Corvallis, OR.*
- 13:45 130 * Environmental correlates of population genetic structure in *Zonotrichia capensis*: incongruent patterns of geographic variation between mitochondrial and nuclear markers. ZACHARY A. CHEVIRON and ROBB T. BRUMFIELD, *Mus. Nat. Sci., Louisiana State Univ., Baton Rouge, LA.*
- 14:00 131 Molecular phylogenetics of avian malaria parasites. DIANA C. OUTLAW and ROBERT E. RICKLEFS, *Dept. Biol., Univ. Missouri-St. Louis, St. Louis, MO.*
- 14:15 132 Natal dispersal and inbreeding in American Kestrels. KAREN STEENHOF and BRIT PETERSON, *U.S. Geol. Surv., For. & Range. Ecosys. Sci. Center, Snake River Field Station, Boise, ID.*
- 14:30 133 Skewed male mating success and female breeding failure reduce effective population size in the lekking Gunnison Sage-Grouse. JULIE R. STIVER, *School Biol. Sci., Univ. Nebraska-Lincoln, Lincoln, NE*, ANTHONY D. APA, *Colorado Div. Wildl., Grand Junction, CO*, THOMAS E. REMINGTON, *Colorado Div. Wildl., Denver, CO*, and ROBERT M. GIBSON, *School Biol. Sci., Univ. Nebraska-Lincoln.*
- 14:45 134 An apparent paradox: high inbreeding in small populations does not result in strong population differentiation or low genetic diversity in White-tailed Ptarmigan. B. C. FEDY, *Montana Coop. Wildl. Res. Unit, Univ. Montana, Missoula, MT*, K. MARTIN and C. RITLAND, *Dept. For. Sci., Univ. British Columbia, Vancouver, BC.*

Session 5D. Hybrid zones and hybridization. Chair Katie Langin.

- 13:30 135 Dominance interactions and social patterns in a chickadee hybrid zone. AMANDA

NICODEMUS and ROBERT L CURRY, *Dept. Biol., Villanova Univ., Villanova, PA.*

- 13:45 136 A multi-locus test of historical zone movement vs species parapatry as the underlying cause for discordant clines between hybridizing warblers. MEADE KROSBY and SIEVERT ROHWER, *Burke Mus. and Dept. Biol., Univ. Washington, Seattle, WA.*
- 14:00 137 * Reproductive isolation in the Yellow-rumped Warbler hybrid zone. ALAN T. BRELSFORD and DARREN E. IRWIN, *Zool. Dept., Univ. British Columbia, Vancouver, BC.*
- 14:15 138 * A multilocus approach to testing introgression hypotheses in *Passerina* buntings. MATT D. CARLING and ROBB T. BRUMFIELD, *Mus. Nat. Sci., Louisiana State Univ., Baton Rouge, LA.*
- 14:30 139 vacant
- 14:45 140 Range expansion in the White-winged Dove and Eurasian Collared-Dove and the potential for nest site competition. TIMOTHY J. LUDWICK, ALAN M. FEDYNICH, *Caesar Kleberg Wildl. Res. Inst., Texas A&M Univ.-Kingsville, Kingsville, TX*, GLENN H. PERRIGO, *Dept. Biol., Texas A&M Univ.-Kingsville*, and T. WAYNE SCHWERTNER, *Texas Parks & Wildl. Dept., Mason, TX.*

Session 6A. Incubation, brood-rearing and parental investment, continued. Chair Mark Stanback.

- 15:30 141 * Sex ratios in Barn Owls: do Fisher or Myers predict parental investment? MEGAN L. SEIFERT, HUBERT SCHWABL and MICHAEL S. WEBSTER, *School Biol. Sci., Washington State Univ., Pullman, WA.*
- 15:45 142 * Mechanisms of parental manipulation in American Coots. DAIZABURO SHIZUKA and B. E. LYON, *Dept. Ecol. & Evol. Biol., Univ. California-Santa Cruz, Santa Cruz, CA.*
- 16:00 143 * Old guys still have it: an investigation of male age, provisioning, and physiological costs in Florida Scrub-Jays. TRAVIS E. WILCOXEN, STEPHAN J. SCHOECH, ELI S. BRIDGE, *Dept. Biol., Univ. Memphis, Memphis, TN*, and RAOUL K. BOUGHTON, *Ornithol. Lab, Archbold Biol. Sta., Venus, FL.*
- 16:15 144 Nest temperature, hatching failure, and chick condition in Eastern Bluebirds. MARK STANBACK, AUSTIN MERCADANTE, NICK DILUZIO, JEAN OLBERT, GRAHAM RAY, REBECCA JAMESON, DOUG GRUNWALD, HOWELL BURKE and CHARLOTTE HINDSLEY, *Dept. Biol., Davidson Coll., Davidson, NC.*
- 16:30 145 Feeding rate, prey availability, and dietary composition of nestling Grasshopper Sparrows. BEN R. SKIPPER, *Dept. Biol. Univ. Nebraska-Kearney, Kearney, NE*, and DANIEL H. KIM, *Platte River Whooping Crane Trust, Wood River, NE.*
- 16:45 146 The effect of experimental heating during incubation on Tree Swallows: female behavior, egg temperature and offspring condition. DANIEL R. ARDIA, *Dept. Biol., Franklin & Marshall Coll., Lancaster, PA*, JONATHAN H. PEREZ and ETHAN D. CLOTFELTER, *Dept. Biol., Amherst Coll., Amherst, MA.*

Session 6B. Urban habitats: predation, disturbance and anthropogenic effects. Chair Victoria J. Dreitz.

- 15:30 147 Brood reduction increases across an urban gradient: adaptive response or an unselected consequence of food limitation. REED BOWMAN, RAOUL K. BOUGHTON, APRIL FESWICK and GLEN E. WOOLFENDEN, *Archbold Biol. Sta., Lake Placid, FL.*

- 15:45 148 * Impacts of recreational trails on avian nest attendance and nest predation in urban riparian forests. JENNIFER R. SMITH-CASTRO and AMANDA D. RODEWALD, *School Environ. & Nat. Res., Ohio State Univ., Columbus, OH.*
- 16:00 149 * Mallard response to human disturbance along the South Platte River in Colorado. JOSH L. DOOLEY, *Dept. Fish, Wildl. & Cons. Biol., Colorado State Univ., Ft. Collins, CO*, TODD A. SANDERS, *U.S. Fish & Wildl. Serv., Portland, OR*, and PAUL F. DOHERTY, Jr., *Dept. Fish, Wildl. & Cons. Biol., Colorado State Univ.*
- 16:15 150 * Effects of road proximity on behavior and prey consumption in Florida Scrub-Jays. GINA M. MORGAN and STEPHAN J. SCHOECH, *Dept. Biol., Univ. Memphis, Memphis TN.*
- 16:30 151 A 93-year study on the effects of moderate urbanization on an avian community. ALLISON J. SHULTZ and RAURI C.K. BOWIE, *Mus. Vert. Zool. and Dept. Integrat. Biol., Univ. California, Berkeley, CA.*
- 16:45 152 Dine and dash? Linking foraging behaviors and habitat use of Common Mergansers on a managed reservoir. JOANNA L. SMITH and JULIA K. PARRISH, *School Aquat. Fish. Sci., Univ. Wash., Seattle, WA.*

Session 6C. Mate choice, EPCs and sexual selection. Chair Melissah Rowe.

