

Monday Morning, 1 st Session			
Time	Room Chesapeake A	Commonwealth Auditorium	Room Chesapeake B/C
8:30	Welcome and ABS KEYNOTE LECTURE (Chesapeake ABC) Ellen Ketterson: The hormone in the middle: Integrative animal behavior as learned from an adaptable songbird		
10:00	Morning Break, 10-10:30		
	Session: Communication 1 Moderator: Jeff Lucas	Session: Parental Care Moderator: Scott Forbes	Session: Predation and Foraging 1 Moderator: Wendy Tidhar
10:30	Individually distinctive social calls reflect kinship in pallid bats (<i>Antrozous pallidus</i>). Arnold BD , Wilkinson GS, University of Maryland	Nestmates that live in different worlds. Forbes S , University of Winnipeg	Singing for another's supper: The value of communication of sentinel status. Bednekoff PA , Eastern Michigan University
10:45	Predator-prey communication between ground squirrels and rattlesnakes: natural observations. Barbour, M , Clark RW, San Diego State University	Maternal vibrational signal function in treehoppers (Hemiptera: Membracidae). Hamel JA , Cocroft RB, University of Missouri	Environmental cues and size effects on short range giant Pacific Octopus movement. Bisson L , Scheel D, Alaska Pacific University
11:00	Song matching in song sparrows: Component of aggressive response? Beecher MD , Akçay C, Tom, M, Reed VA, Campbell SE, University of Washington	Who belongs to whom? Genetic evidence of brood mixing in the convict cichlid. Lee-Jenkins S , Densmore A, Wisenden B, Smith M, Godin JG, Carleton University	Thermoregulatory postures increase the risk of predation in wintering birds. Carr JM , Lima SL, Indiana State University
11:15	Effects of anthropogenic noise on red-winged blackbird vocalizations. Brierley LE , Lucas JR, Purdue University	Adaptive sex ratio manipulation in the common moorhen. McRae SB , Mauney DF, East Carolina University	Personality influences zebra finch feeding success in a producer-scrounger game. David M , Giraldeau LA, Université du Québec à Montréal
11:30	The role of mate choice in reproductive isolation and population divergence. Castner JE , Moore IT, Virginia Tech	The relationship between maternal care and egg cannibalism in a colonial earwig <i>Anisolabis maritima</i> . Miller, JS , Zink AG, San Francisco State University	Foraging complexity in house sparrows: Personality, plasticity, or both? Ensminger AL , Westneat DF, University of Kentucky
11:45	Predator-prey communication between ground squirrels and rattlesnakes: experimental approaches. Clark RW , Barbour M, San Diego State University	A field study of behavioral interactions of native and immigrant cichlids. van Breukelen NA , Mount Aloysius College	Modeling pollinator responses to flower density. Essenberg CJ , University of California-Riverside
12:00	Smelling wrong: Hormonal contraception alters critical female odor cues. Crawford JC , Boulet M, Drea CM, Duke University	Co-evolution of parental care, offspring antipredator competence and predation pressure in convict cichlids. Wisenden BD , Stumbo AD, Self PA, Snekser JL, McEwen DC, Brisch E, Minnesota State University Moorhead	Mechanistic basis of vigilance: vision and head movements in two ground foraging birds. Fernandez-Juricic E , Gall M, Dolan T, O'Rourke C, Thomas S, Lynch J, Purdue University
12:15	Bison acoustic communication in the context of sexual selection. Wyman MT , Mooring MS, McCowan BM, Penedo CT, Hart LA, University of California-Davis	Male cooperation in polyandrous Geoffroy's tamarins (<i>Saguinus geoffroyi</i>): Kinship and paternity. Diaz-Munoz SL , University of California, Berkeley	Effects of diet manipulation on coyote feeding behavior and morphology. LaCroix S , Zelditch ML, Shivik JA, Lundrigan BL, Holekamp KE, Michigan State University
12:30	Lunch, 12:30- 2:00 PM		

