## Wednesday, Morning Session \*indicates student presenters eligible for AOS presentation award

Room	Atwood Hall	Cook Theatre	Summit 1	Summit 2	Summit 3	Summit 4
Session	Symposium Understanding and Addressing the Collapse of the North American Avifauna (Marra)	Symposium Breaking Through Biases: What We've Learned from Female Birds (Odom)	Phylogenetics & Phylogeography	Songs & Vocalizations	Biogeography	Birds & Agriculture
1030	Evidence for Massive Decline in the North American Avifauna  Rosenberg KV, Dokter AM, Blancher PJ, Sauer JR, Smith AC, Smith PA, Stanton JC, Panjabi AO, Helft L, Parr M	Extra-Pair Copulations in Passerines: Why Females Matter Stutchbury BJ	*Evolution of Migration in the Nightingale-Thrushes (Turdidae: Catharus) Inferred via Morphometric and Phylogenetic Analysis Halley MR, Klicka J, Catanach TA, Weckstein JD	It's the Same Old Song: Benefits of Song Dialects in the Lapland Longspur  Montgomerie RD, Cox A, Mullie A	Climate Delineates the Northern Range Boundary of the Northern Cardinal Miller CR, Porter WP, Fitzpatrick MJ, Zuckerberg B	*GPS-Tracking Reveals Selection for Prairie Ponds by Tree Swallows in Cropland-Dominated Landscapes Elgin AS, Morrissey CA, Clark RG
1045	Decline and Survival of North America's Migratory Avifauna Determined by a Weather Radar Network  Dokter AM	Female Bird Songs The Other Half of the Conversation  Benedict Ln, Hathcock T, Najar N, Mitchell L, Cavar J, Logue D	Multiple Hybrid Zones in a Widespread Amazonian Bird Reveal Different Evolutionary Processes Moncrieff AE, Brumfield RT	Behavioral Landscape of 'Oma'o Vocalizations in a Naturally Fragmented Habitat Netoskie EC, Paxton KL, Paxton EH, Hart PJ	Montane Biogeography and the Evolution of Disjunct Ranges: a Case Study in the Diglossa Flowerpiercers Hiller AE, Brumfield RT, Faircloth BC	*Impact of Wildfires on Barn Owl Habitat Selection in a Vineyard Agroecosystem in Napa Valley Huysman AE, Johnson M
1100	Grassland Bird Declines: How Can We Stop the Downward Spiral?  Panjabi AO, Correll M, Strasser EH, Bernath-Plaisted J, Beh A, VerCauteren TL	Female Preferences Shape Elaborate Male Displays and Social Skills on the Lek Patricelli GL	Fine-Scale Genetic Population Structure of an Understory Bird (Thamnophilus Atrinucha) Across the Panama Canal Zone  Maddox JD, Kelley JP, Tarwater CE	*Behavioral and Spectrographic Analysis of Chatter: A Novel Vocalization in Northern Mockingbirds Brown BB, Stracey C	Diversification and Biogeography in an Indo-Pacific Bird Radiation (Pachycephalidae) Brady SS, Joseph L, Moyle RG, Andersen MJ	Does a "Sonic Net" Protect Sunflower from Damage by Blackbirds?  Werrell AK, Klug PE, Swaddle JP
1115	Volunteer-Led Surveys Document 40-Years of Shorebird Declines Across North America  Smith PA, Smith AC, Brown S, Friis C, Paquet J, Winn B, MacDonald A	Habitat Saturation Drives the Frequency of a Rare Behavior in the Females of a Social Bird Barve SS, Koenig WD, Haydock J, Walters EL	Comparative Phylogeography of Amazonian Riverine Island Birds  Johnson O, Brumfield RT	*Repertoire Size and Individual Variation in Vocalizations of 'ōma'o (Myadestes Obscurus) an Endemic Hawaiian Thrush  Tysall EE, Paxton KL, Netoskie E, Paxton E, Hart PJ	*Patterns and Mechanisms of Heterogeneous Breeding Distribution Shifts in North American Migratory Birds McCaslin HM, Heath JA	Quantifying Multiple-Benefits of Bird Conservation in the Agricultural Mosaic of California's Central Valley Seavy NE, Humple D
1130	Conservation of Boreal Birds: Status, Trends, and Data Gaps  Toms JD, Solymos P, Stralberg D, Barker NK, Micheletti T, Leston L, Hache S, Cumming S, Song S, Schmiegelow F	Migratory Landbird Conservation Compromised by Failure to Address Sexual Segregation  Bennett RE, Rodewald AD, Rosenberg KV	Contrasting Drivers of Diversity and Turnover in Andean Birds and Their Parasites  McNew SM, Barrow LN, Bates JM, DuBay SG, Galen SC, Hackett SJ, Johnson AB, Skeen H, Valqui T, Jason WD, Williamson JL, Witt CC	Deep Convolutional Neural Network to Detect Forest Owls of the Pacific Northwest  Lesmeister DB, Ruff ZJ, Sullivan CM	Is Specialism an Evolutionary Dead-End? Estimates of Transition Rates Between Generalism and Specialism in a New World Clade Conway M, Olsen BJ	Estimating the Effect of Prairie Strips on Grassland Birds Giese JC, Schulte LA, Klaver RW
1145	Songbirds of the Sagebrush Sea: Declines and Mechanisms Chalfoun AD, Sanders L, Scherr T, Hethcoat M	Elaborate Female Coloration and Song: Diverse Perspectives Lead to a More Comprehensive Understanding of Avian Biology  Omland KE, Rose EM, Haines CD	Resolving Difficult Nodes in Manakin Phylogeny Using Low-Coverage Whole Genome Sequencing  Braun EL, White ND, Kimball RT, Moncrieff AE, Zhao M, Kurtis SM, Brumfield RT	*Sex and Species Divergence in Vocalizations Between Role-Reversed Shorebirds, Jacana Spinosa and Jacana Jacana Buck EJ, Lipshutz SE, Derryberry EP	Cryptic Bird Species on a Remote Archipelago of the Pacific Ocean Cibois A, Thibault J, Friedman NR, Omland KE, Desutter-Grandcolas L, Robillard T, Pasquet E	Comparing Land-Sparing and Land-Sharing Conservation Approaches in a Coffee-Growing Region with High Avian Biodiversity Valente JJ, Ryder TB, Rice RA, G'omez C, Bayly NJ, Sillett TS, Marra PP

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Room	Summit 5	Summit 6	Summit 7/8	Summit 9/10	Summit 11/12	Summit 13/14
Session	Symposium Assessing the Cumulative Effects of Resource Development on Migratory Birds in Northern Boreal Regions (Mahon)	Sexual Selection	Conservation & Population Dynamics	Movements & Dispersal	Habitat Relationships	Population Biology
1030	Soaring to New Heights: Analytical Approaches for Cumulative Effects Assessment for Migratory Birds  Pelech SA, Mahon CL, Lowry N	Can Male Zebra Finches Perceive Their Own Quality and Adjust Mate Choice Accordingly? Martin JO, Chien E, Henson KE, Burley NT	*Cutting Out Without Losing Out: Subsampling Soundscapes for Long-Term Avian Biodiversity Monitoring Eiseman JP, Vonhof MJ, Gill SA	*Effects of Source Population and Release Strategy on Reintroduced Scaled Quail Mortality and Dispersal  Ruzicka RE, Doherty, Jr PF, Rollins D	*Shrub Encroachment Alters Distributions and Demography of Breeding Birds in Semiarid Grasslands  Andersen EM, Steidl RJ	*Growth of Two Atlantic Coast Piping Plover Populations Weithman CE, Robinson SG, Hunt KL, Altman J, Bellman HA, DeRose-Wilson AL, Walker KM, Fraser JD, Karpanty SM, Catlin DH
1045	Understanding Cumulative Effects for Land Management in Alberta: Models and Applications  Solymos P, Toms JD, Bayne EM	Experimentally Increasing Perceived Competition for Nests Reduces Female Reproductive Performance and Extra-Pair Offspring Murphy TG, Korsten P, Birker M, Marfull R, Komdeur J	Spatial Models to Facilitate Broad-Scale Conservation of Breeding Habitat for Secretive Marsh Birds Stevens BS, Conway CJ	*A Burning Question: Does Personality Predict How Pre-Breeding Florida Scrub-Jays Explore Habitat in a Fire History Mosaic?  Sherer DL, Bohlen PJ, Bowman JR	*Are We Sure About Shearing? Evaluating the Impact of a Widely Used but Poorly Assessed Habitat Management Practice  Buckardt Thomas AC, Roth AM, McNeil Jr DJ, Johnson K, Rodewald AD, Larkin JL	Population Demographics, Breeding Ecology, and Responses to Grazing of Montana Sagebrush Steppe Songbirds  Dreitz VJ, Ruth K, Berkeley L
1100	Additive and Interactive Cumulative Effects on Boreal Landbirds: Winners and Losers in a Multi-Stressor Landscape Mahon CL, Holloway GL, Bayne EM, Toms JD	Male Red Carotenoid Coloration Indicates Mitochondrial Performance in the House Finch Hood WR, Hill GE, Kavazis AN, Zhang Y	A Bayesian Network Approach for Improved Seasonal Distribution Models of Long-Distance Migratory Passerines Using Tyrannus Flycatchers  MacPherson MP	Long-Term Dynamics of Breeding Dispersal Distances by Adult Northern Spotted Owls Jenkins JM, Lesmeister D, Forsman E, Dugger K	Restoration Success: Avian Richness and Abundance Among 1,000 Acres of Restored San Francisco Bay Tidal Marsh Habitat, Based on Point Count Surveys that Employ Citizen Scientists  Edelstein D	Population Genomics of Hawaiian House Finches (Haemorhous Mexicanus): Investigating Genetic Variation of an Introduced Population Demery AC, Edwards S, Shultz AJ
1115	Community-Level Response to Cumulative Effects of Forestry and Energy Development Toms JD, Carpenter TM	Infanticide and Adoption in the Green-Rumped Parrotlet: Killing Cavities, Remorseless Rogues and Betrayed Saints Beissinger SR, Berg KS	Contrasting Long-Term Population Trends of Beach-Nesting Shorebirds Under Shared Environmental Conditions  Kwon EB, Robinson S, Weithman C, Fraser JD, Karpanty SM, Catlin DH	Does Experimental Local Extinction of a Flowering Plant Affect Hummingbird Movement Patterns?  Leimberger KG, Hadley AS, Betts MG	*Post-Fire Nest Site Selection and Survival of Black-Backed Woodpeckers Stillman AN, Siegel RB, Wilkerson RL, Johnson M, Howell CA, Tingley MW	*Using Integrated Models to Identify Ecology and Population Dynamics of a Threatened Arctic Species Dunham KD, Abebe A, Dobson SF, Koons DN, Grand JB
1130	Adverse Effects of Climate Change on Boreal Bird Communities Accentuated by Natural and Anthropogenic Disturbances  Tremblay JA, Cadieux P, Boulanger Y, Cyr D, Taylor AR, Price DT, Solymos P, Stralberg D	Within-Pair Annual and Lifetime Reproductive Success Drives the Opportunity for Sexual Selection in Black-Throated Blue Warblers  Germain RR, Hallworth MT, Sillett TS, Webster MS	*Investigation of Population Change in a Hurricane-Affected Piping Plover Population Robinson SG, Gibson D, Fraser JD, Bellman HA, DeRose-Wilson AL, Karpanty SM, Walker KM, Catlin DH	Habitat Use and Foraging Flights of Roseate Spoonbills in Florida Bay  Lago EA, Baldwin JD,  Lorenz JJ	*Identifying Critical Nesting Habitat for Ducks in Alberta's Western Boreal Forest  Dyson ME, Slattery SM, Fedy BC	Population Dynamics of a Long-Distance Migratory Passerine at the Edge of Its Range Murphy MT, Redmond LJ, Dolan AC, Cooper NW, Chutter CM, Cancellieri S
1145	Panel Discussion	Associations of the Cloacal Microbiome with Sexual Ornamentation, Condition, Sex and Habitat in Molting House Finches  Hutton P, Giraudeau M, Sepp T, McGraw KJ	Road Mortality in Barn Owls: Identifying Temporal and Spatial Hotspots in the Fraser Valley of British Columbia  Krebs EA, Hindmarch SR, Powers G	The Allometry of Movement and Connectivity of Bird Communities  Hartfelder J, Fletcher RJ, Reynolds C, Monadjem A, McCleery R	Persistence in a Changing Landscape: Recurring Bird Concentration Areas on Alaska's Arctic Coastal Plain Sullender BK, Smith MA	Using Museum Specimens to Investigate Fitness Variation Across Avian Hybrid Zones Dougherty P.J. Carling MD, Fossberg SL
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Room	Atwood Hall	Cook Theatre	Summit 1	Summit 2	Summit 3	Summit 4
Session	Symposium Understanding and Addressing the Collapse of the North American Avifauna (Marra)	Symposium Conservation and Management of Boreal Birds in a Changing Climate: What Do We Expect, What Have We Observed, and What Do We Do About It? (Stralberg)	Phylogeography	Symposium Species Limits in Birds: Integrative and Practical Considerations for Taxonomy (Winker & Rasmussen)	Climate	Breeding Biology
1400	American Seabirds: A Review of Status, Threats, and Conservation on Land and at Sea  Nevins HM, Goyert H, Keitt B, Wiedenfeld D	Model-Based Vulnerability Assessment of Boreal Birds in a Changing Climate  Bateman BL, Wu J, Wilsey C, Taylor L, LeBaron G, Langham G	Genomic Signatures of Pleistocene Dry Forest Connections in a Widespread South American Songbird Corbett EC, Bravo GA, Schunck F, Naka LN, Silveira LF, Edwards SV	Integrative Approaches to Species Delimitation in Birds Cicero C, Mason NA, Jimenez RA, Wait DR, Wang-Claypool CY, Bowie RC	Validating Climate Suitability Projections: Community Science Reveals that Birds Track Their Ecological Niche in Summer and Winter  Saunders SP, Michel NL, Bateman BL, Wilsey CB, Slavin Z, Dale K, LeBaron G, Langham GM	Can Nest Concealment in Wood Thrushes Predict Reproductive Success? Israel AM, Stutchbury BJ
1415	Waterfowl in North America: A Successful Story of Partner-Based Conservation and Regulated Harvest Brasher MG, Moorman TE	Ecological Niche Modeling and Potential Implications for Alaskan Birds Under 2 °C Warming  Wu JX, Bateman B, Wilsey CB, Taylor L, Langham G	Using Ancient DNA from Fossils to Place an Extinct Flightless Bird Genus in a Phylogenetic Context  Oswald JA, Allen JM, Folk R, Stucky B, Steadman DW, Guralnick R	Revisionist History - Towards Comparable Species Across Avian Taxonomy Bates JM, Reddy S	Climate Change Threatens a Songbird Population Through Its Impacts on Breeding  Bonnot TW, Cox WA, Thompson FR, Millspaugh  JJ	Nest Survival, Predator Assemblage, and Patterns of Predation at Veery (Catharus Fuscescens) Nests in a Mature Forest Goguen CB, Murray LD
1430	Contrasting Regional and Range-Wide Trends Inform Causes of Decline: Case Study with the Red-Cockaded Woodpecker and Associated Pineland Birds Walters JR, Rosenberg KV, Sauer JR	Detecting Shifts in the Phenology and Distribution of Bird Assemblages on the Kenai Peninsula, Alaska in a Changing Climate  Magness DR, Eskelin T	Comparative Phylogeography of Four Lowland Forest Birds Distributed Across the Dahomey Gap of West Africa  Huntley JW, Sweet P, Hibbitts T, Arame H, Adite A	Genoscapes & Species Limits - Lessons from the Last 5 Years  Ruegg KC, Smith T, Bossu C, Rajbandary J	*Contrasting Demographic Responses of Eastern Bluebird Populations to Climatic Variability  Harrod SE, Rolland V	*Viewing Habitat Through Another Lens: Bird Nest-Site Selection and Productivity Across the Beach Thermal Landscape Schaale LE, Baxley JB, Pricope NG, Danner RM
1445	State of Population Trend Monitoring for North American Birds Michel NL, Smith AC, Hudson MR, Sauer J	Present and Future Distribution and Abundance of Aerial Insectivores in the Northwest Using Climate and Landcover  Stehelin TE, Schmiegelow FK	*Comparative Genomics Reveal Modes of Differentiation in North American Warm Desert Birds  Provost KL, Shue S, Forcellati M, Smith BT	The Utility and Significance of Population Genomic Data in Assessing Avian Species Limits Sorenson MD	Climate Warming Reduces Population Growth and Recruitment Rates Over 30 Years in an Afrotropical Bird Community  Neate-Clegg MH, Stanley TR, Sekercioglu CH, Newmark WD	*Intraspecific Variation and Adaptive Significance of a Little-Known Life-History Trait, Laying Interval Length, Along a Latitudinal Gradient Lundblad CG, Conway CJ
1500	Are Declines in Migratory Bird Species More Closely Associated with Breeding or Wintering Locations? Sauer JR, Rosenberg KV, Marra PP, Link WA	Conservation of Kirtland's Warbler in a Changing World Ribic CA, Brown DJ, Donner DM, Bocetti CI	*The Genetics of Adaptation and Diversification of the "Great Speciators" - The Wallacean Zosterops  Bloch LM, Irham M, Haryoko T, Claypool-Wang C, McGuire JA, Rowe K, Bowie RC	The Past and Future of 'benchmark' Systems for Delimiting Bird Species  Tobias JA	Climate, Storm-Petrels, and Chick Growth Mauck RA, Huntington CE, Haussmann MF, Dearborn DC, Ricklefs RE	Macroevolutionary Dynamics of Egg Colour and Patterning Sheard CE, Street SE, Troisi C, Clark A, Healy SD, Laland KN
1515	Addressing Population Declines with Full Annual Cycle Models: Current Advances and Data Needs Joos CJ, Rushing CS	The Influence of Climatic Dipoles on Irruption Dynamics in a Warming World  Zuckerberg B, Strong C, LaMontagne J	Testing the Causes of Speciation with Gene Flow in a Neotropical Avian Species Pair (Pachyramphus Aglaiae)  Musher LJ, Galante P, Blair M, Huntley J, Thom G	Endless Forms Less Beautiful: Relevance of Morphological Analyses to Integrative Taxonomy of Asian Prinia Species Complexes  Rasmussen PC, Alstrom P, Olsson U	Using Big Data to Assess the Vulnerability of North American Birds to Climate Change Bateman BL, Wilsey C, Taylor L, Wu J, Langham G	*To Kill a Mockingbird: The Combined Effects of Two Radically Different Parasites Herman JM, Fiorini VD, Crudele I, Reboreda JC, Pladas SA, Bush SE, Clayton DH
			LUNCH BRE	AK		