- 15:30 153 * The ontogeny of mate preferences: does juvenile experience matter? KEVIN P. OH and ALEXANDER V. BADYAEV, *Dept. Ecol. & Evol. Biol., Univ. Arizona, Tucson, AZ.*
- 15:45 154 Multiple mating by female Tree Swallows improves offspring quality. P. O. DUNN, J. T. LIFJELD and L. A. WHITTINGHAM, *Dept. Biol. Sci., Univ. Wisconsin-Milwaukee, Milwaukee, WI.*
- 16:00 155 * Mechanisms and dynamics of sperm competition in the Splendid Fairy-Wren: male investment in sperm numbers and quality. MELISSAH ROWE and STEPHEN PRUETT-JONES, *Dept. Ecol. Evol., Univ. Chicago, Chicago, IL.*
- 16:15 156 Corticosterone levels in relation to change of mate in the Black-legged Kittiwake. F. ANGELIER, *Centre d'Etudes Biologiques de Chizé, Villiers en Bois, France, and Smithsonian Inst., Washington, DC*, B. MOE, *Dept. Biol., Norwegian Univ. Sci. & Tech., Trondheim, Norway*, C. CLÉMENT-CHASTEL, *Centre d'Etudes Biologiques de Chizé, Villiers en Bois, France*, C. BECH, *Dept. Biol., Norwegian Univ. Sci. & Tech., Trondheim, Norway*, and O. CHASTEL, *Centre d'Etudes Biologiques de Chizé, Villiers en Bois.*
- 16:30 157 Do females choose males with high genetic diversity as reproductive partners? WENDY P. TORI, BETTE A. LOISELLE, JOHN G. BLAKE and PATRICIA PARKER, *Dept. Biol. and Whitney R. Harris World Ecol. Center, Univ. Missouri-St. Louis, St. Louis, MO.*
- 16:45 158 Multiple alleles cause molecular sexing errors in a monomorphic shorebird. ASHLEY E. CASEY, BRETT K. SANDERCOCK, KEN L. JONES and SAMANTHA M. WISELY, *Div. Biol., Kansas State Univ., Manhattan, KS.*

Session 6D. Habitat. Chair C. Alex Hartman.

- 15:30 159 Abundance, distribution, and habitat use of wintering grassland birds in Chihuahuan desert grasslands in northern Mexico. ARVIND O. PANJABI, *Rocky Mountain Bird Observ., Ft. Collins, CO*, JOSE IGNACIO GONZALEZ ROJAS, IRENE RUVALCABA ORTEGA, *Universidad Autonoma de Nuevo Leon, Monterrey, Mexico*, and ROBERT

McCREADY, *The Nature Conservancy, Bainbridge, WA.*

- 15:45 160 Conservation of shortgrass prairie birds on private land in Colorado and Wyoming. DANA L. RIPPER, SETH W. GALLAGHER and TAMMY VERCAUTEREN, *Rocky Mountain Bird Observatory, Ft. Collins, CO.*
- 16:00 161 Male Common Loons – but not females – become familiar with breeding territories through control of nestsite placement. WALTER H. PIPER, *Dept. Biol. Sci., Chapman Univ., Orange, CA.*
- 16:15 162 Bald Eagle restoration on the California Channel Islands. PETER SHARPE and DAVID GARCELON, *Inst. Wildl. Stud., Arcata, CA.*
- 16:30 163 Lower survival probability for Long-billed Curlew broods abandoned by females: why do females desert? C. ALEX HARTMAN, *Prog. Ecol., Evol. & Conserv. Biol., Univ. Nevada, Reno, NV,* and LEWIS W. ORING, *Dept. Nat. Res. & Environ. Sci., Univ. Nevada, Reno, NV.*
- 16:45 164 Greater Sage-Grouse brood rearing habitat at a landscape scale. MICHAEL T. ATAMIAN, JAMES S. SEDINGER, *Nat. Res. & Environ. Sci., Univ. Nevada-Reno, Reno, NV,* and JILL S. HEATON, *Dept. Geog. Univ. Nevada-Reno.*

Saturday, 11 August

Session 7A. Brood parasites, life history and captive breeding. Chair Daniel H. Kim.

- 09:30 165 Differential parasitism frequencies in two suitable cowbird hosts in the Colorado Front Range. TY TUFF, ALEXANDER CRUZ, JOHN WALSH, *Dept. Ecol. Evol. Biol., Univ. Colorado, Boulder, CO,* and JAMESON F. CHACE, *Dept. Biol., Salve Regina Univ., Newport, RI.*
- 09:45 166 Factors influencing female Brown-headed Cowbird home range size in a central Nebraska grassland. DANIEL H. KIM, *Platte River Whooping Crane Trust, Wood River, NE,* and BRIANNA L. ANDERSON, *Dept. Biol., St. Cloud State Univ., St. Cloud, MN.*
- 10:00 167 * Does day length matter? A comparative study of the latitudinal clutch size gradient in temperate Tree Swallow populations. ALEXANDRA P. ROSE, *Ecol. & Evol. Biol. Dept., Univ. California, Santa Cruz, CA.*
- 10:15 168 * Hatching asynchrony and chick condition in Purple Martins: an experiment. AUSTIN MERCADANTE and MARK STANBACK, *Dept. Biol., Davidson Coll., Davidson, NC.*
- 10:30 169 Hatching asynchrony and early nestling mortality: the feeding constraint hypothesis. KAREN L. WIEBE, *Dept. Biol., Univ. Saskatchewan, Saskatoon, SK,* and TORE SLAGSVOLD, *Dept. Biol., Univ. Oslo, Oslo, Norway.*
- 10:45 170 * Assessing the relative fitness of captive-reared Great Lakes Piping Plovers. ERIN A. ROCHE, *Conserv. Biol. Prog., Univ. Minnesota, St. Paul, MN,* and FRANCIE J. CUTHBERT, *Dept. Fish. & Wildl., Univ. Minnesota.*
- 11:00 171 Survival of captive-reared and natural fledged Saskatchewan Piping Plovers from 2005. CHERI L. GRATTO-TREVOR, *Prairie & Northern Wildl. Res. Centre, Env. Canada, Saskatoon, SK,* and CORIE L. WHITE, *Saskatchewan Watershed Authority, Regina, SK.*

11:15 172 Post release demography of endangered island ducks translocated to Midway Atoll. MICHELLE H. REYNOLDS, MARK S. VEKASY, JAMES BREEDEN, NATHANIEL E. SEAVY, *U.S. Geol. Surv., Pacific Island Ecosys. Res. Center, Kilauea Field Sta., Hawaii Natl. Park, HI*, JOHN L. KLAVITTER and LEONA LANIAWE, *U.S. Fish & Wildl. Serv., Midway Atoll Natl. Wildl. Refuge*.