Monday Afternoon, 1st Session

Time	Room Chesapeake A	Commonwealth Auditorium	Room Chesapeake B/C
	Session: Communication 2 Moderator: Michael Beecher	Presidential Symposium: Adaptive Variation in Female Mate Preferences Organizer: Molly Morris	Session: Predation and Foraging 2 Moderator: Theodore Stankowich
2:00 PM	Communication ranges of two psittacid species in Central Brazil. de Araújo CB , Campos FA, Machado LOM, Vieliard JME, Unicamp	Symposium introduction. Morris MR , Ohio University	Olfactory processing of a simplified plant volatile blend: it's elemental. Franklin, WE , Lincoln DE, Kester KM, University of South Carolina
2:15 PM	Phylogenetic and socioecological patterns in the urinary cues of prosimians. delBarco-Trillo J , Burkert BA, Goodwin TE, Drea CM, Duke University	Plasticity of female mate choice in Schizocosa wolf spiders. Hebets EA , University of Nebraska	Personality and antipredator behavior in the convict cichlid fish. Godin JG , Jones KA, Carleton University
2:30 PM	Consistency of blue-black grassquit song. Dias A , Manica L, Maia R, Podos J, Macedo R, University of Brasilia		Urban behavioral ecology of black widows: the effect of nature and nurture on development and cannibalism. Johnson JC , Miles L, Trubl P, Arizona State University
2:45 PM	Message 'scent': lemurs detect honest olfactory ornaments in females. Drea CM , Boulet M, Charpentier MJE, Crawford JC, Duke University	Variation in female mating preferences and the myth of the "superior male". Morris MR , Ohio University	Perception of predator targeting in socially feeding birds during attacks. Lima SL , Bednekoff PA, Indiana State University
3:00 PM	Olfactory experience affects the response of meadow voles to the opposite-sex scent donor of mixed-sex over-mark. Ferkin MH , Ferkin DA, Ferkin BD, Vlautin CT, University of Memphis		Behavioral response of Neotropical royal flycatchers to conspecific and predator models. Rieveley K , Doucet SM, University of Windsor
3:15 PM	From alarm to distress: fear and calling behavior in tufted titmice. Freeberg TD , Branch CL, University of Tennessee	Female condition-dependent sexual selection. Pomiankowski A , University College London	The role of cues to navigation in movement patterns of giant Pacific octopuses. Scheel D , Kjellgren A, Bisson L, Alaska Pacific University
3:30PM	The acoustic structure-function hypothesis: the receiver perspective. Gall MD , Henry KS, Lucas JR, Purdue University		Black, white, and stinky: Evolution of aposematic defenses in terrestrial carnivores. Stankowich T , Caro T, University of Massachusetts, Amherst
3:45 PM	Afternoon Break, 3:45 - 4:15 PM		

Monday Afternoon 2nd Session; Monday Evening

Time	Room Chesapeake A	Commonwealth Auditorium	Room Chesapeake B/C
	Session: Communication 3 Moderator: Erin Gilliam	Presidential Symposium Adaptive Variation in Female Mate Preferences. Organizer: Molly Morris	Session: Development & Conservation Moderator: Jason Watters
4:15 PM	The electric signal of <i>Brachyhyopomus gauderio</i> is an honest indicator of body size and androgen levels. Gavassa S , Silva A, Stoddard PK, Florida International University	Variation in female mate preference in humans. Gangestad S , University of New Mexico	Sex-bias and ontogeny of sponge tool-use in wild bottlenose dolphins. Mann J , Sargeant BL, Patterson EM, Georgetown University
4:30 PM	Marco! Polo! Social calls used by leaf-roosting bats for locating roostmates. Gilliam EH , Chaverri G, Vonhof M, North Dakota State University		Food sharing and early sex in bottlenose dolphins, <i>Tursiops truncatus</i> . Weaver A , Argosy University
4:45 PM	Signal size, performance, and dominance: an experimental test with the green anole lizard. Henningsen JP , Irschick DJ, University of Massachusetts Amherst	Symposium Discussion. Morris MR , Ohio University	Human behavior towards birds: comparing a European and North American city. Clucas B , Marzluff J, University of Washington
5:00 PM	Protein content of the diet and scent marking behavior in meadow voles, <i>Microtus pennsylvanicus</i> . Hobbs NJ , Ferkin MH, University of Memphis		How animals choose where to settle affects conservation outcomes of reintroduction. Swaigood RR , Shier DM, San Diego Zoo's Institute for Conservation Research
5:15 PM	Low-amplitude song predicts attack in black-throated blue warblers. Hof D , Hazlett N, University of Massachusetts		Nonintuitive social effects in animal translocations for conservation. Shier DM , Swaisgood RR, San Diego Zoo's Institute for Conservation Research
5:30 PM	Sing their own song: territorial behavior and song variation in song sparrows. Hughes M , College of Charleston		Behavioral types and stereotypy components in okapi. Watters JV , Chicago Zoological Society
5:45 PM	Extreme sex differences in song sharing: implications for vocal learning in a group-living songbird. Illes AE , University of Washington		Sex differences in activity and boldness: significance for an invasive fish. Marentette J , Schiller C, Sopinka N, Wang G, Tong S, Taves M, Balshine S, McMaster University
6:00 PM	Break for Dinner		
EVE		Poster Session A. 7 - 8:30 PM, Special Poster Session on Applied Animal Behavior Tidewater Rooms & Sadler Center lobby	
EVE		Careers in Animal Behavior Workshop 8:30-10 PM, Room Chesapeake B/C	