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Room	Summit 5	Summit 6	Summit 7/8	Summit 9/10	Summit 11/12	Summit 13/14
Session	Symposium Biodiversity Mediated Trade-offs in Agroecosystems: When Do Birds Help or Hurt Farmers? (Pejchar)	Evolution	Conservation	Migration & Stopover	Symposium Social Dynamics in Interspecific Interactions (Shizuka)	Symposium Avian Biology and the Annual Life Cycle: Shorebirds as Models to Understand Dynamic Boundaries (Gurney)
1400	Net Effects of Birds in Agroecosystems Pejchar L, Clough Y, Ekroos J, Nicholas K, Olsson O, Ram D, Tschumi M, Smith H	*A Tale of Two Transects: Sexual Selection Across a Hummingbird Hybrid Zone  Myers BM, Rankin DT, Brelsford A, Burns KJ, Clark CJ	*Cross-Scale Interaction Effects of Climate and Forest Patch Size on the Persistence of Forest-Interior Birds Chaudhary A, Gutzwiller KJ	*A Range-Wide Geolocator Project Fills Critical Knowledge Gaps of Our Understanding of the Full Annual Cycle of Cerulean Warblers  Raybuck DW, Buehler DA, Boves TJ, L LJ, Stoleson SH, Bulluck LP, George GA, Kearns LJ, Slankard KG, Petzinger S, Cox JJ, Mylecraine KA	Heterospecific Sociality: How Cooperation, Competition, and Communication Across Species Shape Avian Behavior  Johnson AE	Can Stable Isotopes Help Identify Links Between Wintering, Migration, and Breeding Areas of Semipalmated Sandpiper? Gurney KE, Mizrahi DS, Alisauskas RT
1415	Strategies for Navigating Trade-Offs Between Avian-Mediated Services and Disservices Affecting Food Production and Safety Kennedy CM, Latimer CE, Smith OM, Taylor JM, Owen JP, Rankin E, Snyder WE	Cultural Evolution Promotes Rapid Character Displacement in Sympatric Crossbills Porter CK, Benkman CW	Extinction Debt and Species Credit in Tropical Forest Bird Communities: Conservation Implications for Two Biodiversity Hotspots	Phenology of the Purple Martin Annual Cycle Kelly JF, Horton K, Stepanian P	Learning to Join the Information Web	Migratory Dynamics of Beringian Dunlin on the East Asian-Australasian Flyway  Lanctot RB, Lagasse BJ, Yezerinac S, Brown S, Kendall S, Latty C, Liebezeit J, McGuire RL, Robards M, Saalfeld ST, Slaght J, Wunder M
1430	Trade-Offs Between Ecosystem Services and Disservices Provided by Birds Covary with Agricultural Intensification in the US  Latimer CE, Smith OM, Owen J, Snyder W, Kennedy CM	The Relative Roles of Natural Selection and Sexual Selection in Speciation in the Tanagers Price-Waldman RM, Demery AJ, Mason NA, Shultz AJ, Title PO, Burns KJ	*Experimental Forest Fragmentation Alters Interaction Networks of Amazonian Mixed-Species Flocks Rutt CL, Mokross K, Stouffer PC	Conservation Implications of a Migratory Network for the Common Nighthawk  Knight EC, Harrison A, Scarpignato AL, Van Wilgenburg SL, Bayne EM, Marra PP	Magrath RD, Ratnayake C, Radford A, McLachlan J, Igic B, Potvin D	Movement Patterns of Arctic-Breeding Shorebirds During Post-Breeding and Southbound Migration  Saalfeld ST, Lanctot RB, Brown S, Lamarre J, McGuire R, Ruthrauff D, Elliot K, Latty C
1445	*Understanding Food Safety Risks Associated with Wild Birds: a Meta-Analysis and Conceptual Framework Smith OM, Owen JP	Pleistocene Glacial Cycles and the Relative Ease of Speciation with Periodic Gene Flow Linck EB, Battey C	Forest Management, Habitat Conservation and Monitoring Northern Goshawks in Southeast Alaska Titus K	Conservation in the Context of Migratory Connectivity: A Golden-Winged Warbler Case Study Roth AM, Buckardt Thomas A	Sister, Sister: Song Recognition and the Role of Early Experience in Sympatric Zonotrichia Hudson EJ, Shizuka D	Migratory Connectivity of a Declining Boreal Shorebird, the Lesser Yellowlegs Christie KS, McDuffie L, Johnson JA, Taylor A
1500	Managing Wild Birds for Strawberry Production, Pest Control, and Food Safety Outcomes in the California Central Coast Olimpi EM, Garcia K, Gonthier D, Karp DS	Early Stage of the Speciation Process: Two Coloration Genes Underlie Species Differences in a Pair of Capuchino Seedeaters (Sporophila)"  Estalles MC, Campagna L, Rodriguez Cajarville MJ, Tubaro PL, Lovette I, Lijtmaer DA	*Grassland Bird Response to Spring Cover Crops in an Agricultural Landscape Godar AJ, Annis A, Haukos D, Prendergast J	Migratory Pathways, Stopover Locations, and Wintering Destinations of Flammulated Owls Breeding in Colorado Linkhart BD, Yanco SW, Fox JW	Identifying Functional Roles in Mixed-Species Groups Vander Meiden LN, Shizuka D	Stopover Ecology of Semipalmated Sandpipers in Maritime Canada Hamilton DJ, Bliss S, Geldart E, Linhart R, Neima SG, Paquet J, Gratto-Trevor CL
1515	Birds in Fruit Production Systems: Contexts, Outcomes, Costs, and Benefits Lindell CA	Signal Evolution and Morphological Complexity in Hummingbirds (Aves: Trochilidae) Eliason CM, Maia R, Parra JL, Shawkey MD	Using Remote Sensing of Avian Habitat to Direct Bird Conservation Bonfield SB, Schimel D, Stavros N, Questad E, Schneider F, Ferraz A	Full Annual Cycle Ecology of Migratory Birds in the Lower Great Lakes Tonra CM	Loss of a Keystone Informant Disrupts Information Cascades among Ant-Following Birds in a Tropical Forest Fragment  Pollock HS, Martinez AE, Kelley JP, Touchton JM, Tarwater CE	How Can Habitat Degradation Push Extreme Migrants Over the Edge?  Chan Y, Tibbitts TL, Hassell CJ, Peng H, Piersma T
			COFFEE BRI	EAK		