11:30 173 vacant

11:45 174 vacant

Session 7B. Forest habitats: breeding ecology, patch effects and cavity-nesters. Chair Sarah E. Lehnen.

09:30 175 Habitat use of territorial Louisiana Waterthrushes overwintering along streams in the Caribbean National Forest, Puerto Rico. MICHAEL HALLWORTH and LEONARD R. REITSMA, *Dept. Biol., Plymouth State Univ., Plymouth, NH*.

09:45 176 * Nest site selection and success of three common piñon-juniper birds in response to a chronic industrial noise disturbance. CLINTON D. FRANCIS, *Dept. Ecol. & Evol. Biol., Univ. Colorado, Boulder, CO*, CATHERINE P. ORTEGA, *San Juan Inst. & Dept. Biol., Ft. Lewis Coll., Durango, CO*, and JOHN HANSEN, *BLM Farmington Field Office, Farmington, NM*.

10:00 177 * The importance of patch area to shrubland birds in southeastern Ohio. SARAH E. LEHNEN and AMANDA D. RODEWALD, *School Environ. & Nat. Res., Ohio State Univ., Columbus, OH*.

10:15 178 * Thresholds in nesting habitat requirements of a mature forest specialist, the Brown Creeper. JEAN-FRANÇOIS POULIN, MARC-ANDRÉ VILLARD, PIERRE GOULET, *Dept. de biologie, Univ. de Moncton, Moncton, NB*, MATTIAS EDMAN, *Dept. Wildl., Fish & Env. Stud., Swedish Univ. Agr. Sci., Umea, Sweden*, and ANNA-MARIA ERIKSSON, *Dept. Nat. Sci., Mid Sweden Univ., Sundsvall, Sweden*.

10:30 179 Canada Warbler breeding ecology in young forest stands compared to red maple swamp. LEONARD R. REITSMA, MICHAEL HALLWORTH, PHRED M. BENHAM and J. DANIEL LAMBERT, *Biol. Dept., Plymouth State Univ., Vermont Inst. Nat. Sci., Quechee, VT*.

10:45 180 Changes in Kentucky Warbler preferred habitat choice at a long-term study site in north-central Virginia. M. VICTORIA McDONALD, *Smithsonian Conserv. & Res. Center, Front Royal, VA*.

11:00 181 Snag management for cavity-nesters in southern pine forests: what is a 'quality' snag? LORI A. BLANC and JEFFREY R. WALTERS, *Dept. Biol. Sci., Virginia Tech Univ., Blacksburg, VA*.

11:15 182 Snag availability for cavity nesting birds and other wildlife over a chronosequence of post-harvest landscapes in western Newfoundland. CARYN SMITH, *Cognitive & Behav. Ecol., Memorial Univ. Newfoundland, St. John's, NL*, IAN WARKENTIN, *Environ. Sci., Memorial Univ. Newfoundland, Corner Brook, NL*, and MARTIN MORONI, *Nat. Res. Canada - Canadian For. Serv., Atlantic For. Center, Corner Brook, NL*.

11:30 183 Status of experimental fungal inoculations to establish heart-rot and promote cavity nests and wildlife habitat in managed forests in Washington. JAMES C. BEDNARZ,

MARTIN J. HUSS, THOMAS J. BENSON, *Dept. Biol. Sci., Arkansas State Univ., Jonesboro, AR*, and DANIEL E. VARLAND, *Rayonier, Hoquiam, WA*.

11:45 184 vacant

Session 7C. Systematics and character mapping. Chair Joseph W. Brown.

09:30 185 Emergent phylogenetic signal from Neoavian DNA sequences. PETER HOUDE, *Dept. Biol., New Mexico State Univ., Las Cruces, NM*.

09:45 186 * Nuclear and mitochondrial DNA agree on the age of Neoaves. JOSEPH W. BROWN and DAVID P. MINDELL, *Dept. Ecol. & Evol. Biol. and Mus. Zool., Univ. Michigan, Ann Arbor, MI*.

10:00 187 What is a Hawaiian honeyeater? ROBERT FLEISCHER, HELEN JAMES, AMY DRISKELL and STORRS OLSON, *Natl. Zool. Park, Smithsonian Inst., Washington, DC*.

10:15 188 Working through polytomies: auklets revisited. ELIZABETH M. HUMPHRIES and KEVIN WINKER, *Univ. Alaska Mus. and Inst. Arctic Biol., Fairbanks, AK*.

10:30 189 Has cladistics been misleading studies of the origin of birds? FRANCES C. JAMES and JOHN A. POURTLESS IV, *Dept. Biol. Sci., Florida State Univ., Tallahassee, FL*.

10:45 190 * Molecular phylogenetics of a radiation of lowland tanagers (genus *Tachyphonus*) and relatives. KEVIN J. BURNS and RACHEL A. RACICOT, *Dept. Biol., San Diego State Univ., San Diego, CA*.

11:00 191 Comparative approaches for inferring divergence times in a well-resolved Cardinalid clade. BRIAN T. SMITH and JOHN KLICKA, *Barrick Mus. Nat. Hist., Univ. Nevada Las Vegas, Las Vegas, NV*.

11:15 192 Molecular phylogeny of African bush-shrikes and allies: tracking the colonisation history and evolution of foraging behaviour. JEROME FUCHS, *Muséum national d'Histoire naturelle, Paris, France*, RAURI C. K. BOWIE, *Mus. Vert. Zool., Berkeley, CA*, MARTIN IRESTEDT, *Naturhistoriska riksmuseet, Stockholm, Sweden*, JON FJELDSA, *Zoologisk Mus., Univ. Copenhagen, Copenhagen, Denmark*, ARNAUD COULOUX, *Genoscope, Evry, France*, and ERIC PASQUET, *Muséum national d'Histoire naturelle*.

11:30 193 * Phylogenetics and evolution of nectar specialization in flowerpiercers (genera: *Diglossa* and *Diglossopsis*). WILLIAM M. MAUCK III and K. J. BURNS, *Dept. Biol., Univ. California, San Diego, CA*.

11:45 194 Genetic diversity and genetic structure of 4 large parrots in the Peruvian Amazon. KARA J. GEBHARDT, LISETTE P. WAITS, *Dept. Fish & Wildl., Univ. Idaho, Moscow, ID*, GEORGE POWELL, *WWF, Washington, DC*, and DONALD J. BRIGHTSMITH, *Dept. Vet. Path., Texas A&M Univ., College Station, TX*.

Session 7D. Coevolution, speciation and genetics. Chair Shawn T. McKinney.