Tuesday Morning, 1 st Session			
Time	Room Chesapeake A	Commonwealth Auditorium	Room Chesapeake B/C
8:30	ANIMAL BEHAVIOR SOCIETY FELLOW LECTURE (Chesapeake ABC) Andrew Sih: Behavioral syndromes: three major directions for future study		
10:00	Morning Break, 10-10:30		
	Allee Competition Moderator: Joan Strassman	Session: Communication 4 Moderator: Jeff Podos	Session: Mating and Breeding Systems 1 Moderator: Ken Yasukawa
10:30	Sociality and social learning in turtles (Emydidae). Davis KM , University of Tennessee	Playback reveals conflict and cooperation in the duets of tropical antbirds. Koloff J , Mennill DJ, University of Windsor	Extra-pair copulations: Female song sparrows stay on territory when they are fertile. Akçay C , Campbell SE, Searcy WA, Templeton CN, Beecher MD University of Washington
10:45		Vocal and anatomical evidence for two-voiced sound production in the greater sage-grouse. Krakauer AH , Tyrrell M, Lehmann K, Losin N, Goller F, Patricelli GL, University of California Davis	Mate search and experience in a cricket: tomorrow 'hot', today not. Beckers OM , Wagner Jr. WE, University of Nebraska-Lincoln
11:00	Risk assessment in the San Marcos salamander: alarm cues, predator encounter frequency, and prey experience. Epp KJ , Texas State University	Diurnal and nocturnal birds both vocalize at night. La VT , University of Windsor	Does variation in sampling behavior underlie variable female mate choice in the lekking lance-tailed manakin? DuVal EH , Kapoor VA, Florida State University
11:15		Age-dependent advertisement of shared song elements in male song sparrows. Lapierre J , Mennill D, Potvin D, Adamson YS, MacDougall-Shackleton E, University of Western Ontario	Sperm competition and the alternative reproductive tactics in Chinook salmon. Flannery E , Pitcher T, Heath D, University of Windsor
11:30	Differential escape behavior and behavioral plasticity alter male morph fitness tradeoffs in a wolf spider. Fowler-Finn KD , University of Wisconsin-Milwaukee	Do humans retain the first tetrapod method of airborne hearing, some 375M years old? Lenhardt M , Virginia Commonwealth University	The geography of group sex: male display and female response in a lek-mating insect. Howard DR , Lee N, Hall CL, Mason AC, University of Toronto at Scarborough
11:45		Signal detectability and the evolution of floral complexity. Leonard AS , Dornhaus A, Papaj DR, University of Arizona	Neutral-locus genetic diversity and a potential trade-off between current and future reproduction in song sparrows. Kewin J , King J, Adamson YS, Lapierre J, MacDougall-Shackleton E, University of Western Ontario
12PM	Bumble bee response thresholds and body size: Variation is the key to colony success. Jandt JM , University of Arizona	Species and individual variability in auditory processing in four passerines. Lucas JR , Henry KS, Purdue University	The role of pair bonding in monogamy: assessment or coordination? Leese JM , Lehigh University
12:15PM		Female songbirds do more than memorize: learned geographic discrimination generalizes to unfamiliar songs. Anderson R , Peters S, Nowicki S, Duke University	Why mate guard? Missing opportunities to cheat may be more important than risk of cuckoldry in the zebra finch. Wilson LC , Swaddle JP, College of William & Mary
12:30	Lunch, 12:30-2:00 PM		