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Session	Symposium Understanding and Addressing the Collapse of the North American Avifauna (Marra)	Symposium Conservation and Management of Boreal Birds in a Changing Climate: What Do We Expect, What Have We Observed, and What Do We Do About It? (Stralberg)	Phylogenetics	Symposium Species Limits in Birds: Integrative and Practical Considerations for Taxonomy (Winker & Rasmussen)	Climate	Abundance, Occupancy, Trends
1600	Pesticide Exposure and Effects on Migratory Songbirds: Past and Current Threats Morrissey CA, Eng M, Stutchbury B, Stanton R, Clark R	Forecasting Avian Responses to Climate-Mediated Increases in Fire Activity Across the Northwestern Boreal Forest  Matsuoka SM, S'olymos P, Breen AL, Handel CM, Rupp TS, Mahon CL, Kurkowski TA	Genomic and Phenotypic Divergence in Red Warblers (Cardellina Rubra) Tsai WL, White E, Maley JM, McCormack JE	Australo-Papuan Perspectives on Unravelling Tangled Knots on Branches of Species Trees?  Joseph LG	*Characterizing a Century of Species Losses in an Isolated Tropical Forest Fragment Curtis JR, Robinson WD, Rompré G, McCune B	EBird Status and Trends: Species Distributions and Population Trends with Citizen Science Data Fink D, Auer T, Johnston A, Strimas-Mackey M, Iliff M, Robinson O, Petersen B, Kelling S
1615	Determining the Role of Human-Caused Bird Mortality in the Collapse of the North American Avifauna Loss SR	Simulating the Effects of Climate on Fire Regime & Vegetation: Implications for Woodland Caribou & Boreal Landbird Communities  Hache SA, Micheletti T, Stralberg D, Cumming S, McIntire E, Tremblay J, Leblond M, Marchal J, Raymundo Sanchez A, van Telgen M	A Phylogenomic Tree of Screech-Owls: Elucidating the Evolution of Color Polymorphism and Its Ecological Correlates Kurtis SM, Owens HL, Oswald JA, Hosner PA, Guralnick R, Allen J, Ku M, Braun EL, Kimball RT	Coalescent-Based Species Delimitation in Avian Taxonomy: History, Promise, and Pitfalls  Mason NA, Fletcher NK, Gill B, Funk C, Zamudio K	Dominance in Hummingbird Communities: An Alternative Way to Visually Represent it Ortiz-Pulido R	Combining BBS and PIF Population Data to Estimate Recent Changes in Illinois' Total Bird Population  Herkert JR
1630	Limitations to Predicting the Future of Climate-Driven Bird Declines  Tingley MW	Conservation Lessons from the Study of Boreal Birds at Their Southern Periphery Ralston J, DeLuca WV	Phylogenomics of the Parrots of the World Smith BT, Brumfield R, Ferreira M, Mauck W, Merwin J, Wright T, Joseph L	The Genomic Revolution and Species Delimitation in Birds: Gene Flow Matters, but What About Other Evolutionary Forces?  Cadena C	Plague Management on Prairie Dog Colonies Maintains Habitat for Grassland Passerines and Raptors Conrey RY, Tripp DW, Youngberg EN, Panjabi AO	Results from a Decade of Banding Yellow Rails in Oklahoma and Texas Butler CJ
1645	Migratory Bird Policies: Changes, Threats and Opportunities for Action Senner SE	A Synthesis of Climate Change Impacts on Boreal Bird Communities in Managed Landscapes of Canada Tremblay JA, Cadieux P, Boulanger Y, Cyr D, Taylor AR, Price DT	Phylogenomics of Pigeons and Doves from Whole Genome Sequencing Johnson KP, Boyd BM, Nguyen N, Allen JM, Steadman DW, Waterhouse RM, Sweet AD, Clayton DH, Bush SE, Shapiro MD	An Incomplete Overview of Determining Avian Species Limits  Winker KS	*Behavioral Niche Partitioning Reexamined: Do Behavioral Foraging Differences Predict Dietary Differences?  Kent CM, Sherry TW	Population Trends and Habitat Associations of Conservation Priority Bird Species in Iowa Vanausdall RA, Dinsmore SJ, Kinkead KE, Frese PW
1700	Sorting Through the Ashes: a Synthesis, Roadmap and Discussion for the Conservation of the Birds of North America Marra PP, Rosenberg K	Conservation Planning for Boreal Birds in a Changing Climate: A Framework for Action Stralberg D, Berteaux D, Drever M, Drever R, Naujokaitis-Lewis I, Schmiegelow F, Tremblay J	Wild Turkey Speciation Seen Through Full Genomes Vazquez-Miranda H, Zink RM	Phylogenetic Relationships Within the Sharp-Shinned Hawk Complex with a Focus on Caribbean Populations  Catanach TA, Johnson JA, Thorstrom R, Halley MR, Palhano S, Weckstein JD	Functional Changes in Assemblages of Avian Frugivores Following Extinction and Invasion Case SB, Tarwater CE	Do Drones Bug Songbirds? Wilson AM, Boyle KS, Gilmore JL, Kiefer C
1715	Panel Discussion	Panel Discussion	Molecular Phylogeny of Whistling Ducks (Dendrocygninae) Harshman J	Phylogenomic Analysis of Species Limits and Hybridization in the Red- Bellied/Golden-Fronted Woodpecker Clade (Melanerpes) Miller MJ, Lavretsky P	*Shifts in Avian Community Composition Across a Human-Modified Landscape in Borneo, Malaysia  Hightower JN, Yusah KM, Fletcher RJ	Risk Assessment of Great Lakes Piping Plovers Using EABM: An R Package to Run Environment Agent-Based Models Edwards BP, Jacobs S, Gillis D
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Session	Symposium Biodiversity Mediated Trade-offs in Agroecosystems: When Do Birds Help or Hurt Farmers? (Pejchar)	Life History & Behavior	Conservation	Migration & Stopover	Symposium Social Dynamics in Interspecific Interactions (Shizuka)	Symposium Avian Biology and the Annual Life Cycle: Shorebirds as Models to Understand Dynamic Boundaries (Gurney)
1600	Predation-Mediated Ecosystem Services and Disservices in Agricultural Landscapes  Smith HG, Tschumi M, Birkhofer K, Ekroos J, Hjort C	*Evolution of Polygyny in Weaverbirds (Family Ploceidae) De Silva TN, Fernando SW, Peterson A	*Fear of Predators Influences Nestling Condition Across a Suburbanization Gradient  Grade AM, Warren PS, Lerman SB	Satellite Tracking a Wide-Ranging Endangered Vulture Species to Target Conservation Actions in the Middle East and East Africa Buechley ER, McGrady MJ, Coban E, Sekercioglu CH		Connectivity and Staging Site Pollution Effects in a Long-Distance Migratory Shorebird  Morrissey CA, Bianchini K, McKellar A, Newstead D
1615	Insectivorous Birds Foraging in Temperate and Tropical Agricultural Lands  Jedlicka JA	*Patterns and Causes of Tropical Montane Life Histories: An Observational and Experimental Study in Malaysian Borneo Mitchell AE, Martin TE	*Testing the Proposed IUCN Green List Categories and Criteria Gupta G, McGowan P, Dunn J, Sanderson R	Synthesis of Migration Ecology in the Gulf of Mexico Guides Species Conservation  Deppe JL, Benson TJ, Bolus R, Buler J, Celis Murillo A, Diehl R, Feldman R, Knight E, Langham G, Mehlman D, Michel N, Moore F	Effects of Non-Breeding Foraging on Mixed-Species Flocking in Florida Jones HH, Walters MJ, Robinson SK	*Traveling as a Newbie: Migratory Strategies Linked to Survivorship in Juvenile Shorebirds in Peru  Tavera EA, Lank DB, Drever MC, Gutierrez-Ruiz V
1630	Vertebrate Control from Raptors Motivates Farmers to Install Nest Boxes, but is Secondary Poisoning a Concern? Martinico BL, Kross SM, Hull JM, Bourbour RP, Phillips EM, Hiroyasu E	*Quantifying Trade-Offs in Migration and Reproduction in Long-Distance Migratory Birds of Contrasting Life History  Cunningham SA, Schafer TL, Wikle CK, Ballard BM, VonBank JA, Weegman MD	Saving the Red Siskin (Spinus Cucullatus): Managing New Flock Member Introductions in Captivity Hill SK	Messy Eaters: DNA on Dirty Talons and Beaks Reveal What a Migrating Raptor Eats Bourbour RP, Hull JM	Fighting Over Food Unites the Birds of North America in a Continental Dominance Hierarchy Miller ET, Bonter DN, Eldermire C, Freeman BG, Greig EI, Harmon LJ, Lisle C, Hochachka WM	Within-Individual Advancement in Bar-Tailed Godwit Departure from New Zealand Does Not Lead to Earlier Arrival in Alaska  Conklin JR, Lisovski S, Battley PF
1645	Foraging Selectivity of Insectivorous Birds in Kenyan Shade Coffee Systems Kammerichs-Berke D, Johnson M, Bean T	Timing is of the Essence: Later Breeding Predicts Lower Survival in American Kestrels (Falco Sparverius)  Callery KR, Smallwood JA, Eschenbauch AL, Luttmann ER, Heath JA	*Conservation of Tidal Marsh Sparrows in an Urban Setting Referencing Range Wide Nesting Occurrence  Kocek AR, Elphick CS, Hodgman TP, Kovach AI, Olsen BJ, Ruskin KJ, Shriver G, Cohen JB	Winter Ecology and Spring Migration Timing of Swainson's Thrush Using Forest and Shade Coffee Plantations in Colombia  Hobson KA, Gonzalez Prieto AM, McElaney S, Bayly N	Interspecific Aggression and the Evolution of Avian Mimicry in Woodpeckers  Leighton GM, Miller ET, Freeman BG, Lees AC, Ligon RA	Declines in Eastern Canada Piping Plovers: Are Overwintering Grounds the Key to Conservation?  Gratto-Trevor CL, Rock J, Shaffer F
1700	Panel Discussion	*Loggers in Artificial Eggs Reveal Scarlet Macaw Incubation in Natural and Artificial Nests Woodman CJ	Integrating Genetic, Population Monitoring, and Climate Data to Inform Conservation of a Declining Migratory Bird  Saracco JF, Ruegg KC, Harrigan RJ, Taylor CM, Rubenstein M	Population-Level Importance and Migratory Connectivity of a Shorebird Staging Site in the Midcontinental Flyway  Howell JE, McKellar AE, Espie RH, Bianchini K, Morrissey CA	Social Dominance Hierarchies among	Linking Demographic Rates to Population Trends in Six Species of Arctic-Breeding Shorebirds  Weiser EL, Sandercock BK, Lanctot RB, Brown SC, Arctic Shorebird Demographics Network NA
1715		Application of a Novel Nest Density Estimator: An Example Using Sagebrush-Steppe Songbirds  Reintsma KM, Berkeley LI, Dreitz VJ	Response of a Southern California Riparian Bird Community to Habitat Destruction by the Invasive Kuroshio Shot Hole Borer  Kus BE	Idiosyncratic Changes in Spring Arrival Dates of Pacific Northwest Migratory Birds Robinson WD, Partipilo C, Hallman TA, Fairchild K, Fairchild J	Species and Their Consequences for Behaviour, Ecology and Evolution Martin PR	Environmental Drivers of Annual Survival and Site Fidelity of Lekking Great Snipe in Norway Sandercock BK, Saether SA, Kalas JA
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### Thursday, Moraing Session \*indicates student presenters eligible for AOS presentation award

Atwood Hall	om	Cook Theatre	Summit 1	Summit 2	Summit 3	Summit 4
Molecular Ecology	sion	Behavior	Symposium Migratory Connectivity of Alaskan Birds (Harrison)	Lightning Talks	Biogeography	Climate
Variation in the icrobiome of Kirtland's Varblers Between Their Vintering and Breeding Areas Skeen HR, Cooper NW, Hackett SJ, Bates JM, Marra PP	330	Social Network Metrics Predict Future Social Status in Male Lance-Tailed Manakins Beckman AK, Vanderbilt CC, DuVal EH	One State, Global Connections: Insights from 100 Years of Bird Banding in Alaska Scarpignato AL, Harrison A, Marra PP	Mexican Hummingbird  Nesting Nunez-Rosas LE et al.  Individual Variation in Suboscine Vocalizations Tagestad IT et al.  Social Polygyny in Eastern Bluebird King KM et al.	Modeling the Implications of Future Bioenergy Scenarios on Bird Diversity and Abundance in the Northern Great Plains  Baltensperger AP, Goljani-Goljani-Amirkhiz R, Dixon M, Swanson D	
admixture Mapping the enetic Basis of Species Differences in Avian Hybrid Zones elsford AT, Nwankwo E, Myers B, Clark CJ, Kirschel A	145	Effects of the Social Environment on Cloacal Microbiome Diversity  Houtz JL, Taff CC, Zimmer C, Vitousek MN	Revealing the Migratory Path and Wintering Areas of Olive-Sided Flycatchers that Breed in Alaska  Hagelin JC, Johnson JA, Hallworth MT	Nest Defense in Eastern Bluebirds Gillespie LM et al.  Cross-species Auditory Stimuli and Responses Crook-Hill JR et al.  Coloration Mechanisms in Painted Bunting Justyn NM et al.	Extraordinary Plumage Polymorphism in the Variable Antshrike (Thamnophilus Caerulescens, Thamnophilidae) is Consistent with Gloger's Rule  Marcondes RS, Brumfield RT	Understanding the Effects of Nest Site Temperature on Songbird Reproductive Fitness and Parental Care Scherr TM, Chalfoun AD
opulation Genetics and ylogeography of Merlin Falco Columbarius) in North America Martinico BL, Sage GK, Gravley MC, Talbot SL, Haak BA, Hull JM	00	Differences in Foraging Strategies among Common Loons Overwintering on a Large Freshwater Reservoir in Northwest South Carolina Mager JN, Paruk JD, Wade B	Connectivity of Pre-Adult, Non-Territorial Migratory Golden Eagles During the Nesting Season in Alaska McIntyre CL, Lewis SB, Katzner TE, Miller TA, Lanzone M, Collopy MW, Douglas DC	Molt Dynamics of Eiders Ulman SE et al.  Bill Divergence and Speciation in New World Jays Scott BF et al.  Melanistic Pathways in Harlan's Hawk Barry JL et al.	Natural Selection on Body Size During Range Expansion in Red-Bellied Woodpeckers Ralston J, Mayette-Draper E, Hamilton S, Kirchman JJ	Extreme Weather Lengthens Incubation Periods and Lowers Productivity for a Sagebrush-Obligate Songbird  Sanders LE, Hall LE, Chalfoun AD
symmetric Gene Flow in Understory Fijian Bird Allenhaal EF, Mapel XM, Andersen MJ	15	Does Object Neophobia Predict Exploratory Behavior in a Free-Living Wild Bird?  Tringali A, Prussing S, Sherer D, Windsor R, Bowman R	Contrasting Patterns of Migratory Connectivity in Two Species of Alaska-Breeding Shorebirds  Tibbitts TL, Gill, Jr R, Ruthrauff D, Warnock N, Harwood C, Harrison A, Hallworth M, Douglas D	Red-crowned x Lilac-crowned Hybridization Maley JM et al.  Where did Cuban Bobwhites Come From? Salter JF et al.  Phylogeny and Evolution of the Gallopheasants Hosner PA et al.	Modelling the Niche in Present and Past Climatic Scenarios for the Great Tit Machado-Stredel FJ, Song G, Zhang R, Alstr"om P, Qu Y, Qiao H, Mays H, Ericson PG, Fjelds a J, Peterson AT, Chinese Academy of Sciences NAL	
Des Range Expansion or Ongoing Dispersal Explain Apparent ranmixia in Bachman's Sparrow? a Temporal Study Using Museum DNA ttlecowski AE, Faircloth BC, Brown JM, Cox JA, ucker JW, Carpenter JP, Taylor SS	30	A Tale of Two Todies: Understanding How Vocalizations Mediate Behaviors in a Sympatric Zone Garrod HM, Curry R	Migration Patterns of Three Loon Species (Gavidae) Breeding in the Arctic  Schmutz JA, Uher-Koch BD, Harrison A, Mulcahy DM, Fair JS, Wright KG, DeSorbo CR	Phylogenomics of Euphoniinae Vazquez Lopez AM et al. Genetic and Phenotypic Variation in Piranga bidentata Robles Bello SM et al.	How Do Dispersal and Migration Influence Range Expansion of Birds? Pegan TM, Weeks B, Winger B	Mesoscale Winds Shape Spring Stopover Distributions of Migrating Birds Along the Gulf of Mexico  Clipp HL, Cohen EB, Smolinsky JA, Farnsworth A, Horton KG, Buler JJ
The Common Loon Genoscape Lindsay AR, Larison B, ossu C, Rajbhandary J, orenson MD, DaCosta I, Kaplan JD, Evers DC, truk J, Smith TB, Ruegg K	45	Neighbor-Stranger Discrimination in a Neotropical Suboscine Bird: Embracing Behavioral Complexity to Uncover Patterns Kelley JP, Tarwater CE	Synthesis Harrison A		The Importance of Geography and Environment for Diversification: a Case Study in the Northern Double-Collared Sunbird Cinnyris Reichenowi  Cooper JC, Maddox D, McKague K, Bates J	Intraspecific Variation in Morphological Traits of an Understory Insectivore Across a Precipitation Gradient in the Tropics Tarwater CE, Kelley P
Gindsay ossu C, orenson I, Kapla	45	AR, Larison B, Rajbhandary J, n MD, DaCosta un JD, Evers DC, Smith TB, Ruegg	enoscape  AR, Larison B, Rajbhandary J, n MD, DaCosta un JD, Evers DC, Smith TB, Ruegg  Neignbor-stranger Discrimination in a Neotropical Suboscine Bird: Embracing Behavioral Complexity to Uncover Patterns  Kelley IP Tarwater CF	AR, Larison B, Rajbhandary J, In MD, DaCosta Int JD, Evers DC, Smith TB, Ruegg K  Neignbor-Stranger Discrimination in a Neotropical Suboscine Bird: Embracing Behavioral Complexity to Uncover Patterns  Kelley JP, Tarwater CE  Neignbor-Stranger Discrimination in a Neotropical Suboscine Bird: Embracing Behavioral Complexity to Uncover Patterns  Kelley JP, Tarwater CE	enoscape  AR, Larison B, Rajbhandary J, n MD, DaCosta In JD, Evers DC, Smith TB, Ruegg  Neighbor-Stranger Discrimination in a Neotropical Suboscine Bird: Embracing Behavioral Complexity to Uncover Patterns  Kellev IP Tarwater CF	Neighbor-Stranger Discrimination in a  AR, Larison B, Rajbhandary J, MD, DaCosta Im JD, Evers DC, Smith TB, Ruegg K  Neighbor-Stranger Discrimination in a  Neotropical Suboscine Synthesis Synthesis Bird: Embracing Behavioral Complexity to Uncover Patterns  Harrison A  Cooper JC, Maddox D, McKague K, Bates J

