

# 137th Annual Meeting American Ornithological Society Birds on the Edge: Dynamic Boundaries

June 24–28, 2019 Anchorage, Alaska Egan Center www.amornithmeeting.org #AOS19AK



# **SCIENTIFIC PROGRAM**



# Thursday, Late Afternoon Session

\* indicates student presenters eligible for AOS presentation award

Room	Summit 5	Summit 6	Summit 7/8	Summit 9/10	Summit 11/12	Summit 13/14
Session	Human Dimensions & Policy S67	Symposium: Undergrad Symposium S68	Urban Ecology S69	Symposium: Permeable Boundaries in Biological and Social Sciences: Human Dimensions in Bird Research and Conservation (Naves et al.)	Morphology & Molt S71	Symposium: Lessons from Avian Hybrid Zones and the Maintenance of Species Boundaries (Aguillon et al.) S72
4:00 pm	*Wedge-tailed Shearwater Persistence in Human-dominated Areas <u>Idle JL</u> , Friswold BM, Harmon KC, Price MR	*Development, Not Bird Feeders, is Associated with Increased Occupancy of Northern Cardinals in Northern Michigan Toner SM, Bonter DN	*Investigating the Influence of Polarized Light and Artificial Night Lighting on Bird-Building Collisions Lao S, Anderson AW, Blair RB, Eckles JW, Robertson BA, Turner RJ, Loss SR	*Aspects of Municipalities Associated with Occupancy and Abundance of Chimney Swifts in Illinois Hurd ML, Benson TJ, Ward MP	The Role of Diet and Nesting in Bill Shape Diversification of Frugivorous Asian Barbets <u>Krishnan A</u> , Souza N, Reddy S	Hybridization in Northern Flickers Reveals Loci Associated with Feather Coloration <u>Aguillon SM</u> , Lovette IJ
4:15 pm	If You Build It, They Will Come: Avian Utilization and Predation at a Large- scale Photovoltaic Solar Facility <u>Griffiths JL</u> , Meade DE, Dart JD	*Integrating Machine Learning and Citizen Science Data to Generate High- performing Species Distribution Models for the Globally Vulnerable Gray Tinamou ( <i>Tinamus</i> tao) Wiebe RA	Urbanization and Elevated Cholesterol in American Crows <u>Townsend AK</u> , Staab H, Barker CM	Cross-cultural Considerations in Wildlife Management and Conservation <u>Leonetti CC</u>	Glare Reduction Properties of Dark Avian Facial Markings <u>Lebow CK</u> , Burt DB	Cardinals Are Red, Buntings Are Blue; Because They Hybridize, They're Interesting Too! <u>Megna LC</u> , Carling MD
4:30 pm	Year-round Monitoring Reveals a Unique Seasonal Pattern of Bird- Window Collisions Along the Pacific Coast of North America <u>De Groot KL</u> , Porter AN, Norris AR, Huang AC	*Modeling Persistent Effects of West Nile Virus on Avian Population Dynamics in the Northeastern United States <u>Dupont GL</u> , Bonter DN, Robinson OJ	The Interactive Effects of Fire and Recreation on Golden Eagles <u>Davis CM</u> , Heath JA	Sustainability in Long-term Collaborations: The Harvest Assessment Program of the Alaska Migratory Bird Co- Management Council Naves LC, Fall J, Tulik C, Pederson M, Keating JM, Fischer J, Schwalenberg P	Evolution of Molt-migration: a Large-scale Phylogenetic Approach <u>Pageau C</u> , Reudink MW	Sex Chromosome Inversions May Enforce Reproductive Isolation Across an Avian Hybrid Zone Hooper DM, Griffith SC, Price TD
4:45 pm	Engaging Undergraduate Students in an Authentic Course-based Research Experience Using Archived Nest Video Footage <u>Stracey CM</u>	Panel Discussion	Relationships Between Local- and Landscape- scale Management and Urban Bird Communities Across Six Major Metropolitan Areas: Do Yards Matter? <u>Narango DL</u> , Lerman SB, Hall SJ, Hobbie SE, Neill C, Trammell TL, Groffman P	Banding Together to Learn and Preserve: 25 Years of Research in Cross-cultural Western Alaska <u>Ely CR</u>	Molt-migration in the Mexican Monsoon: 90 Years of Specimens Reveal a Phenological Mismatch Caused by Anthropogenic Climate Change <u>Terrill RS</u> , Tsai WL, Maley JM, Rohwer S, Pimm G, McCormack JE	Genomic and Morphological Approaches to Understanding Speciation in Jamaican- endemic Streamertail Hummingbirds Judy CD, Brumfield RT, Graves GR
5:00 pm	Engaging with Veterinarians to Reduce Cat Overpopulation and Cat Impacts on Wildlife Populations Sherwood LJ, Wilson AG, South CS, Roche SM, Luszcz TM		Songbirds Alter Their Use of Bird Feeders in Response to Vocalization Playback <u>Barron DG</u> , Sarna SD, <u>Middleton RL</u>	Human Dimensions Applications in Shorebird Subsistence Harvest and Indigenous Knowledge in Alaska <u>Keating JM</u> , Naves LC, Tibbitts TL, Ruthrauff DR	Simultaneous Rectrix Molt and Comparative Molt Ecology of Eastern Wood-Warblers <u>Mumme RL</u> , Mulvihill RS	Ancient and Contemporary Hybridization Amongst Wood Warblers <u>Toews DP</u> , Taylor SA, Streby H, Kramer G, Brennan C, Jones A, Lovette IJ
5:15 pm	Evaluating Bird Feeders as Tools to Connect People with Nature, and Challenges Associated with Middle School Interventions Hammond RL, Theimer		*Effects of Habitat Type on Provisioning Florida Burrowing Owl Space Use and Movements <u>Rose EH</u> , Boughton RK	Panel Discussion <u>Dayer A</u>	Bill Size Evolution in Response to Human-mediated Ecological Change in a Tidal Marsh Songbird Benham PM, Bowie RC	Assessing Assortative Mating in Hybrid Zones <u>Scordato ES</u>