Tuesday Afternoon, 1st Session

Time	Room Chesapeake A Allee Competition Moderator: Joan Strassman	Commonwealth Auditorium Session: Communication 5 Moderator: Emma Greig	Room Chesapeake B/C Session: Mating and Breeding Systems 2 Moderator: John Leiser
2:00 PM	Sexy bird nerds and the evolution of multiple behavioral display traits. Keagy J , University of Maryland	Spatial perception and adaptive sonar behavior of the big brown bat, <i>Eptesicus fuscus</i> . Aytekin M , Mao B, Moss C, University of Maryland	Season and female fertility but not opportunities for paternal care predict intensity of mate guarding in baboons. Onyango PO , Alberts SC, Altmann J, Princeton University
2:15 PM		Eavesdropping on the hippopotamus: acoustic and behavioral repertoires. Maust-Mohl M , Soltis J, Reiss D, CUNY	Female mate choice, male-male competition and their interaction in the redbreast dace, <i>Clinostomus elongatus</i> . Pitcher TE , Beusoleil JM, Doucet S, Heath D, University of Windsor
2:30 PM	Sexually selected male nuptial plumage is testosterone dependent in a tropical passerine, the red-backed fairy. Lindsay WR , Washington State University	Reaching your target audience: Sound transmission and function in manakins. Mennill DJ , Bond NM, Doucet SM, University of Windsor	Successful subordinates: Alternative mating strategies in male geladas, <i>Theropithecus gelada</i> . Snyder-Mackler N , Alberts SC, Bergman TJ, University of Pennsylvania
2:45 PM		Vocal tract filtering in zebra finches. Ohms VR , Snelderwaard PC, Beckers GJL, ten Cate C, University of Leiden	The effect of prairie burn regimes on dickcissel mating patterns. Sousa B , University of Kentucky
3:00 PM	Female choice, limiting nutrients, genic capture and male butterfly colors. Morehouse NI , Arizona State University	Cracking the code: Answering rules in the duets of tropical wrens. Osmun AE , Mennill DJ, University of Windsor	Genetic monogamy is important in the evolution of large brain size in birds. West RJD , University of New Mexico
3:15 PM		Tonic communication in the antipredator behavior of ground squirrels. Owings DH , University of California, Davis	Through their eyes: assessing peafowl mating preferences and multiple male traits with telemetric eye-tracking. Yorzinski JL , Patricelli GL, Platt M; University of California, Davis
3:30 PM		Birds adjust acoustic directionality to beam their antipredator calls to predators and conspecifics. Patricelli GL , Yorzinski JL, University of California, Davis	Promiscuous mating patterns of female Leon Springs Pupfish. Leiser J , Gagliardi-Seeley J, Wisenden B, Itzkowitz M, Northampton Community College
3:45 PM		Active time and working memory for call complexity. Ryan MJ , Akre KL, University of Texas	
3:45 PM	Afternoon Break, 3:45 -4:15 PM		