### Thursday, Morning Session \*indicates student presenters eligible for AOS presentation award

Summit 5	Summit 6	Summit 7/8	Summit 9/10	Summit 11/12	Summit 13/14
Sexual Selection & Parental Care	Abundance, Occupancy, Trends	Habitat Relationships	Symposium Permeable Boundaries in Biological and Social Sciences: Human Dimensions in Bird Research and Conservation (Naves)	Breeding Biology	Symposium A Bright Future for Birds: Understanding the Impacts of Light Pollution on Avian Wildlife (Kernbach)
*Testing the Hotspot Hypothesis: Lesser Prairie-Chicken Lek Formation and Female Space Use Aulicky CS, Haukos D	*The Effects of Recreational Activities on Avian Occupancy in a High Latitude Tundra Ecosystem Meeker AL, Marzluff JM	Guild-Specific Effects of Intensive Forest Management on Avian Abundance Verschuyl JP, Kroll AJ, Jones J, Betts MG	Why Do Bird Conservation and	A Holistic Approach to Demographic Monitoring of Declining Grassland Songbirds Bernath-Plaisted JS, Correll MD, Panjabi AO	Circadian Rhythms, Melatonin and the Daily and Seasonal Control of Birdsong Cassone VM, Harpole CE
*Habitat- And Sex-Specific Parental Care in the Monomorphic Red-Headed Woodpecker  Walter LA, Viverette C, Bulluck LP	Juniper Expansion in the Sagebrush Ecosystem: Avian Predator Occupancy Patterns and Implications for Sage-Grouse Habitat Restoration	Influence of Reproductive Status of Greater Sage-Grouse on Habitat Selection in a Juniper Dominated Landscape Rabon JC, Coates PS, Ricca MA, Johnson TN	Conservation and Ornithology Need Social Science?  Dayer AA	Variation in Nest Survival of the Federally Threatened Streaked Horned Lark on Grasslands in the South Puget Sound Lowlands Slater GL, Wolf AL, Lynch J	Physiological and Genetic Mechanisms Underlying Organismal Response to Artificial Light at Night Alaasam VJ, Zang Y, Niu Y, Ferguson B, Pieraut S, Seymoure B, Casagrande S, Ouyang JQ
Social Versus Genetic Mating Systems: The Complex Mating System of the Lark Bunting Lyon BE, Chaine AS	*Bias in Estimated Breeding-Bird Abundance from Individual Movement Fogarty FA, Fleishman E	*Multi-Scale Approach to Evaluating Space Use in Invasive Avian Dispersers and the Implications for Seed Dispersal Wilcox RC, Tarwater CE	Building Social Science Capacity in the Bird	*Seasonal Variation in Effects of Competing Predators on Avian Nest Success Ellis KS, Larsen RT, Koons DN	Effects of Spectral Composition of Nighttime Lighting on Host Competence to West Nile Virus in a Passerine Reservoir  Kernbach ME, Cassone VM, Unnasch TR, Martin LB
Influence of Both Male and Female Attractiveness on Reproductive Success, Offspring Phenotype, and Nestling Sex Ratio Hubbard JK, Moranville GP	Distribution Update, Habitat Use and Conservation Status Assessment of the Grey-Bellied Comet (Taphrolesbia Griseiventris)  Cuadros SF	Patterns of Home Range Resource Use by the Volcano Junco, a Costa Rican Highland Endemic Besozzi EM, Patten M	Conservation Community: Nationwide Priorities and Practices  Scarl J, Barnes JC, VerCauteren T	Patterns of Nestling Growth Rates in Tidal Marsh Sparrows Mirror Colonization of Specialist Habitat Ruskin KJ, Watson VK, Olsen BJ	Multiple Reproductive Costs Due to Light Pollution: Insights from Manipulative Experiments & Continental-Scale Data Synthesis  Francis CD, Senzaki M, Ferraro DM, Barber JR
Frontline Defenses Against a Purported Mafia Brood Parasite Peer BD, Page P	Ecological Correlates to Habitat Use in the Coastal Cactus Wren Winchell CS, Doherty PF, Taylor JM	Cascading Effects of Widespread Disease-Induced Mortality of a Foundation Tree Species on Hawaiian Forest Bird Communities  Paxton KL, Hart PJ	America's Wildlife Values: How Values Lead to Challenges and Opportunities for Bird Conservation  Dietsch AM	To Burn or Not to Burn? Breeding Success of King Rails in a Fire-Managed Coastal Marsh McRae SB, Schroeder KM	*Light Pollution is Greatest Within Migration Passage Areas and is Related to Flight Altitudes of Nocturnal Migrants  Cabrera-Cruz SA, Smolinsky JA, McCarthy KP, Buler JJ
Direct Effects of Brown-Headed Cowbird (Molothrus Ater) Brood Parasitism on the Growth and Development of Grassland Songbirds Winnicki SK, Boyle WA	Sea Level Rise Impacts on Waterbird Habitat Across the Hawaiian Islands Price MR, Harmon K	Greener Pastures: Idiosyncratic Avian Responses to Early Forest Regeneration in the Maya Biosphere Reserve  Lello-Smith AM, Rodewald AD, Ruiz-Gutierrez V	Understanding Underserved Audiences to Ensure Ongoing Long-Term Citizen Science Data Collection for Project FeederWatch  Martin VY, Greig E, Bonter D	Not So Secretive Marshbirds: Using Technology to Research a Cryptic Species, the Clapper Rail Elizondo EC, Shriver WG	Seasonal Associations with Urban Light Pollution for Nocturnally Migrating Bird Populations  La Sorte FA
	*Testing the Hotspot Hypothesis: Lesser Prairie-Chicken Lek Formation and Female Space Use  Aulicky CS, Haukos D  *Habitat- And Sex-Specific Parental Care in the Monomorphic Red-Headed Woodpecker  Walter LA, Viverette C, Bulluck LP  Social Versus Genetic Mating Systems: The Complex Mating System of the Lark Bunting Lyon BE, Chaine AS  Influence of Both Male and Female Attractiveness on Reproductive Success, Offspring Phenotype, and Nestling Sex Ratio  Hubbard JK, Moranville GP  Frontline Defenses Against a Purported Mafia Brood Parasite  Peer BD, Page P  Direct Effects of Brown-Headed Cowbird (Molothrus Ater) Brood Parasitism on the Growth and Development of Grassland Songbirds	*Testing the Hotspot Hypothesis: Lesser Prairie-Chicken Lek Formation and Female Space Use  *Habitat-And Sex-Specific Parental Care in the Monomorphic Red-Headed Woodpecker Walter LA, Viverette C, Bulluck LP  Social Versus Genetic Mating Systems: The Complex Mating System of the Lark Bunting Lyon BE, Chaine AS  Influence of Both Male and Female Attractiveness on Reproductive Success, Offspring Phenotype, and Nestling Sex Ratio Hubbard JK, Moranville GP  Frontline Defenses Against a Purported Mafia Brood Parasitie  Peer BD, Page P  Direct Effects of Brown-Headed Cowbird (Molothrus Ater) Brood Parasitism on the Growth and Development of Grassland Songbirds  *The Effects of Recreational Activities on Avian Occupancy in a High Latitude Tundra Ecosystem:  Avian Predator Occupancy Patterns and Implications for Sage-Grouse Habitat Restoration  Young AC, Johnson TN   *Bias in Estimated Breeding-Bird Abundance from Individual Movement  Fogarty FA, Fleishman E  Distribution Update, Habitat Use and Conservation Status Assessment of the Grey-Bellied Comet (Taphrolesbia Griseiventris)  Cuadros SF  Ecological Correlates to Habitat Use in the Coastal Cactus Wren  Winchell CS, Doherty PF, Taylor JM  Sea Level Rise Impacts on Waterbird Habitat Across the Hawaiian Islands  Price MR, Harmon K	#Testing the Hotspot Hypothesis: Lesser Pariticle Chicken Lek Formation and Female Space Use  **Aulicky CS, Haukos D  **Habitat- And Sex-Specific Parental Care in the Monomorphic Red-Headed Woodpecker Walter LA, Viverette C, Bulluck LP  **Bocial Versus Genetic Mating Systems: The Complex Mating Systems: The Complex Mating Systems: The Complex Mating Systems of the Lark Bunting  Lyon BE, Chaine AS  Influence of Both Male and Female Attractiveness on Reproductive Success. Offspring Phenotype, and Nestling Sex Ratio  Hubbard JK, Moramville  GP  Frontline Defenses Against a Purported Mafia Brood Parasitire  Peer BD, Page P  Direct Effects of Brown-Headed Cowbird (Molothrus Ater) Brood Parasitire  Peer BD, Page P  Direct Effects of Brown-Headed Cowbird (Molothrus Ater) Brood Parasitire on the Growth and Development of Grassland Songbirds  Winnelch SK Royle WA  Wannelch SK Royle WA  *The Effects of Recreational Activities on Avian Activities on Avian Certain and Activities on Intensive Forest Management on Avian Avian Development of Grassland Songbirds  #The Effects of Brown-Headed Cowbird (Molothrus Ater) Brood Parasitien on the Growth and Development of Grassland Songbirds  Winnelch SK Royle WA  *The Effects of Recreational Activities on Avian Occupancy in a High Latitude Tundra Ecosystem  Avian Predator Occupancy in the Sagesbrush Ecosystem: Anagement on Avian Abundance Tosge-Grouse on Habitat Selection in a Juniper Status of Great PS, Ricca MA, Johnson TN  Influence of Reproductive Status of Great PS, Ricca MA, Johnson TN  Influence of Reproductive Status of Great PS, Ricca MA, Johnson TN  #Multi-Scale Approach to Evaluating Space Use in Invasive Avian Dispersers and the Implications for Seed Dispersal  #Willow Reformation Status Assessment of the Grey-Bellied Comet (Taphrolesbia Griseiventris)  #Willow Reformation Tree Species on Habitat Use and Conservation Status Assessment of the Grey-Bellied Comet (Taphrolesbia Griseiventris)  #Willow Reformation Tree Species on Habitation of a Foundation Tree Species on Haw	Sexual Selection & Parental Care  Abundance, Occupancy, Trends  Abundance, Occupancy, Trends  Abundance, Occupancy, Trends  Froating the Hotspet Hypothesis: Lesser Partire-Chicken Lek Formation and Female Space Use  Anticky CS, Hankos D  Anticky CS, Hankos D  Juniper Expansion in the Sagebrash Ecosystem: Avian Pedator Sage-Grouse on Habitat Selection in a Juniper Sage-Grouse Habitat Restant Dominated Landscape Rabulack LP  Social Versus Genetic Mating Systems The Complex Mating Systems of the Lark Bunting Lyon BE, Chaine AS  Influence of Both Male and Female Attractiveness on Reproductive Sacess Offspring Systems of the Lark Bunting Lyon BE, Chaine AS  Distribution Update, Habitat Use and Conservation Status of Conservation Status of Conservation in Bundance From Individual Movement  Fogarty IA, Fleishman E  Distribution Update, Habitat Use and Conservation Status of Conservation Status of Conservation in Status of Conservation in Status of Conservation in Juniper Sequence?  Wilcox RC, Turvater CE  Building Social Science Capacity in the Bird Comservation Status of Conservation of the Lark Bunting Systems on the Lark Bunting Systems of the Lark Bunting Systems on Reproductive Saccess, Offspring Systems Complex Mating Systems  Influence of Both Male and Fernale Attractiveness on Reproductive Saccess, Offspring Systems Capacity in the Bird Conservation Status of Conservation Status	Sexual Selection & Parental Care Parental Care  Abundance, Occupancy, Trends  Abundance, Occupan