# AVIAN BIOLOGY AND THE ANNUAL LIFE CYCLE: SHOREBIRDS AS MODELS TO UNDERSTAND DYNAMIC BOUNDARIES

ORGANIZERS: KIRSTY E. GURNEY (ENVIRONMENT & CLIMATE CHANGE CANADA), DAN R. RUTHRAUFF (UNITED STATES GEOLOGICAL SURVEY)

### **AFTERNOON - WEDNESDAY (S24, S36)**

Throughout their annual life cycles, migratory birds use multiple habitats that can be distributed across broad spatial scales and encompass a diverse range of environmental conditions. Increasingly, evidence is showing that these conditions, as experienced during one stage of the annual cycle, can influence the health and / or survival of individuals in subsequent stages. Difficulties in tracking migratory birds over the annual cycle and lack of information on migratory connectivity, however, make it challenging to detect and understand these interactions (i.e. carry-over effects). These remain critical needs for informed conservation planning, given the potential influence of carry-over effects on population dynamics through changes in demographic rates.

For shorebirds (Charadriiformes), the need for information on migratory connectivity and tests for possible carry-over effects are particularly pressing. Current evidence suggests that populations of many shorebird species are declining, and the status of several species that nest in North America have been designated as of "conservation concern" by the US Shorebird Conservation Partnership: of 57 taxa (species / subspecies) evaluated by this group, seven taxa are listed under the Endangered Species Act, and an additional nine North American populations meet Watch List criteria (i.e. greatest or high conservation concern). Whereas habitat loss and degradation are likely affecting shorebird populations on wintering grounds, changes in breeding and migratory habitats, food resources, and predation risk may also have an important influence. Given the long-distance migrations and dynamic boundaries of many North American shorebird species and their strong potential for carry-over effects across different phases of the annual life cycle, this taxa exemplifies the concept of 'birds on the edge'.

The objectives of this session will be to assemble speakers who (i) will describe research that uses a life-cycle approach to study the biology and migratory connectivity of shorebirds, and (ii) will discuss the methods that are currently available for tracking shorebirds throughout their annual life cycles, including key assumptions and limitations of the technology. We anticipate that presentations will encourage an ongoing dialogue of the challenges and future directions for the study of migratory connectivity and carry-over effects in shorebirds and other species.

## WEDNESDAY EARLY PROFESSIONALS MINI-TALK SYMPOSIUM SCHEDULE (M1)

Opening	Sara Kaiser & Nicholas Mason (EPC)	Overview of symposium goals
5:30 pm	Allison Shultz	Pathogen-mediated genotypes to colorful phenotypes: integrating research across organizational levels to study biodiversity
5:35 pm	Michael Akresh	Determining the limiting factors of declining bird populations
5:40 pm	Jessica Oswald	Using paleontology and genomics to understand the diversity of birds
5:45 pm	Anand Krishnan	How acoustics helps understand tropical bird communication and community organization
5:50 pm	Maggie MacPherson	A Bayesian network approach for improved seasonal distribution models of long-distance migratory passerines
5:55 pm	<b>Douglas Barron</b>	Developing an avian ecology lab at an undergraduate university
6:00 pm	Hernan Vazquez- Miranda	Understanding avian rEVOLUTIONary vision through birds' eyes (with 'omics help)
6:05 pm	Patrick Ruhl	Identifying and investigating knowledge gaps in the Worm-eating Warbler full annual cycle to inform habitat management and conservation decisions
6:10 pm	Anusha Shankar	Bringing field physiology to the tropics
6:15 pm	Ryan Terrill	Evolution and ecological interactions of molt strategies in birds
6:20 pm	Emma Greig & Scott Taylor (EPC)	Q&A panel