Tuesday Afternoon, 2nd Session; Tuesday Evening

Time	Room Chesapeake A	Commonwealth Auditorium	Room Chesapeake B/C
	Allee Competition Moderator: Joan Strassman	Session: Communication 6 Moderator: Daniel Mennill	Session: Sexual Selection 1 Moderator: Susan Gershman
4:15 PM	To win the battle but lose the war: conflicting selection on aggressiveness in intra- versus intersexual selection. Pruitt JM , University of Tennessee Knoxville	Iridescent blue and orange spots function as a warning signal in Battus philenor. Pegram KV , Rutowski RL, Arizona State University	Intrasexual competition among male spotted hyenas: sperm competition? Curren L , Holekamp KE, Michigan State University
4:30 PM		Persistence of song types in Darwin's finches, Geospiza fortis, over four decades. Podos J , Goodale E, University of Massachusetts, Amherst	Do sexy birds have smaller brains? Abdellah ML , Doucet SM, University of Windsor
4:45 PM	The consequences of male courtship attention in sagebrush lizards. Ruiz M , Indiana University	Song sharing and vocal performance in the swamp sparrow (Melospiza georgiana). Rega CC , Moseley DL, Lahti DC, Podos J, University of Massachusetts Amherst	Genotype x environment interaction in signals and genitalia in Enchenopa treehoppers (Hemiptera: Membracidae). Al-Wathiqui NA , Rodriguez RL, University of Wisconsin- Milwaukee
5:00 PM		Call timing interactions in the treefrog Dendropsophus ebraccatus. Reichert MS , University of Missouri	Female-controlled timing of remating alters paternity and costs of polyandry. Andrade MCB , Stoltz JA, University of Toronto Scarborough
5:15 PM	An examination of mate fidelity in a serially monogamous biparental fish. Snekser JL , Lehigh University	Does Anolis carolinensis exhibit pursuit deterrent signalling? Reisch A , Lovern MB, Oklahoma State University	Haemoparasite prevalences and intensities in adult and nestling European starlings. Barber CA , Zaroni P, Saint Mary's University
5:30 PM		Independent origins of female preferences for leading calls. Schul J , Frederick-Hudson KH, Bush SL, University of Missouri	Cryptic male choice in the soldier fly Merosargus cingulatus. Barbosa F , University of Missouri
5:45 PM		Development of receiver response to a status signal in the house sparrow. Stewart I , Ehlman S, Westneat D, University of Kentucky	Risky business: predation and behavioral plasticity in swordtails. Basolo A , Nootz M, University of Nebraska-Lincoln
Break for Dinner 6:00 pm - Allee Student Participants Dinner 6 - 8:00 PM			
eve		Poster Session B. 7 - 8:30 PM Tidewater Rooms & Sadler Center lobby	
eve	Film Competition 1 8:30 - 10:00 PM Commonwealth Auditorium		

Wednesday Morning, 1 st Session			
Time	Room Chesapeake A	Commonwealth Auditorium	Room Chesapeake B/C
8:30	DISTINGUISHED ANIMAL BEHAVIORIST LECTURE (Chesapeake ABC) Lee Drickamer: Animal behavior at a crossroads		
10:00	Morning Break, 10-10:30		
	Session: Social Behavior 1 Moderator: Lauren Brent	Session: Communication 7 Moderator: Regina Macedo	Session: Neuroendocrinology & Physiology 1 Moderator: Heather Watts
10:30	Effects of chronic sibling aggression on viability over the lifetime. Drummond H , Rodríguez C, Torres R, Carmona C, Lifschitz N, Nuñez A, Sanchez O, Universidad Nacional Autónoma de México	Context-dependent scent marking in black-tufted-ear marmosets. Macedo RH , Oliveira DGR, Universidade de Brasilia	Elicited and spontaneous changes in EOD rate in <i>Microsternarchus</i> sp. Berry RJ , Braun CB, Hunter College
10:45	Will I be there for you? Social flexibility and relationships of female sitatunga. Bashaw MJ , Franklin & Marshall College	Do male spiders use female feedback to improve signaling efficiency? Sullivan-Beckers L , Hebets E, University of Nebraska-Lincoln	Energy metabolism and consistent individual differences in behavior. Biro P , Stamps J, University of California Davis
11:00	Short-term flexibility in the structure of female rhesus macaque networks. Brent L JN , MacLarnon A, Semple S, Roehampton University	Individual discrimination through urine in raccoons (<i>Procyon lotor</i>). Tang-Martinez Z , Kent LA, University of Missouri-St. Louis	The effects of kinship on fitness, physiology and spatial and social behavior. Mateo JM , Nuss K, University of Chicago
11:15	Intrasexual and intersexual aggression in male and female Northern Cardinals. DeVries MS , Winters CP, Jawor JM, The University of Southern Mississippi	Spatial movements, social interactions, and song learning in song sparrows. Templeton C , Beecher MD, University of St Andrews	Hormonally-mediated maternal effects in sticklebacks. Giesing E , Suski C, Bell AM, University of Illinois
11:30	Continuous nest maintenance and sociality in an invasive parrot in Brooklyn. Grasso FW , Brooklyn College,	Behavioral profiles in a complex social setting. Williams EH , Union College	Hippocampal neurogenesis is associated with migration in adult sparrows. LaDage LD , Roth TC, Pravosudov VV, University of Nevada, Reno
11:45	I'm a lover...maybe: the effect of recent experience on behavioral strategies in Betta. Dzieweczynski TL , Forrette LM, University of New England	Chickadees use individually distinctive songs in individual discrimination. Wilson DR , Mennill DJ, University of Windsor	Contest experience and androgen, estrogen, cortisol and 5-HT1A receptor gene expression in <i>K. marmoratus</i> . Li CY , Hung SP, Earley RL, Hsu Y, National Taiwan Normal University
12PM	LUNCH 12:00 -12:45		
12:15	Animal Behavior Business Meeting, 12:45 - 2:00		