### Thursday, Early Afternoon Session \*indicates student presenters eligible for AOS presentation award

Possible Lanks to Migration Over the North Sparrows   Possible Lanks to Migration Over the North Spa	Room	Atwood Hall	Cook Theatre	Summit 1	Summit 2	Summit 3	Summit 4
Accommic Differentiation Adjusted Population Size and Local Mechanism of Population Size and Size Mechanism Mechanism Size and Size Mechanism Size Size Size Size Size Size Size Size	Session	Genomics	Behavior	Cross-Pacific Migration: How the Impossible Becomes Commonplace	Molecular Ecology is for the Birds: Using Molecular Techniques to Advance Our Understanding of Avian Ecology	Conservation	O .
Feedings	1400	Along the Speciation Continuum in Three Hummingbird Species Pairs Henderson EC, Brelsford	Behavior in Bachman's Sparrows Niederhauser JM, Ali S,	Atmospheric Teleconnections, and Possible Links to Wind-Assisted Bird Migration Over the North Pacific Feldstein SB, Gill RE,		Microbiota of 'Akikiki: Implications for Conservation of a Critically Endangered Hawaiian Honeycreeper  Costantini MS, Crampton	Population Size and Migration Phenology of Endangered Rufa Red Knots Staging in Southwestern James Bay,
## Genomics of Parallel Divergence and Local Diverg	1415	Morphs: Comparison of Whole Genome Sequence Data Between a Melanin-Based and a Carotenoid-Based Species Shakya SB, Brumfield RT,	Brown-Headed Nuthatches May Indicate Successful Population Reintroduction Strategy	Trans-Pacific Flights of Shorebirds Mean for Our Understanding of the Energetic and Physiological Limits to Endurance Flight  Guglielmo CG,	Ecology	Searching for Answers to Wood Thrush Fledgling and Juvenile Survival Hayes SM, Boyd B,	Parameters in Two Migratory Songbirds
A Genomic Comparison Between Flycatchers Only Distinguishable by Innate Song Differences Garcia NC, Campagna L, Rush AC, Bowie RC, Lovette IJ  Minding the Gap: An Energetics-Based Perspective on Not Migrating Ruthrauff DR, Dekinga A, Gill, Jr R, Piersma T  Rapid Global Differentiation of Migratory Phenotypes in Steamer-Ducks Campagna Ln, McCracken K, Lovette IJ  Minding the Gap: An Energetics-Based Perspective on Not Migrating Ruthrauff DR, Dekinga A, Gill, Jr R, Piersma T  Rapid Global Differentiation of Migratory Phenotypes in Sar-Tailed Godwits SV, Ebeler SE  Minding the Gap: An Energetics-Based Perspective on Not Migrating Ruthrauff DR, Dekinga A, Gill, Jr R, Piersma T  Rapid Global Differentiation of Migratory Phenotypes in Bar-Tailed Godwits SV, Ebeler SE  Minding the Gap: An Energetics-Based Perspective on Not Migrating Ruthrauff DR, Dekinga A, Gill, Jr R, Piersma T  Rapid Global Differentiation of Migratory Phenotypes in Bar-Tailed Godwits SV, Ebeler SE  Minding the Gap: An Energetics-Based Perspective on Not Migrating Ruthrauff DR, Dekinga A, Gill, Jr R, Piersma T  Simnott EA, Thompson FR, Weegman MD, Thompson T  Cumulative Effects of Forest Harvesting, Wildfires, and Roads on Olive-Sided Flyeatcher Habitat in British Columbia: Implications for Environmental Assessment Processes Nort's AR, De Groot K, Robinson A, Dohms KM, Thomas J, Lee A, Moore K, Martin K  Responses of State-Endangered Common Tems (Sterna Hirtundo) in Ohio to the Use of Artificial Nesting Platforms  State-Endangered Common Tems (Sterna Hirtundo) in Ohio to the Use of Artificial Nesting Platforms  State-Endangered Common Tems (Sterna Hirtundo) in Ohio to the Use of Artificial Nesting Platforms  State-Endangered Common Tems (Sterna Hirtundo) in Ohio to the Use of Artificial Nesting Platforms  State-Endangered Common Tems (Sterna Hirtundo) in Ohio to the Use of Artificial Nesting Platforms  State-Endangered Common Tems (Sterna Hirtundo) in Ohio to the Use of Artificial Nesting Platforms  State-Endangered Common Tems (Sterna Hirtundo) in	1430	Divergence and Local Adaptation in Two North American Woodpeckers	Trumpeter Swans Measured by Continuous Infrared Videography	the Trans-Pacific Migration Corridor of the Bar-Tailed Godwit: Past, Present, and Future  Gill, Jr RE, Douglas DC, Feldstein SB, Mills CM,	to Identify Fungi at Woodpecker Excavated Cavities in Western Coniferous Forests  Lorenz T.J. Jusino MA, Schilling JS, Andrews E,	and Annual Return Rates of Wintering Piping Plovers on Natural and Man-Made Beaches in the Mississippi Sound	
*Migratory Phenotypes in Bar-Tailed Godwits  Campagna Ln, McCracken K, Lovette IJ  *Dominance Rank and Sex Predict Social Network Position in Diversification in Birds?  Oliveros CH, Faircloth BC  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Bar-Tailed Godwits  *Truffles  *Revealing Unknown Interactions: The Role of Patagonian Tapaculos (Rhinocryptidae) on the Dispersal of Endemic Truffles  *Migratory Bird Use of Wood Decay Fungi and Black-Capped Chickadee Nest Cavities?  *Moore K, Martin K  *Migratory Bird Use of Wood Decay Fungi and Black-Capped Chickadee Nest Cavities?  *Moore Habitat in British Columbia: Implications for Environmental Assessment Processes  *Norris AR, De Groot K, Robinson A, Dohms KM, Thomas J, Lee A, Moore K, Martin K  *Migratory Pienotypes in Bar-Tailed Godwits  *Migratory Pienotypes in Bar-Tailed Godwits  *Migratory Pienotypes in Bar-Tailed Godwits  *Molitores, and Roads on Olive-Sided Ployleacher Habitat in British Columbia: Implications for Environmental Assessment Processes  *Morris AR, De Groot K, Robinson A, Dohms KM, Thomas J, Lee A, Moore K, Martin K  *Migratory Pienotypes in Bar-Tailed Godwits  *Migratory Paterns of Soot Stopover Sites in Modes Teve	1445	Between Flycatchers Only Distinguishable by Innate Song Differences Garcia NC, Campagna L, Rush AC, Bowie RC,	Cover Influence Habitat Selection in a Winter-Adapted Bird	Energetics-Based Perspective on Not Migrating  Ruthrauff DR, Dekinga A,	Framework to Understand Microbiome Assembly Campos-Cerda F,	Bobwhite Juvenile Survival on Extensive Prairies and Mixed Agricultural, Grassland, and Wooded Landscapes in Missouri  Sinnott EA, Thompson FR,	Warblers Along the Pacific Coast?
*Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Diversification in Birds?  *Oliveros CH, Faircloth BC  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Dominance Rank and Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird  *Dominance Rank and Sex Predict Social Interactions: The Role of Patagonian Tapaculos (Rhinocryptidae) on the Dispersal of Endemic Truffles  *Dior IA Smith ME  *Caiafa MV, Jusino MA, Dior IA Smith ME  *Dominance Rank and State-Endangered Common Terns (Sterna Hirundo) in Ohio to the Use of Artificial Nesting Platforms  *Duration of Migrating Land Birds?  *Buler JJ, Zenzal, Jr TJ, Moore FR, Calderlin in Moore FR, Calderlin in Land Birds?	1500	Towards Flightlessness in Steamer-Ducks  Campagna Ln,	Major Histocompatibility Complex, Mate Choice and Personal Odor in Leach's Storm-Petrels Jennings SL, Hoover BA, Sin Y, Nevitt GA, Edwards	Differentiation of Migratory Phenotypes in Bar-Tailed Godwits Conklin JR, Verkuil YI,	Between Communities of Wood Decay Fungi and Black-Capped Chickadee Nest Cavities? Gable CL, Lindsay AR,	Forest Harvesting, Wildfires, and Roads on Olive-Sided Flycatcher Habitat in British Columbia: Implications for Environmental Assessment Processes  Norris AR, De Groot K, Robinson A, Dohms KM, Thomas J, Lee A, Moore	Midwestern Forests and Urban Habitats During Spring and Fall
Block IA, Shizuka D, Chaine A, Lyon BE  Shaffer SA, Harrison A Caiafa MV, Jusino MA, Diaz IA Smith MF Picciuto M, Crouser A, Barrow, Ir W Wilson B	1515	Diversification in Birds?	Sex Predict Social Network Position in Winter Social Groups in a Passerine Bird	Sooty Shearwaters (Ardenna Grisea) Across the Pacific Ocean	Interactions: The Role of Patagonian Tapaculos (Rhinocryptidae) on the Dispersal of Endemic	State-Endangered Common Terns (Sterna Hirundo) in Ohio to the Use of Artificial Nesting Platforms	Surveillance Radar Data Tell Us About Stopover Duration of Migrating Land Birds?
Diaz IA, Smith ME Scott E Barrow, Jr W, Wilson B				Shaffer SA, Harrison A	Caiafa MV, Jusino MA, Díaz IA, Smith ME	Picciuto M, Crouser A,	Buler JJ, Zenzal, Jr 11, Moore FR, CalderÏŇn LN, Barrow, Jr W, Wilson B

# Thursday, Early 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	Endocrinology & Physiology	Symposium Undergrad Symposium	Disease & Ecotoxicology	Symposium Permeable Boundaries in Biological and Social Sciences: Human Dimensions in Bird Research and Conservation (Naves)	Songs & Vocalizations	Symposium Lessons from Avian Hybrid Zones and the Maintenance of Species Boundaries (Aguillon)
1400	Chronic, Sublethal Effects of High Temperatures Will Cause Severe Declines in Arid-Zone Birds During the 21st Century  Conradie SR, Woodborne SM, Susan CJ, McKechnie AE	Use of Thermal Imaging for the Study of Seabirds in the Gulf of Alaska: Implications for Management and Conservation Kidder EA, Sherwin R	*Geographic Variation in Host Immunogenetics and Malarial Parasite Infection in a Catharus Thrush Species Complex Starkloff NC, Sammons MA, Westerdahl H, Turner WC, Kirchman JJ	How Do Individual Attributes Predict Bird Conservation Behaviors Among Birders in the United States?  Rich TD	Partitioning of Signal Space in a Breeding Warbler Community Sblendorio JM, Vonhof MJ, Gill SA	Mechanisms Underlying the Maintenance of Species Boundaries: Lessons from Avian Hybrid Zones Walsh JL, Aguillon SM, Clucas GV
1415	*Will Low Oxygen Slow Range Shifts? Response to a Novel High Elevation Environment from Populations Across a Hummingbird Range Spence AR, Tingley MW	Genomics for the Management of 'Alalā (Corvus Hawaiiensis) in a Conservation Breeding Program  Leavitt JS, Blanchet G, Datlof E, Bellinger R, Geib S, Masuda B, Sutton J	Regional Variation in the Abundance of House Finches Created the Context that Determined the Impact of an Emerging Pathogen  Hochachka WM, Dhondt AA	Preferences of Birdwatchers and Waterfowl Hunters in the United States and Canada: Results of Discrete Choice Experiments (DCEs)  Fulton DC, Dietsch A, Harshaw H, Raedeke A, Dayer A, Duberstein J	Examining the Effect of Helicopter Noise on Bird Assemblages in Hawai'i's Protected Natural Areas Gallardo Cruz KV, Paxton KL, Hart PJ	Genetic Architecture and Asymmetric Introgression of Plumage-Related Reproductive Barriers in Hybridizing Birds  Semenov GA, Khaydarov DR, Safran RJ, Taylor SA
1430	*Out in the Cold: a Novel Approach to Understanding the Physiological Drivers of Phenotypic Flexibility in Dark-Eyed Juncos  Stager M, Senner NR, Cheviron ZA	Machine Annotation of Puaiohi Calls in Environmental Acoustic Recordings  Weyenberg GS, Rumpungworn MD, Howells LO, Paxton KL, Crampton LH, Hart PJ	Cross-Ecosystem Subsidies in Acadia National Park: How Invertebrates Can Help Us Understand Mercury Exposure in Songbirds  Jackson AK, Frampton L, Garafalo M, Harris S, Nightingale B, Youre-Moses A	Quantifying the Stability of Birds' Cultural Niches: Changing Public Perceptions of the North American Avifauna Schuetz JG, Johnston A	*Developmental Experience May Contribute to Adult Female Preferences for Male Mating Signals Strauss AV, Podos J	Using Comparative Genomics to Investigate Non-Geographic Drivers of Divergence and Introgression in Panamanian Birds  McLaughlin JF
1445	Long-Term Effects of Early-Life Stress on the HPA Axis in a Short- And Long-Lived Bird Grace JK, Anderson DJ, Angelier F	A Comparison Between Traditional and Next Generation Screening Approaches to Characterize Avian Haemosporidian Parasites  Ray S, Henry M, Galen S, Ostrow EN, Dispoto J, Kiziuk L, Weckstein JD	Assessing Halogenated Marine Persistent Organic Pollutants in the Critically Endangered California Condor and Their Marine Mammal Prey  Stack ME, Hoh E, Dodder N, Tubbs C, Vilchis I, Felton R, Johnson J	Minimizing All-Terrain Vehicle Impact in Bird Habitat: Reconciling Harvest and Conservation on Private Land in Western Alaska Naneng W, Maroney RL, Naneng M, Tinker W	Morphologically, Genetically and Vocally Divergent Warbling Vireo Subspecies Exhibit Indiscriminate Aggression Toward Intruders in a New Contact Zone  Spellman GM, Hammond A, Zhang T	Differences in Introgression Across Two Hybrid Zones in the Great Plains Billerman SM, Walsh J, Butcher BG, Lovette IJ
1500	Do High-Energy Lifestyles in Birds Promote High Maximal Metabolic Capacities?  Swanson DL, Thomas NE, Zhang Y	*Spatial Patterns of Habitat Use of the Sierra Madre Sparrow, Mexican and Endemic Mountain Bird, in Milpa Alta, Mexico City  Savarino-Drago A, Ruvalcaba-Ortega I, Martinez M, Martinez H, Martinez-Molina U, Martinez-Molina Y, Garcia-Loeza S, Rodriguez-Contreras V, Martinez-Molina G	The Effects of Climate, Habitat, and Diet on Methylmercury Bioavailability for New York Songbirds  Adams EM, Sauer AK, Lane O, Regan K, Evers DC	Prioritizing Regional Landscapes to Achieve Biological and Social Objectives Through Bird Habitat Conservation Soulliere GJ, Al-Saffer MA	*What Drives Flexible Signaling? Anthropogenic Noise and Social Context Affect Male House Wren Vocal Behavior  Grabarczyk EE, Vonhof MJ, Gill SA	Evolutionary Genomics of Variable Carotenoid-Based Ornamentation in the Red-Backed Fairywren Khalil S, Walsh J, Enbody ED, Baldassarre DT, Webster MS, Karubian J
1515	From Shallow to Deep: A Torpor Spectrum in Hummingbirds Uncovered Using Thermal Imaging Shankar A, Cisneros IN,	*Effects of Lead Exposure on Reproductive Success and Extra-Pair Paternity in a Common Urban Songbird Hitt LG, Khalil S,	Are Wetlands Hotspots for Bioaccumulation of Mercury in Songbirds? Brasso RL, Rittenhouse	Land Trusts and Birds: Partners in Strategic Conservation  Rodewald AD, Swarthout	Who is There? Response to Different Type of Territorial Intruders  Sandoval L, Hamzaj T,	Hybrid Zones and the Development of Reproductive Isolation in Flooded Versus Terra Firme Forest Birds of the Amazon
	Thompson S, Graham CH, Powers DR	Blanchette A, Finkelstein ME, Ribeiro RD, Iverson EN, McClelland SC, Karubian J	KA, Winder VL	SB, Dayer AA, Rohrbaugh RW	Bonilla K, Gutierrez I	Weir JT
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# Thursday, Late Afternoon Session \*indicates student presenters eligible for AOS presentation award