09:30 195 * Low genetic heritability of nestling begging intensity in the House Sparrow. ROI DOR and ARNON LOTEM, *Dept. Zool., Tel-Aviv Univ., Tel Aviv, Israel*.

09:45 196 * Testing hypotheses of divergence between Snow and McKay's buntings: evidence for founder effect speciation. JAMES M. MALEY, *Mus. Nat. Sci., Louisiana State Univ., Baton Rouge, LA*, and KEVIN WINKER, *Univ. Alaska Mus., Fairbanks, AK*.

- 10:00 197 Coevolution between Hispaniolan crossbills and pine: does more time allow for greater phenotypic escalation at lower latitude? THOMAS L. PARCHMAN, *Dept. Biol., New Mexico State Univ., Las Cruces, NM, and Dept Zool. & Physiol., Univ. Wyoming, Laramie, WY*, CRAIG W. BENKMAN, *Dept. Zool. & Physiol., Univ. Wyoming*, and EDUARDO T. MEZQUIDA, *Ecol. & Edaphology Unit, Polytech. Univ. Madrid, Madrid, Spain*.
- 10:15 198 Life history strategies of a resident crossbill (*Loxia curvirostra* complex). LEONARD SANTISTEBAN, *Dept. Biol., New Mexico State Univ., Las Cruces, NM*, CRAIG W. BENKMAN and PATRICK C. KEENAN, *Dept. Zool. & Physiol., Univ. Wyoming, Laramie, WY*.
- 10:30 199 Is white pine blister rust influencing Clark's Nutcracker population trends? DIANA F. TOMBACK, *Univ. Colorado Denver and Health Sci. Center, Denver, CO, and Whitebark Pine Ecosys. Found., Missoula, MT*, KATIE G. CHIPMAN, *Univ. Colorado Denver and Health Sci. Center*, and SHAWN T. MCKINNEY, *Coll. For. & Conserv., Univ. Montana, Missoula, MT*.
- 10:45 200 * Is the Clark's Nutcracker - whitebark pine mutualism threatened by white pine blister rust? SHAWN T. MCKINNEY, CARL E. FIEDLER, *Coll. For. & Conserv., Univ. Montana, Missoula, MT*, and DIANA F. TOMBACK, *Dept. Biol., Univ. Colorado Denver and Health Sci. Cen., Denver, CO*.
- 11:00 201 vacant
- 11:15 202 Biogeography and speciation of the Neotropical jay genus *Cyanolyca*. ELISA BONACCORSO, *Nat. Hist. Mus., Univ. Kansas, Lawrence, KS*.
- 11:30 203 Founder effect speciation in the Zebra Finch. CHRISTOPHER N. BALAKRISHNAN and SCOTT V. EDWARDS, *Dept. Organ. & Evol. Biol., Harvard Univ., Cambridge, MA*.
- 11:45 204 Paraphyly of the plovers and rails (Aves). P. HOUDE and M. G. FAIN, *Dept. Biol., New Mexico State Univ., Las Cruces NM*.
- Session 8A. Migration, non-breeding habitat and conservation. Chair Erin T. Macchia.
- 13:30 205 Using satellite telemetry to track the movements of Bar-tailed Godwits in the Pacific region. N. WARNOCK, R. E. GILL, P. BATTLELEY and L. TIBBITTS, *Point Reyes Bird Observ., Conserv. Sci., Petaluma, CA*.
- 13:45 206 Spatial age segregation of White-rumped Sandpiper in non-breeding grounds. J. TORRES-DOWDALL, A. FARMER, K. STRUM, M. ALFARO, L. MACCHI and B. SANDERCOCK, *Dept. Biol., Colorado State Univ., Ft. Collins, CO*.
- 14:00 207 Effects of the El Niño Southern Oscillation on nearctic-neotropical migrant condition in Central America. JARED D. WOLFE, *Dept. Wildl., Humboldt State Univ., Arcata, CA*, and C. JOHN RALPH, *U.S. For. Serv., Pacific Southwest Res. Sta., Redwood Sci. Lab., Arcata, CA*.
- 14:15 208 Effects of communication towers on migrating birds during spring in Arkansas. ERIN T. MACCHIA, *Environ. Sci. Program, Arkansas State Univ., Jonesboro, AR*, JAMES C. BEDNARZ and RICHARD S. GRIPPO, *Dept. Biol. Sci., Arkansas State Univ.*
- 14:30 209 Making progress on a 50-year-old avian conservation issue: the potential positive impacts of changing communication tower lighting systems at a landscape scale.

JOELLE L. GEHRING, *Michigan Natural Features Inventory, Lansing, MI.*

- 14:45 210 Urban flight: understanding individual and population-level responses of Nearctic-Neotropical migratory birds to urbanization. AMANDA D. RODEWALD and DANIEL P. SHUSTACK, *Sch. Enviro. & Nat. Res., Ohio State Univ., Columbus, OH.*

Session 8B. Red-cockaded and Ivory-billed Woodpeckers. Chair Geoffrey E. Hill.

- 13:30 211 Intersexual differences in foraging behavior of Red-cockaded Woodpeckers. KATHLEEN E. FRANZREB, *Southern Res. Sta., Dept. For., Wildl. & Fish., Univ. Tennessee, Knoxville, TN.*
- 13:45 212 Further evidence suggesting that Ivory-billed Woodpeckers exist in Florida. GEOFFREY E. HILL, *Dept. Biol. Sci., Auburn Univ., Auburn, AL*, DANIEL J. MENNILL, *Dept. Biol., Univ. Windsor, Windsor, ON*, BRIAN R. ROLEK, RUSTY LIGON, JAMES R. HILL, III, *Auburn Univ.*, KYLE A. SWISTON, KARAN ODOM, *Univ. Windsor*, and TYLER L. HICKS, *Western State Coll., Gunnison, CO.*
- 14:00 213 A comparison of large woodpecker cavity morphology in the Choctawhatchee River bottomlands and other southern forests. BRIAN W. ROLEK, RUSSELL LIGON, GEOFFREY HILL, *Dept. Biol., Auburn Univ., Auburn, AL*, and DANIEL J. MENNILL, *Dept. Biol. Univ. Windsor, Windsor, ON.*
- 14:15 214 Home range size and movements of the Pileated Woodpecker in eastern Arkansas. BRANDON L. NOEL and JAMES C. BEDNARZ, *Dept. Biol. Sci., Arkansas State Univ., State University, AR.*
- 14:30 215 Design and implementation of a region-wide search for the Ivory-billed Woodpecker with the objective of estimating occupancy and related parameters. ROBERT J. COOPER, RUA S. MORDECAI, *Univ. Georgia, Athens, GA*, MICHAEL J. CONROY, JAMES T. PETERSON, *USGS Georgia Coop. Fish & Wildl. Res. Unit and Univ. Georgia*, CLINTON T. MOORE, *Patuxent Wildl. Res. Center, Univ. Georgia*, and BRADY J. MATTSSON, *Univ. Georgia.*
- 14:45 216 vacant

Session 8C. Grassland habitats: conservation, population dynamics, and invasive plants. Chair Gary D. Schnell.