Wednesday Afternoon, 1st session

Time	Room Chesapeake A	Commonwealth Auditorium	Room Chesapeake B/C
	Session: Social Behavior 2 Moderator: Ann Weaver	Symposium: Signaling in Multiple Modalities. Organizer: James P. Higham	Session: Neuroendocrinology & Physiology 2 Moderator: Natalie van Breukelen
2:00 PM	Social influences on growth in dominance-structured groups of cichlid fish. Hamilton IM , Ohio State University	Symposium introduction. Higham JP , University of Chicago	The ecology and hormones of maternal care in biparental convict cichlids. Santangelo N , Westrick B, Eastern Kentucky University
2:15 PM	Affiliation preferences and group organization in dynamic social networks. Hock K , Fefferman NH, Rutgers University	Should I repeat that? Examining the costs and benefits of redundant signals. Smith KL , Evans C, Macquarie University	Effects of the song environment on Lincoln's sparrows' brain and behavior. Sewall KB , Caro SP, Sockman KW, University of North Carolina Chapel Hill
2:30 PM	The influence of social context on behavior in big brown bats (<i>Eptesicus fuscus</i>). Kilgour RJ , Brigham RM, University of Regina		Prolonged exposure to atrazine affects male mating behaviors. Shenoy K , Crowley PH, University of Kentucky
2:45 PM	Do fighting ability and previous contest experience influence winner/loser effects in <i>K. marmoratus</i> ? Lan YT , Hsu Y, National Taiwan Normal University	Experimental approaches and the use of animal robots to study multimodal communication. Partan S , Hampshire College	The use of food and social cues to time reproduction in a flexibly breeding songbird. Watts HE , Hahn TP, University of California, Davis
3:00 PM	Interspecific aggression in two <i>Stegastes</i> damselfish species. Little K , Draud M, Itzkowitz M, Lehigh University		The role of steroid hormones in chemosignal production in songbirds. Whittaker DJ , Soini HA, Gerlach NM, Posto AL, Novotny MV, Ketterson ED, Indiana University
3:15 PM	Modeling behavior syndromes or social organization on networks: manakin examples. McDonald DB , Shizuka D, University of Wyoming	Anuran courtship, what can a fixed signal tell us about multimodal signalling? Taylor RC , Salisbury University	Brain regions associated with female mate preference behavior in a poeciliid fish. Wong RY , Cummings ME, University of Texas Austin
3:30 PM	Social-sexual behavior seasonality in captive beluga whales, <i>Delphinapterus leucas</i> . Noonan M , Glabicky N, DuBrava A, Canisius College		Ingestion of <i>Mycobacterium vaccae</i> influences learning and anxiety in mice. Jenks SM , Matthews D, The Sage Colleges
3:45 PM	Afternoon Break, 3:45-4:15		