Room	Atwood Hall	Cook Theatre	Summit 1	Summit 2	Summit 3	Summit 4
Session	Genomics & Systematics	Behavior	Symposium Cross-Pacific Migration: How the Impossible Becomes Commonplace (Ruthrauff)	Symposium Molecular Ecology is for the Birds: Using Molecular Techniques to Advance Our Understanding of Avian Ecology (Jusino)	Conservation	Migration & Stopover
1600	Identifying and Characterizing Transposable Element Polymorphisms in the Northern Flicker (Colaptes Auratus) Species Complex Hruska JP, Manthey JD	*Provisioning Coordination Increases with Mate Familiarity in a Long-Lived Pelagic Seabird, the Manx Shearwater  Tyson CW, Gillies N, Guilford T, Hull J	*Demographic and Distributional Responses by Long-Distance Migratory Shorebirds to the Rapid Loss of Staging Habitat  Chan Y, Lok T, Chung SS, Tibbitts TL, Hassell CJ, Piersma T, Zhang S	Detecting Ecosystem Services from Insectivorous Birds  Jedlicka JA	*Where in the World Are Migratory Birds Declining During the Annual Cycle? the Winter Survival of a Near Threatened Shorebird in South America  Herbert JA, Mizrahi D, Taylor C	Assessing Optimality of Migratory Landbirds Crossing the Gulf of Mexico Using Individual-Based Modeling of Telemetry Data Bolus RT, Diehl RH, Deppe JL, Ward MP, Moore FR, Celis-Murillo A, Zenzal Jr TJ, Smolinsky JA
1615	Immigration May Decouple Heterozygosity and Inbreeding in Declining Populations of Florida Scrub-Jays  Nguyen TN, Chen N, Bowman R, Fitzpatrick JW, Clark AG	Investigating the Role of Avian Vocalizations as 'Magic Traits' Using On-Bird Sensors Tarango CA, Sillett TS, Gomez AJ, Fitzpatrick JW	Cross-Seasonal Interactions: The Pacific	Using Molecular Techniques to Study the Diets and Gut Microbiota of Migratory Birds  Trevelline BK	*What Factors Influence Nest Survival of the Endangered Yellow-Headed Amazon? Tarazona-Tubens FL, Britt CR, Abadi F, Desmond MJ	Movement and Distribution of Red Knots (Calidris Canutus) in the Southeastern U.S  Tuma ME, Powell AN
1630	Phylogeny of the Hawaiian Thrushes (Myadestes) Based on UCE and Mitochondrial DNA Sequences Fleischer RC, McInerney N, McIntosh CE, Sonsthagen S, Olson S, James H	Hierarchical Fear: Predation Risk Has Direct and Indirect Effects on Nestling Growth and Stress  de Zwaan DR, Martin K	as the World's Greatest Theater of Bird Migration  Piersma T	Using Box-Nesting Birds to Explore Methods in Studying Developmental Immunity and Gut Microbiota Knutie SA	Effects of Translocation on Burrowing Owl (Athene Cunicularia) Survival, Fidelity, and Nesting Rates in Arizona Doublet DN, Desmond MJ, Johnson DH, Abadi F	Movement Patterns and Habitat Use of Endangered Whooping Cranes During Migration Through Canada's Oil Sands Mining Region  Bidwell MT, Conkin JA, Ball J, Brandt DA, Harrell W, Kindopp R, Metzger K, Pearse AT, Wiacek R
1645	Reconciling the Mitonuclear Compatibility Species Concept with Rampant Mitochondrial Introgression Hill GE	Increased Predator Density Changes Nest Attendance Behavior of Yellow-Headed Blackbirds (Xanthocephalus Xanthocephalus)  Harms TM, Behrens C, Ruff ZJ, Dinsmore SJ	Closing Summary: A Synthesis and Gap Analysis of Migratory Connectivity Knowledge Available for Alaskan Birds  Harrison A	Anthelminthic Drugs Modulate the Acute Phase Immune Response but Not the Microbiome in Wild Song Sparrows  Vaziri GJ, Jusino MA, Brewer MT, Adelman JS	Landscape Matrix and Species Traits Mediate Avian Responses to Forest Fragmentation Kennedy CM, Marra PP	Revisiting Red-Winged Blackbird Migration: Fine-Scale Temporal and Spatial Movements of Individuals Across Annual Migration  Eshleman MA, Klug PE, Greives TJ, Gillam EH
1700	The Common Yellowthroat Genoscape- a Genomic Approach to Delineating Conservation Units  Bossu CM, Rajbhandary J, Smith TB, Ruegg K	Parental Behaviors Mediate the Effects of Bird Blow Fly Ectoparasitism on Nestling Wood Thrushes in Suburban Forests  Straley KM, Warren PS, King DI		Assessing the Relationship Between Multiple Paternity and the Cloacal Microbiome in Female Tree Swallows  Hernandez J, McGlothlin JW, Belden LK, Moore IT	*Demographic Consequences of Road Mortality to Snowy Plovers at Gulf Islands National Seashore, FL Durkin MM, Cohen JB	Age-, Sex-, and Size-Related Differences in the Distribution of Migrating Landbirds on the Northern Gulf Coast  Calderon LN, Zenzal TJ, Barrow W, Wilson B, Buler JJ
1715	A Genomic Investigation of the Potential Despeciation of Deeply Divergent Lineages in a Malagasy Passerine Perry NL, Block NL, Younger JL, Raherilalao M, Goodman SM, Reddy S	Testing the Social Intelligence Hypothesis in Wild Birds McCune KB, Jablonski P, Lee S, Ha RR		Panel Discussion	When Prioritizing Regions for Migratory Bird Habitat Conservation, Quantifying Costs Can Supersede Parametrizing a Population Model Stanton Jr RA, McGowan CP, Robinson OJ	*Assessing the Potential for Using Weather Radar to Predict Bird Collisions Elmore JA, Horton KG, Riding CS, O'Connell TJ, Loss SR
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# 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	Symposium Undergrad Symposium	Urban Ecology	Symposium Permeable Boundaries in Biological and Social Sciences: Human Dimensions in Bird Research and Conservation (Naves)	Morphology & Molt	Symposium Lessons from Avian Hybrid Zones and the Maintenance of Species Boundaries (Aguillon)
1600	*Wedge-Tailed Shearwater Persistence in Human-Dominated Areas Idle JL, Friswold BM, Harmon KC, Price MR	The Role of Song in Reproductive Isolation in Two Newly Overlapping White-Crowned Sparrow (Zonotrichia Leucophrys) Subspecies  Brooks WE, Wimberger PH, Rouse ML	*Urban Habitat Use by the an Endangered Hawaiian Waterbird on O'ahu, Hawaii Kawasaki MT, Hart PJ, Paxton EH	*Aspects of Municipalities Associated with Occupancy and Abundance of Chimney Swifts in Illinois  Hurd ML, Benson TJ, Ward MP	Simultaneous Rectrix Molt and Comparative Molt Ecology of Eastern Wood-Warblers Mumme RL, Mulvihill RS	Hybridization in Northern Flickers Reveals Loci Associated with Feather Coloration Aguillon SM, Lovette IJ
1615	If You Build It, They Will Come: Avian Utilization and Predation at a Large-Scale Photovoltaic Solar Facility  Griffiths JL, Meade DE, Dart JD	*Development, Not Bird Feeders, is Associated with Increased Occupancy of Northern Cardinals in Northern Michigan Toner SM, Bonter DN	Urbanization and Elevated Cholesterol in American Crows Townsend AK, Staab H, Barker CM	Cross-Cultural Considerations in Wildlife Management and Conservation  Leonetti CC	Glare Reduction Properties of Dark Avian Facial Markings Lebow CK, Burt DB	Cardinals Are Red, Buntings Are Blue; Because They Hybridize, They're Interesting Too! Megna LC, Carling MD
1630	Year-Round Monitoring Reveals a Unique Seasonal Pattern of Bird-Window Collisions Along the Pacific Coast of North America  De Groot KL, Porter AN, Norris AR, Huang AC	*Integrating Machine Learning and Citizen Science Data to Generate High-Performing Species Distribution Models for the Globally Vulnerable Gray Tinamou (Tinamus Tao)  Wiebe RA	*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	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 Pageau C, Reudink MW	Sex Chromosome Inversions May Enforce Reproductive Isolation Across an Avian Hybrid Zone  Hooper DM, Griffith SC, Price TD
1645	Engaging Undergraduate Students in an Authentic Course-Based Research Experience Using Archived Nest Video Footage Stracey CM	*Modeling Persistent Effects of West Nile Virus on Avian Population Dynamics in the Northeastern United States  Dupont GL, Bonter DN, Robinson OJ	Relationships Between Local- And Landscape-Scale Management and Urban Bird Communities Across Six Major Metropolitan Areas: Do Yards Matter? Narango DL, 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 Ely CR	Molt-Migration in the Mexican Monsoon: 90 Years of Specimens Reveal a Phenological Mismatch Caused by Anthropogenic Climate Change  Terrill RS, 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
1700	Engaging with Veterinarians to Reduce Cat Overpopulation and Cat Impacts on Wildlife Populations Sherwood L.I. Wilson AG, South CS, Roche SM, Luszcz TM		Songbirds Alter Their Use of Bird Feeders in Response to Vocalization Playback Barron DG, Sarna SD, Middleton RL	Human Dimensions Applications in Shorebird Subsistence Harvest and Indigenous Knowledge in Alaska  Keating JM, Naves LC, Tibbitts TL, Ruthrauff DR	The Role of Diet and Nesting in Bill Shape Diversification of Frugivorous Asian Barbets Krishnan A, Souza N, Reddy S	Ancient and Contemporary Hybridization Amongst Wood Warblers  Toews DP, Taylor SA, Streby H, Kramer G, Brennan C, Jones A, Lovette IJ
1715	Evaluating Bird Feeders as Tools to Connect People with Nature, and Challenges Associated with Middle School Interventions  Hammond RL, Theimer TC		*Effects of Habitat Type on Provisioning Florida Burrowing Owl Space Use and Movements Rose EH, Boughton RK	Panel Discussion  Dayer A	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 Scordato ES
			COFFEE BRI	EAK		

### Friday, Morning Session \*indicates student presenters eligible for AOS presentation award

Room	Arteaga Theatre	Cook Theatre	Summit 1	Summit 2	Summit 3	Summit 4	
Session	Habitat Relationships	Breeding Biology	Movements & Dispersal	Lightning Talks   Evolutionary Ecology		Behavior	
1030	Habitat Modeling for Desert Thrashers Fletcher DM, Harter LB, Ammon E	Can Renesting Be an Effective Reproductive Strategy and How Does it Influence Conservation of a Threatened Shorebird Species?  Swift RJ, Anteau MJ, Ring MM, Toy DL, Wagner HR, Sherfy MH	Investigating Aleutian Tern Breeding Season Movements Using Satellite Telemetry  Nesvacil KA, Lyons DE, Oehlers S, Skinner J, Mondragon J	Urban Bird Community Shifts in Arizona Allen DC et al.  Site Availability of NA's Breeding Birds Brown TM et al.  Grazers and North Great Plains Community Composition Boyce AJ et al.	Speciation on an Island: Genetic Differentiation in Penguins and Shags Burg TM, Guevara-L'opez J, Perkins N, Bost CA	New Technologies and Analytical Opportunities for Improved Inference About Avian Social Structure Clements SJ, Silk MJ, Hodgson DH, Weegman MD	
1045	The Importance of Dynamic Conservation Programs to Shorebirds in California's Central Valley  Golet GH, Dybala K, Reiter M, Sesser K, Reynolds M, Barfield J, Spraycar P	Nest Initiation Time and Distance to Water Predict Nest Success of the Hawaiian Stilt in Wetlands on O'ahu  Vyblala K, esser K, Barfield J, Price MR  Nest Initiation Time and Distance to Water Predict Vagrant Passerines During Autumn Migration  Zawadzki LC, Taylor PD, Guilford T  Agricultural Fields Reley BM et al.  Denefits of Canada Goose Egg Addling Edelstein DA et al.  Cheek RG, Funk W. Sillett TS, Ghalamb		The Genomic Landscape of Microgeographic Adaptive Divergence in an Island Endemic Cheek RG, Funk WC, Sillett TS, Ghalambor C	Using Playback Experiments to Investigate Species Discrimination in a Hybridizing Population of Blue-Winged and Golden-Winged Warblers  Janik AE, Vonhof MJ, Gill SA		
1100	Spanning the Habitat Gradient: Red-Headed Woodpecker Nest-Site Selection in Three Distinct Cover Types Nickley BM, Bulluck LP	Impacts of the December 2016 to August 2017 Bogoslof Island Eruption Event on a Major Alaskan Seabird Colony Rojek NA, Drew GS	Agent-Based Modeling and Simulation What's in it for Ornithologists? Clemen T, Lenfers UA, Bradshaw K	Snag Availability for Cavity Nesting Birds Levy HE et al.  Golden Eagle Migration Paprocki NA et al.  Early Spring Migration in Turkey Homs JJ et al.	Genetic Connectivity and Differentiation among Horned Larks (Eremophila Alpestris) Along an Elevational Gradient in the White Mountains of California  Wang-Claypool CY, Mason NA, Cicero C, Bowie RC	Landscape-Level Information Use Shapes Brown Pelican (Pelecanus Occidentalis) Foraging Behaviors Geary B, James WR, Karubian J, Nelson JA, Leberg PL	
1115	Innovations in Measuring Habitat: Nest-Site Selection of Grassland Songbirds in Northern Mixed-Grass Prairies  Guido NA, Correll MD, Ruskin K, Olsen BJ, Bernath-Plaisted J	Measuring Impacts of Non-Native Species on Cavity-Nesting Birds at the Continental Scale Bailey RL, Faulkner HA, Martin VY, Phillips TB, Bonter DN	Alternative Pathways to Success: Transient Dispersers in a Cooperative Breeding Corvid Suh Y, Dent ML, Fitzpatrick JW, Bowman R	Nocturnal Flight Calls and Collision Vulnerability Winger BM et al.  Winter Movement of Brown-capped Rosy-Finches Yappert AA et al.  Habitat Use of Hawaiian Short-eared Owls Wilhite CJ et al.	Assessing the Influences of Habitat Structure on Bird Song Propagation Hardt BM, Benedict L	Age-Related Variation in Bite Force in a Long-Lived Seabird in the Galapagos Rebol EJ, Anderson DJ	
1130	Survival, Habitat Selection, and Behavior of Post-Fledging Golden-Cheeked Warblers Trumbo EM, Brawn MP, Brawn J	Decadal Shifts in Patterns and Benefits of Nesting Near Territorial Predators by Tundra-Nesting Sea Ducks Miller MW, Lovvorn JR, Graff N, Stellrecht N, Quakenbush LT, Safine DE	Pacific Arctic Seabird Communities: a Decade of Change Viewed Through the Lens of the Distributed Biological Observatory's At-Sea Surveys  Kuletz KJ, Cushing D, Osnas E, Labunski E, Gall A		Factors Mediating Reproductive Isolation Between Related Species at Contact Zones Kirschel AN, Nwankwo EC, Monadjem A, Grether GF, Brelsford A	Effects of Non-Breeding Rainfall on Signal Development, Social Behavior, and Reproductive Success in Red-Backed Fairywrens  Welklin JF, Lantz SM, Khalil S, Karubian J, Webster MS	
1145	Woodpecker Nest Survival and Density in Relation to a Pine Beetle Outbreak Saab VA, Latif Q, Dresser M, Dudley J	Consequences of Nest Outcome on Investment into Later Broods by Gray Catbirds  Redmond LJ, Haq JI, Noble D, Ricco D	*Seasonal and Directional Dispersal Behavior in an Ongoing Dove Invasion Slager DL		Life History Structures Phenotypic Variation in Avian Functional Traits  DuBay SG	Variability in the Use of Acoustic Space Between Two Tropical Forest Bird Communities Hart PJ, Paxton K, Tredinnick G	
LUNCH BREAK							