- 13:30 217 The effects of invasive bush honeysuckle (*Lonicera* spp.) on wintering avian communities. COURTNEY E. McCUSKER, *Dept. Nat. Res. & Environ. Sci., Univ. Illinois, Urbana, IL*, MICHAEL P. WARD, *Illinois Nat. His. Survey, Champaign, IL*, and JEFFREY D. BRAUN, *Dept. Nat. Res. Environ. Sci., Univ. Illinois.*
- 13:45 218 Influence of extent and management of woody plant invasion on survival of sparrow nests in northern mixed-grass prairie. ROBERT K. MURPHY, *Univ. Nebraska at Kearney, Kearney, NE*, TERRY L. SHAFFER, *USGS-Northern Prairie Wildl. Res. Center, Jamestown, ND*, TODD A. GRANT, *U.S. Fish & Wildl. Ser., Upham, ND*, CORY S. RUBIN, ADAM J. RYBA, *U.S. Fish & Wildl. Ser., Kenmare, ND*, COURTNEY K. KERNS, *Univ. Missouri, Columbia, MO*, and JAMES L. DERRIG, *Univ. Wisconsin-Stevens Point, Stevens Point, WI.*
- 14:00 219 Geographic structure and dynamics in Mountain Plover. MICHAEL B. WUNDER, *Colorado State Univ, Ft. Collins, CO*, and FRITZ L. KNOPF, *USGS-BRD, Ft. Collins, CO.*

- 14:15 220 Migratory bird use of playa wetlands in eastern Colorado. LACRECIA A. JOHNSON and ALISON BANKS CARIVEAU, *Rocky Mountain Bird Observatory, Ft. Collins, CO.*
- 14:30 221 Comparison of nesting sites of Dickcissel in grasslands with different stages in restoration in the Platte River Valley, Nebraska. F. J. HEREDIA, F. CHÁVEZ-RAMÍREZ and L. SCOTT-MORALES, *Linares, Nuevo Leon, Mexico.*
- 14:45 222 Effects of removing wooded fencerows on grassland birds and their predators. KEVIN ELLISON, *Dept. Wildl. Ecol., Univ. Wisconsin, Madison, WI*, CHRISTINE A. RIBIC, *USGS Wisconsin Coop. Wildl. Res. Unit, Madison, WI*, and DAVID W. SAMPLE, *Wisconsin Dept. Nat. Res., Madison, WI.*

Session 8D. Monitoring, conservation and habitat use. Chair John R. Sauer.

- 13:30 223 Results from the second New York Breeding Bird Atlas. KEVIN J. MCGOWAN, *Lab. Ornithol., Cornell Univ., Ithaca, NY*, and KIMBERLEY CORWIN, *New York Dept. Environ. Conserv., Albany NY.*
- 13:45 224 Monitoring Colorado's landbirds: evaluation of methods to estimate population status and trend. JENNIFER A. BLAKESLEY, D. HANNI, K. HUTTON, *Rocky Mountain Bird Observ., Ft. Collins, CO*, and P. M. LUKACS, *Colorado Div. Wildl., Ft. Collins.*
- 14:00 225 Influence of repeated video probing on nesting success of Burrowing Owls. VICTORIA GARCIA and COURTNEY J. CONWAY, *USGS Arizona Coop. Fish & Wildl. Res. Unit, School Nat. Res., Univ. Arizona, Tucson, AZ.*
- 14:15 226 Factors affecting foraging success and habitat selection in piscivorous wading birds. ERIC D. STOLEN, *Dynamac Corp., Kennedy Space Center, FL.*
- 14:30 227 Reward band reporting probabilities for North American geese. GUTHRIE S. ZIMMERMAN, *U.S. Fish & Wildl. Serv., Patuxent, MD*, WILLIAM L. KENDALL, *USGS Patuxent Wildl. Res. Center, Laurel, MD*, and TIMOTHY J. MOSER, *U.S. Fish & Wildl. Serv., Minneapolis, MN.*
- 14:45 228 Optimal conservation of migratory species: integrating stable isotopes and decision models. D. RYAN NORRIS, *Dept. Integrative Biol., Univ. Guelph, Guelph, ON*, TARA M. MARTIN, *Dept. Forest Sci., Univ. British Columbia, Vancouver, BC*, IADINE CHADES, *Unité Biométrie et Intelligence Artificielle, Castanet-Tolosan, France*, PETER ARCESE, *Dept. Forest Sci., Univ. British Columbia*, PETER P. MARRA, *Smithsonian Migratory Bird Center, Washington, DC*, and HUGH POSSINGHAM, *Ecol. Centre & Dept. Math., Univ. Queensland, Australia.*

Session 9A. Migration, isotopes and survival. Chair Michael B. Wunder.

- 15:30 229 Stopover habitat selection by migrant landbirds in a fragmented forest-agricultural landscape. DIANE L. PACKETT and JOHN B. DUNNING, Jr., *Dept. Forestry & Nat. Res., Purdue Univ., West Lafayette, IN.*
- 15:45 230 Nocturnal passerine migration across the northeastern United States, as documented by automated recording of night flight-calls. ANDREW FARNSWORTH, KENNETH V. ROSENBERG, RALPH S. HAMES and MICHAEL E. POWERS, *Lab. Ornithol., Cornell Univ., Ithaca NY.*
- 16:00 231 Forest patch use by migrant landbirds near Lake Erie in Ohio: importance of local habitat, patch area, and distance to lakeshore. PAUL G. RODEWALD, *School Environ.*

& Nat. Res., Ohio State Univ., Columbus, OH.

- 16:15 232 Generalized spatial resolution limits for inferring geographic origin from stable hydrogen isotopes. MICHAEL B. WUNDER, *Colorado State Univ., Ft. Collins, CO.*
- 16:30 233 Ranges of stable isotope values in Eared Grebe feathers grown under extreme natural constraints. MICHAEL B. WUNDER, *Colorado State Univ., Ft. Collins, CO.*, and JOSEPH JEHL, Jr., *Smithsonian Inst. Washington, DC.*
- 16:45 234 Survival of Sora during fall migration in Missouri. DAVID G. KREMENTZ, *Arkansas Coop Unit, Univ. Arkansas, Fayetteville, AR.*

Session 9B. Breeding ecology. Chair Swen C. Renner.