Wednesday Afternoon, 2nd session; Wednesday Evening

Wednesday Afternoon, 2nd session; Wednesday Evening			
Time	Room Chesapeake A	Commonwealth Auditorium	Room Chesapeake B/C
	Session: Social Behavior 3 Moderator: Jennifer Fewell	Symposium: Signaling in Multiple Modalities. Organizer: James P. Higham	Session: Cognition and Learning 1 Moderator: Janet Mann
4:15 PM	Development of territorial behavior in a songbird (Australian magpie). O'Shea K , Kaplan G, University of New England	Active space of multimodal signaling in a complex environment. Uetz GW , University of Cincinnati	Do octopus responses to their mirror image indicate their self-awareness? Mather J , Anderson R, University of Lethbridge
4:30 PM	Individuality evolves with sociality. Pollard KA , Blumstein DT, University of California, Los Angeles		Spotted hyenas assess numerical advantage when played calls from unknown conspecifics. Benson-Amram S , Heinen V, Holekamp KE, Michigan State University
4:45 PM	Behavioral and physiological differences in social and solitary huntsman spiders. Rayor LS Cornell University	Multimodal signaling in a communication network. Roberts JA , The Ohio State University at Newark	Variation in exploratory behavior within family groups of American crows. Campbell-Smith J , Clark AB, Binghamton University
5:00 PM	Simple rules reduce conspecific brood parasitism in a cooperatively breeding cuckoo. Riehl C , Princeton University		Spatial cues overshadow shape and scent cues in a flower bat and fruit bat. Carter GG , Ratcliffe JM, Galef BG, University of Maryland
5:15 PM	Greetings promote cooperation and reinforce social bonds among spotted hyaenas. Smith JE , Powning KS, Dawes SE, Estrada JR, Hopper AL, Piotrowski SL, Holekamp KE, Michigan State University	Multi-modal reproductive signaling and social knowledge in primates. Higham JP , The University of Chicago	Hand preference in marmosets as an indicator of cognitive bias. Gordon DJ , Rogers LJ, University of New England
5:30 PM	Costs and benefits of social migration in the amoeba Dictyostelium discoideum. Strassmann JE , Brock D, Jack C, Gilbert O, Kuzdzal-Fick J, Queller DC, Rice University		Multimodal perception and risk taking by common marmosets. Kemp C , Kaplan G, University of New England
5:45 PM	Differences among honey bee colonies in collective personality and decision-making. Wray MK , Seeley TD, Mattila HR, Cornell University	Symposium Discussion. Higham JP , University of Chicago	The influence of cognitive complexity, behavioral novelty and group density on social information transfer. Lemasson BH , Anderson JJ, Goodwin RA, U.S. Army Engineer R & D
6:00 PM	break for Dinner		
Eve	Poster Session C. 7-8:30PM Tidewater Rooms & Sadler Center lobby		
Eve	Film Competition 2 8:30 - 10:00 PM Commonwealth Auditorium		

Thursday Morning, 1 st Session			
Time	Room Chesapeake A	Commonwealth Auditorium	Room Chesapeake B/C
	Session: Sexual Selection 2 Moderator: Maydianne Andrade	Session: Ecology 1 Moderator: Karen Mabry	Teaching Workshop Organizers: Penny Bernstein and Mike Noonan
8:30 AM	Social environment affects penis size in waterfowl. Brennan PLR , Gereg I, Goodman M, Prum RO, Yale University	Reflectance of snakes of Beaver Island: A descriptive and visual approach. Seymour BM , Clark DL, Arizona State University	Making behavior part of introductory biology, in college and in high school. Nowicki S , Duke University
8:45 AM	Female latency to remating increases with male coercion in a livebearing fish. Deaton R , Cureton J, Lewis R, Sanchez J, Stoops S, West J, Tobler M, Sam Houston State University	Spiral-digging by rodents: "Devil's corkscrews" due to morphology or environment? Gobetz KE , James Madison University	
9:00 AM	Androgen response in a unisexual-bisexual mating complex. Gabor CR , Texas State University	Rules of dispersal in the endangered mariana crow (Corvus kubaryi). Robinette Ha R , Faegre S, Ha JC, University of Washington	Parent-offspring conflict: evolutionary thinking for a rote clientele. Mock D , University of Oklahoma
9:15 AM	Quality trumps novelty: female postcopulatory choice is more influenced by male variability than male novelty. Gershman SN , Sakaluk SK, Illinois State University	Ecological conditions favoring the evolution of stronger immune defenses. Hahn C , Kogut MH, Reisen WK, USGS – Patuxent Wildlife Research Center	
9:30 AM	An investigation of the refractory-inducing effects of nuptial food gifts in decorated crickets. Gordon D , Gershman SN, Sakaluk SK, Illinois State University	Urban habitats limit expression of behavioral syndromes in song sparrows. Hyman J , Evans J, Boudreau K, Scales J, Hughes M, Western Carolina University	Teaching animal behavior in the field and abroad. Penner J , Hendrix College
9:45 AM	Micro-scale laser surgery reveals adaptive function of a genital trait, <i>D. ananassae</i> . Grieshop KH , University of Cincinnati	Myth of the "busy chipmunk": Activity and rest between years. LaZerte SE , Kramer DL, McGill University	
10:00	Morning Break 10:00-10:30		