# 7riday, Morning Session \*indicates student presenters eligible for AOS presentation award

Foraging & Food Habits   Citizen Science   Counting Unmarked Birds: Matching Appropriate Sampling and Modeling Techniques with Particular Research Questions (Latif)   Conservation   Co	tory Trait and Across a Elevational dient and Structure of mununities and Gradient Shakya SS, I, Moyle RG, tin TE
Canada Jay (Perisoreus Canadensis) Foraging Ecology in Denali National Park and Preserve, Alaska   Swift KN, Marzluff JM, Williams E   Webcams as an Untapped Opportunity to Conduct Citizen Science: Six Years of the American Kesterl Cams Gabel WW   Williams Data and Changing Tundra Ecosystem   Connectration in House Sparrow Eggs   Abundance from Unmarked Populations: Requirements, Requirements, Requirements, Requirements, Assumptions, and Finding the Best Method for Your Research   Gardali frinding the Best Method for Your Research   What is Multiple-Benefit Conservation and Why Care?   Gardali T. Seavy NE, Dybala KE   Steger K. Walsh RG, Smart DR, Gardali T. Seavy NE   Sheldon FH   Mart Sheldon FH   Mart Sheldon FH   Mart Sheldon FW   Gardali T. Seavy NE, Dybala KE   Steger K. Walsh RG, Smart DR, Gardali T. Seavy NE   Sheldon FH   Mart Sheldon FW   Ma	n Across a Elevational dient  JE, Scholer adono GA  enetic and Structure of mmunities Tropical al Gradient  Shakya SS, H, Moyle RG,
Canada Jay (Perisoreus Canadensis) Foraging Ecology in Denali National Park and Preserve, Alaska  Swift KN, Marzluff JM, Williams E  Trophic Transfer of Energy via Nestling Wading Birds to a Scavenger Community in an Oligotrophic Wetland  Gabel WW  Canadensis) Foraging Ecology in Denali Fine-Scale Distribution and Density Modeling  The Role of EBird in Fine-Scale Distribution Strong Inference from Large-Scale Monitoring Programs  Pavlacky DC  Sampling Design Carbon Storage and Biodiversity Conservation in Reforested Riparian Zones  Evolutionary Changes Following a Successful Host Shift: The Case of Mycoplasma Gallisepticum  Can See Forever: Comparing Analytical Methods Using Simulated Point Counts  Schulwitz SE, Spurling DP Pavis TS McClure CL  Schulwitz SE, Spurling DP Pavis TS McClure CL  Canadensis) Foraging  Sampling Design Carbon Storage and Biodiversity Conservation in Reforested Riparian Zones  Evolutionary Changes Following a Successful Host Shift: The Case of Mycoplasma Gallisepticum  Can See Forever: Comparing Analytical Methods Using Simulated Point Counts  Schulwitz SE, Spurling DP Pavis TS McClure CL  Schulwitz SE, Spurling DP Pavis TS McClure CL  Schulwitz SE, Spurling DP Pavis TS McClure CL  Sampling Design Considerations for Making Strong Inference from Large-Scale Monitoring Programs  Pavlacky DC  Evolutionary Changes Following a Successful Host Shift: The Case of Mycoplasma Gallisepticum  Can See Forever: Comparing Analytical Methods Using Simulated Point Counts  Multi-Benefit Approach to Creating Bird Habitat and Recharging Groundwater  The Impactions of Carbon Storage and Biodiversity Conservation in Reforested Riparian Zones  Pollowing a Successful Host Shift: The Case of Mycoplasma Gallisepticum  Can See Forever: Comparing Analytical Methods Using Simulated Point Counts  Multi-Benefit Approach to Creating Bird Habitat and Recharging Groundwater  The Impactions of Maclary Point Counts  Functional Along Carbon Methods Valance Point Counts  Along Toronton Point Counts  Functional Along Carbon	Structure of ommunities Tropical al Gradient  Shakya SS, H, Moyle RG,
Trophic Transfer of Energy via Nestling Wading Birds to a Scavenger Community in an Oligotrophic Wetland  Gabel WW  Trophic Transfer of Energy via Nestling Wading Birds to a Scavenger Community in an Oligotrophic Wetland  Gabel WW  Webcams as an Untapped Opportunity to Conduct Citizen Science: Six Years of the American Kestrel Partnership's KestrelCam  Schulwitz SE, Spurling DP, Davis TS, McClure CL  Rigby EA, Johnson DH  Host Shift: The Case of Mycoplasma Gallisepticum  Can See Forever: Comparing Analytical Methods Using Simulated Point Counts  WM, Ley DH, Pflaum K, Reinoso-Peres M, Tulman  Barfield Jn, Rohde M, Golet G, Reynolds M,  Drug	
	et of Species on Latitudinal ts in Trait n in Birds
Determine Seaside Sparrow Diet Following Large-Scale Disturbances  Snider AM, Bonisoli Alquati A, Woltmann S, Stouffer PC, Taylor SS  Stouffer PC, Taylor SS  Sasserilles: Exploring the Provalence of a Unique Cross-System Pulsed Subsidy  Multi-Year Revisits: Matching Sampling Strategies to Inferential Goals  Strategies to Inferential Goals  Strum KM, Sesser KA, Shuford WD, Golet GH  Following Interaction" Alfalfa in the San Joaquin Valley  Strum KM, Sesser KA, Shuford WD, Golet GH  Founier A, Seubert E, Kroetz A, Powers S	of Divergent i in "Biotic Traits Faster pics? a Test ird Beaks G. Schluter D, itas J
Contribution of Arthropod Taxa to the Diet of Birds?  Verkuil YI, Ubels R,  Compbell-Smith IA  Compbell-Smith IA  Compbell-Smith IA  Composition  Contribution of Arthropod Taxa to the Diet of Birds?  Verkuil YI, Ubels R,  Compbell-Smith IA  Compbell-Smith IA  Compbell-Smith IA  Composition  And Progress  MM, Schoen SK, Dusek RJ, Piatt JF, Arimitsu ML, Litaker RW, Pearce JM  Diffendorfer J, Mattsson R, Dubousky J.  Cooney CR, IA  Cooney C	ogeographic s in Avian uration He Y, Thomas GH
Seasonal Variation in Biofilm Consumption by Migratory Western Sandpipers (Calidris Mauri)  Seasonal Variation in Biofilm Consumption by Migratory Western Sandpipers (Calidris Mauri)  Quality Habitat for Birds Through Application of Management Guidelines Roadside Surveys and New Technologies New Technologies Solymos P, Matsuoka SM, Solymos	Habitat, and hic Range rive Plumage and Mimicry in peckers
Hall LA, De La Cruz SE, Takekawa JY Treyger SM, Burger MF Van Wilgenburg S, Stralberg D, Cumming May CA, Ewert DN Freeman By Ligo	

## Friday, Early Afternoon Session \*indicates student presenters eligible for AOS presentation award

Second   Artung   Theories   Cook Present	Room Arteaga Theatre Cook Theatre Summit 1 Summit 2 Summit 3						
Population Genetics of a Berlingian Endomic, Rock Sandpier		-	Symposium Long-term Studies of Cavity-nesting Birds: Windows into Environmental		Symposium Seabirds on the Edge of Two Worlds: Ecology and Conservation of Brachyramphus Murrelets in Marine and Terrestrial Environments		
How Do Scakhirds Sec   Light Special Effects on the Temporal Scansitivity of the Temporal Scansitivit	1400	Beringian Endemic, Rock Sandpiper	and Population Change from Long-Term Studies of Cavity-Nesting Birds	Breeding Season Habitat on a Long-Distance Migrant  Boyd BP, Stutchbury B,	Marbled Murrelet (Brachyramphus Marmoratus) Nesting Activity in Western Oregon  Rivers JW, Adrean L, Nelson SK, Garcia-Heras	Medullary Bone in Neornithes - Implications for the Identification of Reproductive Tissues in Non-Avian Dinosaurs Canoville AR, Schweitzer	Became More Vulnerable to Climate Change Under Agricultural Intensification  Zhao QN, Arnold T, Devries J, Howerter D,
Alersase Multiple Scales in the Great Tix (Orien Aricapilla). Status After 30 Vears of Revery Management in Oklahoma, USA Grzybowski IA. McDonald DT  Long-Term Effects of Environmental Change on Migratory Birds  Long-Term Effects of Environmental Change on Migratory Songhird  Passerines.  Bartine AW, Wysner TE, Maxband W, Wysner TE, Musgrave KS, Hathcock CD, Fair JM  The Effects of Habitat Management and Long-Northern Bobwitte W on Northern Unib Misson J. Oleyar D  Mapping Wetland Habitat Using Remote Sensing Data for the Critically Edical Cinclodes Clinclodes Pallations Gradient in Northern Bicolor)  Mapping Wetland Habitat Clincape Sandaria of Long-Roments Along and Urban Gradient in Northern Light Connecting Environment, Stores the Piull Annual Cycle in Prairie W arbites Southwest Registration of a Arctice Breeding Population of Tree Sawlwows (Tachychiente Besond Long-Population Six Six In Hong Besond In Long-Tolation Population Six Six	1415	Light? Spectral Effects on the Temporal Sensitivity of Hawaiian Seabirds Moon HE, Anderson T, Travers M, Loew E, Porter		Dynamics of North American Passerines Youngflesh CC, Socolar	Growth and Time to Fledging Mediate Terrestrial Predator Limitation of an At-Risk Seabird?  Knudson TW, Lovvorn JR, Lawonn MJ, Corcoran RM, Roby DD, Piatt JF,	Reveal Hotspots of Natural Selection in the European Starling Hofmeister NR, Rollins LA, Stuart K, Werner SJ,	Will Climate Warming Impact the Persistence of Resident Birds in Alaska? Williams EJ, Phillips LM, Grigsby T, Norris R, Chicalo R, Marzluff J,
Long-Term Effects of Environmental Change on Two Cavity Nesting Passerines  Bartlow AW, Wysner TE, Musgrave KS, Hathcock CD, Fair JM  The Effects of Habitat Management and Landscape Cnot Northern Bobwhite Winter Survival in Southwest Missouri  Mosloff AR, Weegman MD, Thompson III FR, Thompson T  Mapping Wetland Habitat Using Remote Sensing Data for the Critically Endangered White-Bellied Cinclodes (Cinclodes Cinclodes Cinclodes Palliatus)  Mapping Wetland Habitat Using Remote Sensing Data for the Critically Endangered White-Bellied Cinclodes (Cinclodes Cinclodes Cinclod	1430	Black-Capped Vireo (Vireo Atricapilla): Status After 30 Years of Recovery Management in Oklahoma, USA Grzybowski JA, McDonald	Across Multiple Scales in the Great Tit	Strategies Mediate the Effects of Stochastic and Predictable Climatic Changes on Migratory Birds  Senner NR, Linscott JA, Rakhimberdiev E, Douglas	Causes of Nest Failure for Marbled Murrelets in Washington State Lorenz TJ, Raphael MG,	Introgression Across Elevation in a Rapid Radiation, the South American Siskins (Spinus)	Spruce Grouse in Commercially-Managed Forests Blomberg EJ, Tebbenkamp
Using Nestboxes to Understand if Landscape Context on Northern Bobwhite Winter Survival in Southwest Missouri  Mosloff AR, Weegman MD, Thompson III FR, Thompson T  Mapping Wetland Habitat Using Remote Sensing Data for the Critically Endangered White-Bellied Cinclodes (Cinclodes Palliatus)  Mosloff SR, Otto M  Witweel MN  Gibbons RE, Otto M  Using Nestboxes to Understand if Landscape Understand Interactions Across the Full Annual Cycle in Prairie Warblers  Akresh ME, King DI, Marra PP  Kissling ML, Lukacs PM, Lewis SB, Gende SM  Wide-Ranging Movements and Long Wode-Ranging Movements and Long Non-Nesting Brachyramphus Murrelets in Lys Bay, Alaska, 2007–2012  Del-Rio GC, Rego MA, Whitney BM, Schurck F, Silveira LF, Faircloth BC, Brumfield RT  Connecting Environment, Stress Coping Capacity, and Fitness: Insights from a Nest-Box Breeding Population of Tree Swallows (Tachycineta Bicolor)  Mapping Wetland Habitat Using Remote Sensing Data for the Critically Endangered White-Bellied Cinclodes (Cinclodes Palliatus)  Mapping Wetland Habitat Using Remote Sensing Data for the Critically Endangered White-Bellied Cinclodes (Cinclodes Palliatus)  Mapping Wetland Habitat Using Remote Sensing Data for the Critically Endangered White-Bellied Cinclodes (Cinclodes Palliatus)  Mapping Wetland Habitat U	1445	Environmental Change on Two Cavity Nesting Passerines Bartlow AW, Wysner TE, Musgrave KS, Hathcock		Loss is the Primary Driver of Population Declines for a Long-Distance Migratory Songbird Hallworth MT, Marra PP, Bayne E, Love OP, McKinnon E, Tremblay JA, Van Wilgenburg S,	Kittlitz's Murrelets in the Aleutian Islands, Alaska Kaler RS, Kenney L,	Flight Demands on Egg Shape in Migratory and Sedentary Fork-Tailed Flycatchers (Tyrannus Savana)  G'omez-Baham'on VN, Chen ER, Tuero DT, Assis	Intrinsic and Extrinsic Drivers of Individual Fitness
Mapping Wetland Habitat Using Remote Sensing Data for the Critically Endangered White-Bellied Cinclodes (Cinclodes Palliatus)  Gibbons RE, Otto M  Mapping Wetland Habitat Using Remote Sensing Data for the Critically Endangered White-Bellied Cinclodes (Cinclodes Palliatus)  Mapping Wetland Habitat Using Remote Sensing Data for the Critically Endangered White-Bellied Cinclodes (Cinclodes Palliatus)  Migratory Route and Overwintering Locations of an Arctic-Breeding Passerine  Mapping Wetland Habitat Using Remote Sensing Data for the Critically Endangered White-Bellied Cinclodes (Cinclodes Palliatus)  Migratory Route and Overwintering Locations of an Arctic-Breeding Passerine  Mapping Wide-Ranging Movements and Long Nest-Sea Commutes by Marbled Murrelets in Washington  Morear IJ, Raphael MG, Bloxton TD  Bowman JR, Thompson	1500	Management and Landscape Context on Northern Bobwhite Winter Survival in Southwest Missouri  Mosloff AR, Weegman MD, Thompson III FR,	Understand if Landscape Influences American Kestrel Reproduction and Movements Along an Urban Gradient in Northern Utah	Winter Habitat Quality: Examining Seasonal Interactions Across the Full Annual Cycle in Prairie Warblers  Akresh ME, King DI,	Non-Nesting Brachyramphus Murrelets in Icy Bay, Alaska, 2007–2012 Kissling ML, Lukacs PM,	Introgression Between Rhegmatorhina Hoffmannsi and R. Berlepschi in the Amazon Forest  Del-Rio GC, Rego MA, Whitney BM, Schunck F, Silveira LF, Faircloth BC,	at the Core and Southern Edge of the Black-Throated Blue Warbler Breeding Range Chandler RB, Chitwood R, Lewis W, Sillett TS,
GT, Angell E	1515	Using Remote Sensing Data for the Critically Endangered White-Bellied Cinclodes (Cinclodes Palliatus)	Stress Coping Capacity, and Fitness: Insights from a Nest-Box Breeding Population of Tree Swallows (Tachycineta Bicolor)	Isotopes Reveal the Migratory Route and Overwintering Locations of an Arctic-Breeding Passerine McFarland HR, Will A,	Movements and Long Nest-Sea Commutes by Marbled Murrelets in Washington  Lorenz TJ, Raphael MG,		of Translocation: Reproductive Skew and Reduced Effective Population Size in the Red-Cockaded Woodpecker  Bowman JR, Thompson
LUNCH BREAK					AK		GI, Angell E