- 15:30 235 Survival and home range of breeding female Mottled Ducks on the Upper Texas Gulf. ELIZABETH A. RIGBY and DAVID A. HAUKOS, *Dept. Nat. Res. Manage., Texas Tech Univ., Lubbock TX.*
- 15:45 236 Reproductive ecology of Piping Plovers at Chaplin Lake, Saskatchewan. CORIE L. WHITE, *Saskatchewan Watershed Authority, Regina, SK.*, and STEPHEN K. DAVIS, *Environ. Canada, Canadian Wildl. Ser., Regina, SK.*
- 16:00 237 Factors influencing home-range size of Swainson's Warblers in eastern Arkansas. NICHOLAS M. ANICH, THOMAS J. BENSON and JAMES C. BEDNARZ, *Dept. Biol. Sci., Arkansas State Univ., Jonesboro, AR.*
- 16:15 238 New aspects of the biology of the recently discovered Naung Mung Scimitar-Babbler from northern Kachin State, Burma/Myanmar and a new subspecies of *Tesia* from Southeast Asia. SWEN C. RENNER and JOHN H. RAPPOLE, *Natl. Zool. Park, Smithsonian Inst., Front Royal, VA.*
- 16:30 239 Body condition of Swainson's Warblers breeding at three sites in eastern Arkansas. THOMAS J. BENSON and JAMES C. BEDNARZ, *Dept. Biol. Sci., Arkansas State Univ., Jonesboro, AR.*
- 16:45 240 Eastern Bluebird exclusion results in competitive release of Brown-headed Nuthatches. MARK STANBACK, AUSTIN MERCADANTE, HOWELL BURKE, REBECCA JAMESON, DOUG GRUNWALD, GRAHAM RAY and JEAN OLBERT, *Dept. Biol., Davidson Coll., Davidson, NC.*

Session 9C. Grassland habitats: conservation, population dynamics, and invasive plants, continued. Chair Nicola Koper.

- 15:30 241 Grassland bird community response to vegetation composition and structure on private grasslands in the Nebraska Sandhills. LARKIN A. POWELL, SILKA L. F. KEMPEMA, *School Nat. Res., Univ. Nebraska-Lincoln, Lincoln, NE.*, and WALTER H. SCHACHT, *Dept. Agron. & Hort., Univ. Nebraska-Lincoln.*
- 15:45 242 Avoidance of habitat edges by Sprague's Pipits. NICOLA KOPER, *Nat. Res. Inst., Univ. Manitoba, Winnipeg, MB.*, DAVID WALKER, *Dept. Environ. & Geog., Univ. Manitoba.*, and JANESSA CHAMPAGNE, *Nat. Res. Inst., Univ. Manitoba.*
- 16:00 243 Response of summer birds to wildfire in grazed versus ungrazed grasslands in southeastern Arizona. CARL E. BOCK and JANE H. BOCK, *Ecol. & Evol. Biol., Univ. Colorado, Boulder, CO.*, LINDA KENNEDY, *Research Ranch, Natl. Audubon Soc., Elgin,*

AZ; and ZACH F. JONES, *Biol. Dept., Colorado Coll., Colorado Springs, CO.*

- 16:15 244 Bird response to native grass buffer habitats in Mississippi. SAM RIFFELL, L. WES BURGER, RICK HAMRICK, HEIDI PUCKETT, *Dept. Wildl. & Fish., Mississippi State Univ., Mississippi State, MS*, and MARK SMITH, *School For. & Wildl. Sci., Auburn Univ., Auburn, AL.*
- 16:30 245 Wintering bird-habitat associations and responses to grazing in Arizona semidesert grasslands. JANET M. RUTH, *USGS Arid Lands Field Sta., Albuquerque, NM*, CALEB E. GORDON, *Univ. Arizona, Tucson, AZ*, and THOMAS R. STANLEY, *USGS Ft. Collins Sci. Center, Ft. Collins, CO.*
- 16:45 246 vacant

Part 3: Posters (poster session 9 August)

- 301 Dominance behavior as a determinant of Northern Waterthrush space use during the non-breeding season. JOSEPH SMITH, PETER P. MARRA, *Smithsonian Migratory Bird Center, Washington, DC*, and LEONARD R. REITSMA, *Dept. Nat. Sci., Plymouth State University, Plymouth, NH.*
- 302 Male mate choice based on sexually selected traits in female Eastern Bluebirds. JOANNA K HUBBARD and JOHN P SWADDLE, *Biol. Dept., Coll William & Mary, Williamsburg, VA.*
- 303 Eared Grebe mortality on hypersaline lakes: encrustation or salt toxicity? JOSEPH R. JEHL, Jr., *U.S. Natl. Mus. Nat. Hist., Washington, DC*, ANNETTE E. HENRY, *Natl. Marine Fish. Serv., La Jolla, CA*, and JUDY St. LEGER, *SeaWorld, San Diego, CA.*
- 304 Radionuclides and metals in five species of maritime birds from the Aleutians, Alaska. JOANNA BURGER and MICHAEL GOCHFELD, *Environ. & Occ. Health Sci. Inst., Rutgers Univ., and Consortium for Risk Evaluation with Stakeholder Participation, Piscataway, NJ.*
- 305 Eastern Phoebe use different strategies to provision young. R. IAN HORN, C. LATTIN and G. K. RITCHISON, *Dept. Biol., Eastern Kentucky Univ., RICHMOND, KY.*
- 306 Deuterium base map for Mexico created using House Sparrow feathers. KEITH W. LARSON, *Klamath Bird Observ., Ashland, OR*, KEITH A. HOBSON and LEONARD I. WASSENAAR, *Environ. Canada, Saskatoon, SK.*
- 307 Nests, predators and videotape: using miniature cameras on grassland bird nests. PAULA J. GOUSE, *U.S. Fish & Wildl. Ser., Bowdoin NWR, Malta, MT*, and STEPHANIE L. JONES, *U.S. Fish & Wildl. Ser., Denver, CO.*
- 308 Compensatory parental care in a multi-brooded songbird species. KIRK W. STODOLA , ROBERT J. COOPER, *Warnell School For. & Nat. Res., Univ. Georgia, Athens, GA*, and ERIC T. LINDER, *Dept. Biol. Sci., Mississippi State Univ., Mississippi State, MS.*
- 309 Patterns of natal philopatry in Eastern Bluebirds. PATRICIA B. BOLLINGER and ERIC K. BOLLINGER, *Dept. Biol. Sc., Eastern Illinois Univ., Charleston, IL.*
- 310 Incubation rhythm and behavior of Long-billed Curlew at Great Salt Lake. KYLE STONE and JOHN F. CAVITT, *Dept. Zool., Weber State Univ., Ogden, UT.*
- 311 Site fidelity, mate fidelity, and breeding dispersal in American Kestrels. KAREN STEENHOF

- and BRIT PETERSON, *U.S. Geol. Surv., For. & Range. Ecosys. Sci. Center, Snake River Field Station, Boise, ID.*
- 312 Species limits and phylogeography of Hispaniolan palm-tanagers (*Phaenicophilus*). NICHOLAS D. SLY, *Lab. Ornithol., Cornell Univ., Ithaca, NY*, ANDREA K. TOWNSEND, *Dept. Ecol. & Evol. Biol., Cornell Univ.*, CHRISTOPHER C. RIMMER, *Vermont Inst. Nat. Sci., Woodstock, VT*, and IRBY J. LOVETTE, *Dept. Ecol. & Evol. Biol., Cornell Univ.*
- 313 Past reproductive success explains variation in site fidelity of migratory Blue-tailed Bee-eaters on Kinmen Island, Taiwan. PEI-YU TSAI, *Inst. Ecol. & Evol. Biol., Natl. Taiwan Univ, Taipei, Taiwan*, HSIAO-WEI YUAN and LIEN-SIANG CHOU, *School For. & Res. Conserv., Natl. Taiwan Univ.*
- 314 Is the incubation period energetically costly for the Eastern Bluebird? LESLIE D. CLIFFORD and LAUREN BOECKEL, *Dept. Biol., Mansfield Univ., Mansfield, PA.*
- 315 Breeding ecology and habitat associations of the Arctic Warbler in interior, Alaska. DAVID W. SHAW, RICHARD RING and SUSAN SHARBAUGH, *Alaska Bird Observ., Fairbanks, AK.*
- 316 Nest size variation in Eastern Bluebirds. AUSTIN MERCADANTE, MARK STANBACK, NICK DILUZIO and JEAN OLBERT. *Dept. Biol., Davidson Coll., Davidson, NC.*
- 317 Community-level patterns of host use by a generalist brood parasite. JAMES W. RIVERS, *Dept. Ecol., Evol. & Marine Biol., Univ. California, Santa Barbara, CA*, WILLIAM E. JENSEN, *Dept. Biol. Sci., Emporia State Univ., Emporia, KS*, KARL L. KOSCIUCH, *Tetra Tech EC, Inc., Portland, OR*, and STEPHEN I. ROTHSTEIN, *Dept. Ecol., Evol. & Marine Biol., Univ. California, Santa Barbara.*
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- 320 Interior Least Tern nest placement on rooftops. JEANETTE T. BOYLAN, ROBIN GRAHAM, *Dallas Zoo, Dallas, TX*, and OMAR BOCANEGRA, *U.S. Fish & Wildl. Serv., Arlington, TX.*
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- 326 Complete sanitation of dead nestlings by parent birds may bias nest depredation rates. CHRIS KIRKPATRICK, *Dept. Biol., Univ. Arizona, Tucson, AZ*, COURTNEY J. CONWAY, *USGS Arizona Coop. Fish & Wildl. Res. Unit, Tucson, AZ*, and MOEZ H. ALI, *Univ. Arizona.*
- 327 Impacts of Hurricane Katrina on a bottomland hardwood bird community. DAVID R. BROWN, *Dept. Biol. Sci., Louisiana State Univ., Baton Rouge, LA*, and THOMAS W. SHERRY, *Dept. Ecol. & Evol. Biol., Tulane Univ., New Orleans, LA.*
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- 330 Modeling abundance, detection and spatial distribution of threatened birds in western Nebraska. MAX POST VAN DER BURG, ANDREW J. TYRE, *School Nat. Res., Univ. Nebraska-Lincoln, Lincoln, NE*, and BART BLY, *Rocky Mtn. Bird Observ., Scottsbluff, NE.*
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- 334 Temporal and spatial variation in the genetic diversity of the endangered Hawaiian Petrel. ANDREANNA J. WELCH, *Smithsonian Inst., Washington, DC*, and *Behav., Ecol., Evol. & Syst. Prog., Univ. Maryland, College Park, MD*, HELEN F. JAMES and ROBERT C. FLEISCHER, *Smithsonian Inst., Washington, DC.*
- 335 A study of biotic and abiotic factors of Northern Goshawk nest sites in Southern Utah: variables associated with occupancy and nesting. KEELI S. MARVEL, *Dept. Plant & Wildl. Sci., Brigham Young Univ., Provo, UT*, RONALD L. RODRIGUEZ, *U.S. Dept. Agri., Dixie Natl. Forest, Cedar City, UT*, and CLAYTON M. WHITE, *Dept. Plant & Wildl. Sci., Brigham Young Univ.*
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- Connecticut, Storrs, CT, A. F. ZUUR and E. N. IENO, Highlands Statistics, Newburgh, UK.*
- 338 Greater Prairie-Chicken genetic diversity and structure in a contiguous grassland landscape. T. J. PREBYL, A. J. GREGORY, L. B. McNEW, S. M. WISELY and B. K. SANDERCOCK, *Div. Biol. Kansas State Univ., Manhattan, KS.*
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- 341 Canada Warbler age structure, site fidelity, territory characteristics, and pairing success in northeastern Vermont. JAMESON F. CHACE, *Dept. Biol., Salve Regina Univ., Newport, RI*, and STEVEN D. FACCIO, *Conserv. Biol. Dept., Vermont Inst. Nat. Sci., Quechee, VT.*
- 342 Gone with the wind: effects of wind speed on bird species detectability. MATTHEW D. GIOVANNI, LARKIN A. POWELL, *School Nat. Res., Univ. Nebraska-Lincoln, Lincoln, NE*, and WALTER H. SCHACHT, *Dept. Agron. & Hort., Univ. Nebraska-Lincoln.*
- 343 Cooperative breeding in Red-headed Woodpeckers. MEGAN R. ATTERBERRY-JONES, BRIAN D. PEER, *Dept. Biol. Sci., Western Illinois Univ., Macomb, IL*, and JASON D. JONES, *Dept. RPTA, Western Illinois Univ.*
- 344 Insect and bird species diversity in habitat undergoing restoration to tallgrass prairie and an unrestored site. KENDRA D. JOHNSON, *Dept. Environ. Engr., Massachusetts Inst. Tech., Cambridge MA*, and MARA A. McDONALD, *Lab. Genetics, Univ. Wisconsin, Madison, WI.*
- 345 Area-sensitivity by forest songbirds: what scale to use? CHRISTINE RENAUD, ANDRÉ DESROCHERS, *Centre d'étude de la forêt, Faculte de Foresterie & Geomatique, Université Laval, Quebec, QC*, and MIKE CADMAN, *Canadian Wildl. Ser., and Univ. Guelph, Guelph, ON.*
- 346 Nest site competition between cavity-nesting birds and wasps. MARK STANBACK, AUSTIN MERCADANTE, REBECCA JAMESON, HOWELL BURKE, GRAHAM RAY and DOUG GRUNWALD, *Dept. Biol., Davidson Coll., Davidson, NC.*
- 347 Winter habitat affinities of two grassland bird species in the lower Mississippi River alluvial valley: Sedge Wren and Le Conte's Sparrow. ROBERT H. DOSTER, DAVID G. KREMENTZ, *Arkansas Coop. Fish & Wildl. Res. Unit, Dept. Biol. Sci., Univ. Arkansas, Fayetteville, AR*, and DOUGLAS A. JAMES, *Dept. Biol. Sci., Univ. Arkansas, Fayetteville, AR.*
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- 350 The effect of winter habitat type and diet on spring arrival times in an endangered species, the Kirtland's Warbler. SARAH M. ROCKWELL, *Univ. Maryland, College Park, MD*, PETER P. MARRA, *Natl. Zool. Park, Washington, DC*, COLIN E. STUDDS, *Univ. Maryland*, CAROL BOCETTI, *Environ. Sci., California Univ. of Pennsylvania, California, PA*, PAT DORAN, DAVE EWERT, *The Nature Conservancy, E. Lansing, MI*, and JOE WUNDERLE, *USDA Forest*