## Friday, Early 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	Disease & Parasites  Abundance, Occupancy, Trends		Symposium Counting Unmarked Birds: Matching Appropriate Sampling and Modeling Techniques with Particular Research Questions (Latif)	Symposium Wild Birds and the One Health Initiative: Dynamic Boundaries Affect the Health of Birds, Livestock, Humans, and the Environment (Ramey)	Symposium Translational Ecology - Producing Actionable Science (Saunders)	Symposium The Future of Global Bird Trait Datasets: A Game-changing Resource for Macroecology, Macroevolution and Conservation Biology? (Tobias)	
1400	Extensive in Situ Radiation of Feather Lice on Tinamous  Virrueta Herrera S, Weckstein JD, Sweet AD, Allen JM, Walden KK, Johnson KP	Population Trends and Connectivity of Snowy Plovers on the Southern Great Plains  Heath KM, Conway WC, Boal CW, Collins DP, Beauchamp JS, Johnson WP, Hensley G, Saalfeld ST, Grisham BA	What About Those Rare Species? Study Design Implications for Multi-Species Avian Monitoring Programs Sanderlin JS, Ganey JL, Block WM, Schwartz MK, McKelvey KS	Antibiotic Resistance Dissemination Through	Creating a Win-Win for Ranchers and Waterbirds Through Co-Produced Conservation (Social) Science Dayer AA, Sketch M, Anders L, Metcalf A	Exploring the Links Between Morphological Form and Ecological Function in Birds  Tobias JA	
1415	Ecological Drivers of Backyard Bird Feeding and Consequences for Parasite Transmission Hall RJ	Trends in Abundance and Habitat Associations of Forest Birds on Southern National Forests 1992-2017 Matseur EA, Bonnot TW, Thompson FR, Thorning MG	Estimation of Occupancy Parameters for Breeding Birds on the Basis of Single-Visit and Multiple-Visits Point-Count Designs  Leu M, Scherer RD, Jirinec V, Fleishman E	Wild Birds  Bonnedahl J	Co-Production of a Continental-Scale Movement and Energetics-Based Framework for Collaborative Management of Waterbird Populations Thogmartin WE	Stranger Things: Elaboration and Innovation of Island Avifaunas Thomas GH, Cooney C, Beckerman A, Bright J	
1430	Role of Food Availability on a Bird's Response to a West Nile Virus Infection Owen JC, Dupuis AP, Landwerlen H, Kramer L	Long-Term Avifaunal Change in Undisturbed Amazonian Rainforest: Pervasive Declines and Shifting Baselines Stouffer PC, Rutt CL, Jirinec V, Midway SR	The Impacts of Temporary Emigration on Colonization and Extinction Estimates in Dynamic Occupancy Models  Valente JJ, Hutchinson RA, Jirinec V, Leu M, Betts MG	Whole Genome Sequencing Provides Inference on the Epidemiology of Antibiotic Resistant Bacteria in Wild Birds  Ahlstrom CA, Bonnedahl J, Ramey A	Developing a Unified Framework for Avian Monitoring in Pacific Northwest Estuaries Bayard TS, Slater G, Spragens K, Koberstein M, Summers A	Global Raptor Research and Conservation Priorities: Tropical Raptors Fall Prey to Knowledge Gaps  Buechley ER, Santangeli A, Girardello M, Neate-Clegg MH, Oleyar D, McClure CJ, Sekercioglu CH	
1445	Haemosporidians Show Seasonal Patterns but Little Host Specificity Within a Chickadee Hybrid Zone Rice AA, Curry RL, Weckstein JD	Estimating Hawaiian Songbird Population Density Using Machine-Learning Produced Annotations of Automated Acoustic Recordings  Weyenberg GS, Rumpungworn M, Howells L, Paxton KL, Crampton LH, Hart PJ	Nested Sampling of Forest Restoration Treatments Reveals Different Species Occupancy and Richness Patterns Depending on Spatial Scale Latif QS, Pavlacky DC, Sparks RA, Truex RL	Prevalence, Diversity, and Transmission of Blood	Moving Bird Conservation Forward Through Collaborative Action Targeting Grasslands and Wetlands in the Chicago Wilderness Region  Beilke SJ, Miller N, Suarez D, Kasberg B	Global Patterns and Predictors of Dispersal-Trait Variation in Birds  Sheard CE, Neate-Clegg M, Alioravainen N, Jones SE, Vincent C, MacGregor HE, Bregman TP, Seddon N, Tobias JA	
1500	Avian Genomic 'bycatch' Facilitates the Study of Symbiont Ecology and Evolution  Galen SC, Perkins S	Factors Related to Occupancy Dynamics and Breeding Propensity of Northern Spotted Owls in a Protected Area: Habitat, Weather and Barred Owls  Dugger KM, Mangan AO, Chestnut T, Vogeler JC, Breckheimer IK, King WM, Bagnall KE	Broad-Scale Monitoring to Evaluate the Contribution of Local Conservation to Regional Bird Populations Green AW, Pavlacky DC	Parasities in Alaskan Avifauna  Smith MM, Van Hemert C, Meixell B, Handel C, Ramey A	Shared Stewardship for Bird Conservation: Linking Backyard Habitats, Citizen Science and Yard Management Lerman SB, Marra PP, Reitsma R, Evans BS, Narango DL, Clipp H	What Information Do We Need to Anticipate the Interaction Pattern of a Hummingbird? Martin Gonzalez AM	
1515	Sialic Acid Quantity and Glycosidic Linkage on Avian Erythrocytes Fair JM, Jankowski M, Glaberman S, Kimball D, McCabe K	Breeding Distribution of Virginia's Warbler in South Dakota  Jankowski M, n S, Kimball D, Goljani Amirkhiz R, Dixon  Breeding Distribution of Virginia's Warbler in South Dakota  On Point Count sampling for Understanding Recruitment, Survival and Movement		Panel Discussion	Reducing the Impacts of Cats on Birds in Canada Through Collaborative Efforts with Multiple Stakeholders Gow EA	Sex Biases in Natural History Collections and Consequences for Bird Trait Studies Cooper N	
COFFEE BREAK							

## 7riday, Late Afternoon Session \*indicates student presenters eligible for AOS presentation award

Room	Arteaga Theatre	Cook Theatre	Summit 1	Summit 2	Summit 3	Summit 4	
Session	Conservation	Symposium Long-term Studies of Cavity-nesting Birds: Windows into Environmental Change (Duckworth)	Migration & Stopover	Symposium Seabirds on the Edge of Two Worlds: Ecology and Conservation of Brachyramphus Murrelets in Marine and Terrestrial Environments (Rivers)	Genomics	Behavior	
1600	Site Fidelity and Pairing Behavior in a Wintering Population of American Kestrels in North Texas Biles KS, Bednarz JC	Long-Term Dynamics of Tree-Cavity-Nesting	Global Trends in Avian Partial Migration: a Meta-Analysis Zavaleta ES	Dispersal and Marine Habitat Use During the Breeding Season by the Marbled Murrelet in Oregon  Garcia-Heras M, Adrean LJ, Nelson SK, Roby DD, Betts MG, Rivers JW	Population Genomics of Greater White-Fronted Goose Wilson RE, Sonsthagen SA, Ely CR, Talbot SL, DaCosta JM, Sorenson MD, Scribner KT, Weaver M, Skalos D	Timing of Breeding in American Coots: Bet-Hedging Against Nest Predation When Reproductive Performance Declines with Season Lyon BE	
1615	Life on the Edge: Density and Demography of Marsh Wrens and Seaside Sparrows in Northeastern Florida Schwarzer AC, Cox WA	Communities in Temperate and Subtropical Forests  Cockle KL, Norris AR, Wiebe KL, Trzcinski MK, Edworthy AB, Martin K	Nocturnal Bird Migration and Light: Midnight Sun, a Solar Eclipse and Artificial Light Nilsson CH, Horton KG, Dokter A, Van Doren B, Farnsworth A	Distribution and Use of Freshwater Habitats by Kittlitz's Murrelets on Lakes in the Lower Wood River Lake System, Alaska Nesvacil KA, Pendleton G, Swaim M, Walsh P	The Long and the Short of It: Linking Genome-Wide Signatures of Selection Across Evolutionary Timescales in Birds  Shultz AJ, Arnold B, Sackton TB	Manipulated Sex Ratios Alter Group Structure and Cooperation in the Brown-Headed Nuthatch Cox JA, Cusick JA, DuVal EH	
1630	Saving the Kiwikiu (Pseudonestor Xanthophrys): Recovery Efforts in Maui, Hawaii  Mounce HL, Farmer C, Berry L, Masuda B, Warren C, Berthold L, Duvall F	Population Increases Despite Habitat Saturation: What Can We Learn from Five Decades of Research?  Walters EL, Hagemeyer ND, Barve S, Pesendorfer MB, Koenig WD	Migration of Buff-Breasted Sandpipers at Two Key Regions in the Mid-Continent: Northern Gulf of Mexico and the Flint Hills  Lyons JE, Andres BA, Penner RL, Stone K, Wolfenbarger LL	Seasonal Offshore Distribution and Habitat Use of Brachyramphus Murrelets in Alaska  Labunski EA, Kuletz K, Osnas E	Comparative Genomic Structure Within Alaskan Galliforms Sonsthagen SA, Wilson RE, Merizon RA, Talbot SL	Helpers Mitigate Negative Effects of Predation Threat in the Cooperatively Breeding Purple-Backed Fairy Wren Meyer DK, Kinnebrew E, Pruett-Jones S, Johnson AE	
1645	Forest Area Required to Support Landbird Population Goals for the Mississippi Alluvial Valley Twedt DJ, Mini A	Consequences of Long-Term Habitat	Migratory Bird Twilight Ascent and Descent Rates Along the Southwestern Shoreline of Lake Erie Wellik MJ, Kirsch EM, Sheildcastle M	Consistent Post-Breeding Movements of Marbled Murrelet from British Columbia to Alaska (2014-2016)  Bertram DF, MacDonald CA, O'Hara PD, Cragg JL, Corcoran R, Greene R, Woo K	Evolutionary Genomics of the Brown Creeper Manthey JD, Klicka J, Spellman GM	AI Seeking Birds at Night: An Innovative Method to Monitor the Position of Nocturnal Species Using Microphone Arrays and Robot Audition HARK Matsubayashi SS, Saito F, Suzuki R, Nakadai K, Okuno HG	
1700	Do Piping Plovers in the Northern Great Plains Function as a Metapopulation & Why Does it Matter for Conservation? Anteau MJ, Swift RJ, Sherfy MH, Toy DL, Ring MM	Change and Resource Selection for Population Limitation in Cavity-Nesting Birds  Martin TE	Migratory Behavior of the Western Burrowing Owl: Connecting Canada, United States, and Mexico Conway CJ, Wellicome TI, Johnson DH, Conley JL, Lundblad CG, Bruinsma DR, Fisher RJ	Post-Breeding Migration of Kittlitz's Murrelets from the Gulf of Alaska to the Bering Sea and Beyond  Douglas DC, Piatt JF, Arimitsu ML, Madison EN, Kissling ML, Schoen SK			
1715		Panel Discussion Fair J		Panel Discussion			
LUNCH BREAK							

### Friday, Late Afternoon Session \*indicates student presenters eligible for AOS presentation award

Room	Summit 5	Summit 7/8	Summit 9/10	Summit 11/12	Summit 13/14
Session	Management & Policy	Symposium Counting Unmarked Birds: Matching Appropriate Sampling and Modeling Techniques with Particular Research Questions (Latif)	Symposium Wild Birds and the One Health Initiative: Dynamic Boundaries Affect the Health of Birds, Livestock, Humans, and the Environment (Ramey)	Symposium Translational Ecology - Producing Actionable Science (Saunders)	Symposium The Future of Global Bird Trait Datasets: A Game-changing Resource for Macroecology, Macroevolution and Conservation Biology? (Tobias)
1600	The NSF is Growing Pathways to STEM for Rural Community College Students via Community Partnerships and Intensive Mentoring  Gillespie LM, Heinisch S, Grandgenett N	A General Framework to Integrate Repeated Count and Mark-Resight Data Rushing CS, Hostetter NJ, Boettcher R, Lyons J	It's Not Just Flowerpots and Tires: Defining the	Audubon's Vision: Restoring the Gulf of Mexico for Birds and People Lankford KE	Responses of Bird and Plant Communities to Global Change: Coupled or Decoupled?  Schleuning M
1615	Landscape Composition Explains High Rates of Dispersal in Translocated Lesser Prairie-Chickens Berigan LA, Aulicky C, Sullins D, Haukos D, Fricke K, Reitz J, Rossi L, Schultz K	The Potential of Citizen Science Data for Population Monitoring  Johnston AA, Strimas-Mackey ME, Hochachka WM, Robinson O, Ruiz Gutierrez V, Miller E, Auer MT, Fink D	Impacts of West Nile Virus on a Woodland Bird, Ruffed Grouse Williams LM, Brown JD, Nemeth NM, Hutchinson ML, Helwig MW, Kyle AD	Using Structured Decision Making to Connect Bird Monitoring to Restoration Decision-Making  Adams EM, Fournier AM, Lyons JE, Wilson R, Gleason JS, Brush JM, Cooper RJ, DeMasso SJ, Driscoll MJ, Frederick PC, Jodice PG, Reeves DB	Avian Functional Traits and the Impacts of Climate Change on Ecosystem Function Pigot AL, Trisos C, Merow C, Tobias J
1630	The Interactive Effects of Fire and Recreation on Golden Eagles Davis CM, Heath JA	Scaling Up by Integrating Standardized and Unstandardized, Community Science Count Data: a Case Study in the Upper Mississippi River  Michel NL, Meehan TD, Saunders SP	Urban White Ibises Facing Trade-Offs in South Florida  Welch CN, Hernandez SM, Murray M, Curry SE, Kidd A, Hepinstall-Cymerman J, Lankau E, Yabsley M, Navarra K, Cummings C, Lipp E, Altizer S	A Strategic Plan for Monitoring Birds in the Gulf of Mexico: Translating Stakeholder Values into Priorities Fournier AM, Lyons JE, Wilson R, Gleason JS, Adams EM, Brush JM, Cooper RJ, DeMaso SJ, Driscoll MJ, Frederick PC, Jodice PG, Reeves DB	How Trait Data Help Improve Avian Biodiversity Forecasts Under Global Change Zurell D
1645	Duration of Corvid Response to Forest Restoration Thinning: Implications for Conservation of the Threatened Marbled Murrelet Hagar JC, Waianuhea LK	Designing a Bird Survey for Latin America: The PROALAS Protocol in EBird  Ruiz-Gutierrez VV, Lello-Smith A, Ortega Alvarez R	Lessons Learned from Research and Surveillance	Golden-Winged Warbler Conservation: Using Science to Take Action Fowle MR, LaBarr MS, Barker SE	The Impacts of Diversity and Assembly History on Community Vulnerability  Weeks BC, Tobias J
1700	Effective Multi-Scale Governance for Migratory Shorebirds: Lessons from the EAAF and an Australian Wetland Site Hamman EV	Panel Discussion	Directed at Highly Pathogenic Influenza Viruses in Wild Birds of North America  Ramey AM, DeLiberto TJ, Berhane Y, Swayne DE, Stallknecht DE	An Assessment of Ecological Value and Vulnerability in the Bering, Chukchi, and Beaufort Seas  Smith MA, Goldman M, Knight E, Sullender B	Panel Discussion
1715			Panel Discussion OFFEE BREAK	Synthesizing Full Annual Cycle Science and Threats to Drive Conservation and Policy Actions for North American Migratory Birds  Deppe JL, Auer T, Knight E, Langham G, Marra P, Mackenzie S, Rosenberg K, Smith M, Taylor L	