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- 351 Consequences of pre-breeding diet quality in a dominant marine predator the Rhinoceros Auklet. MARJORIE C. SORENSEN, *Dept. Integrative Biol., Univ. Guelph, ON*, J. MARK HIPFNER, *Centre for Wildl. Ecol., Dept. Biol. Sci., Simon Fraser Univ., Burnaby, BC*, and D. RYAN NORRIS, *Dept. Integrative Biol., Univ. Guelph*.
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- 357 Molecular analysis of Black-headed Grosbeak and Rose-breasted Grosbeak hybridization in the Great Plains. RAEANN D. METTLER and GARTH M. SPELLMAN, *Biol. Dept., Black Hills State Univ., Spearfish, SD*.
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- 360 *Rhodopechys obsoleta* (desert finch): a pale ancestor of greenfinches according to molecular phylogeny. ANTONIO ARNAIZ-VILLENA, JORGE ZAMORA, JUAN MOSCOSO, JUAN IGNACIO SERRANO-VELA and VALENTIN RUIZ DEL VALLE, *Dept. Immun. Med., and Madrid Regional Blood Center, Universidad complutense, Madrid, Spain*.
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- 366 Habitat selection by Least Bitterns in the Delta Region of Arkansas. MICHAEL J. BUDD and DAVID G. KREMENTZ, *USGS, Arkansas Coop. Fish & Wildl. Res. Unit, Univ. Arkansas, Fayetteville, AR.*
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- 376 Egg destruction behavior in Brown-headed Cowbirds. KERIANN M. DUBINA and BRIAN D. PEER, *Dept. Biol. Sci., Western Illinois Univ., Macomb, IL.*
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- Denmark, BETTINE J. VAN VUUREN, *Evol. Genomics Group, Dept. Bot. & Zool., Univ. Stellenbosch*, and RAURI C. K. BOWIE, *Mus. Vert. Zool. and Dept. Integrative Biol., Univ. California, Berkeley, CA*.
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- 394 Citril Finch belongs to genus *Carduelis* by conjoint molecular canaries and goldfinches phylogenies. VALENTIN RUIZ-DEL-VALLE, JORGE ZAMORA, JUAN MOSCOSO, JUAN IGNACIO SERRANO-VELA, RAQUEL REGUERA and ANTONIO ARNAIZ-VILLENA. *Dept Immunology, Medicine and The Madrid Regional Transfusion Blood Center, Madrid, Spain*.
- 395 Speciation in North American Certhiid(s): is the Brown Creeper a single morphologically diverse species? GARTH M. SPELLMAN, *Biol. Dept., Black Hills State Univ., Spearfish, SD*, and JOHN KLICKA, *Barrick Mus. Nat. Hist., Univ. Nevada, Las Vegas, NV*.
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- 397 Using molt cycles to inform age-categorization in tropical birds: a new integrative system. JARED D. WOLFE, *Dept. Wildl., Humboldt State Univ., Arcata, CA*, T. BRANDT RYDER, *Dept. Biol. and Whitney Harris World Ecol. Center, Univ. Missouri-St. Louis, St. Louis, MO* and PETER PYLE, *Inst. Bird Pop., Point Reyes Station, CA*.
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- 399 Does mercury contamination affect birdsong? KELLY K. HALLINGER, KATHERINE A. KAZMER, DANIEL J. ZABRANSKY and DANIEL A. CRISTOL, *Dept. Biol., Coll. William & Mary, Williamsburg VA*.
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- 401 The effects of urban noise on the vocalizations of the Red-winged Blackbird. SARA E. CROWELL, BRIAN D. PEER, JEANETTE A. THOMAS, *Dept. Biol. Sci., Western Illinois Univ., Macomb, IL*, and RONALD E. THERRIEN, *EcoSmart Res. Inst., Bradenton Beach, FL*.
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- 404 Song performance and parental care. ANDREW S. DOLBEY, H. T. LIPOWICZ, K. L. LINDBERG and K. M. SHECKELS, *Dept. Biol. Sci., Univ. Mary Washington, Fredericksburg, VA*.
- 405 Assembling, and using, the nine-primaried oscine *Tree of Life*: the poster. F. K. BARKER, *Bell Mus. Nat. Hist., Univ. Minnesota, Minneapolis, MN*, K. J. BURNS, *Dept. Biol., San Diego State Univ., San Diego, CA*, J. KLICKA, *Marjorie Barrick Mus., Univ Nevada, Las Vegas, NV*, S. M. LANYON, *Bell Mus.*, and I. J. LOVETTE, *Lab. Ornithol., Cornell Univ., Ithaca, NY*.
- 406 A complete phylogeny of the grackles, including the extinct Slender-billed Grackle (*Quiscalus palustris*), inferred from mitochondrial DNA. A. F. L. A. POWELL, F. K. BARKER and S. M.

- Lanyon, *Dept. Ecol., Evol. & Behav., and Bell Museum Nat. Hist., Univ. Minnesota, St. Paul, MN.*
- 407 Recreational development and ponderosa pine forest birds. HEATHER M. SWANSON, *Boulder Open Space and Mountain Parks, Boulder, CO*, ALEXANDER CRUZ, *Ecol. and Evol. Biology, Univ. Colorado, Boulder, CO*, and JOHN W. PRATHER, *deceased (20 Feb 2006)*.
- 408 Gondwana origin of Eurypygae falsified. P. HOUDE, M. G. FAIN, *Dept. Biol., New Mexico State Univ., Las Cruces NM*, and ALAN COOPER, *Univ. Adelaide, Adelaide, Australia*.
- 409 A test of the Sensory Bias hypothesis for sexual selection in the Common Grackle. JENNIFER R. SCHAHL and BRIAN D. PEER, *Dept. Biol., Western Illinois Univ., Macomb, IL*.
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- 411 The role of habitat area and edge in fragmented landscapes: definitively distinct or inevitably intertwined? ROBERT J. FLETCHER, Jr., L. RIES, J. BATTIN and A. D. CHALFOUN, *Div. Biol. Sci., Univ. Montana, Missoula, MT*.
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- 413 Territory size, foraging behavior, and vocalizations of the Jocotoco Antpitta in southeastern Ecuador. J. BERTON C. HARRIS, MERY JUIÑA and ROLANDO CARPIO, *Fundación de Conservación Jocotoco, Quito, Ecuador*.
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