Thursday Morning, 2nd Session			
	Session: Sexual Selection 3 Moderator: Susan McRae	Session: Ecology 2 Moderator: Jeremy Hyman	Session: Genetics and Evolution 1 Moderator: Bronwyn Bleakley
10:30 AM	Variation in signal timing and its implications for male attractiveness. Höbel G , University of Wisconsin - Milwaukee	Landscape genetic consequences of natal habitat preference induction. Mabry KE , New Mexico State University	Phenotypic plasticity and behavioral evolution in the stickleback adaptive radiation. Foster SA , Clark University
10:45 AM	Testosterone and melanin ornamentation in female northern cardinals (<i>Cardinalis cardinalis</i>). Jawor JM , Winters CP, University of Southern Mississippi	The effects of supplementary feeding on reproductive activity in the prothonotary warbler. Moore JR , Walters JR, Moore IT, Virginia Tech	Searching the genome for the source of a behavioral syndrome in threespined sticklebacks. Bell AM , Sanogo YO, Band M, Yu P, Xie D, Zhong S, University of Illinois, Urbana-Champaign
11:00 AM	Sperm competition risk and mate choice in male Trinidadian guppies. Jeswiet SB , Lee-Jenkins S, Ramnarine IW, Godin JG, Carleton University	Kinship and dispersal of a solitary rodent, the giant kangaroo rat, in a fluctuating population density. Randall JA , Meshriy M, San Francisco State University	The evolution of antipredator behavior in Alaskan threespine stickleback fish. Wund MA , Foster SA, The College of New Jersey
11:15 AM	Male courtship pheromones indicate genetic quality in an arctiid moth. Kelly CA , Norbutus A, Lagalante A, lyengar VK, Villanova University	Burrowing behavior of the naked mole rat, <i>Heterocephalus glaber</i> . Roland BD , Gobetz KE, James Madison University	Is cannibalism an interacting phenotype in an endangered isopod? Bleakley BH , Welter SM, University of Exeter
11:30 AM	Condition-dependent female mating preferences in the swordtail fish <i>Xiphophorus multilineatus</i> . Lyons SM , Morris MR, Ohio University	Quantifying the timing behavior of kleptoparasitism of <i>Onthophagus taurus</i> . Rushing SL , Raspet E, Crowe M, Rychtar J, University of North Carolina at Greensboro	kin-lmc-game: multiple simple factor models explain sex ratio in a parasitoid wasp. Deyrup LD , Matthews RW, University of the Cumberland
11:45 AM	Female bias for male lateral projection area in <i>Poecilia reticulata</i> and <i>Xiphophorus variatus</i> . MacLaren RD , Iacozzi S, Fontaine A, Ash M, Ash P, Merrimack College	Leadership provides benefits to followers in fission-fusion groups. Lewis J , Wartzok D, Heithaus M, Florida International University	Behavior in 3D: Refining and testing expectations of behavioral variation. Dosmann A , University of Chicago
12:00 PM	Polygyny despite male genital mutilation in the western black widow (<i>Latrodectus hesperus</i>). MacLeod EC , Modanu M, Andrade MCB, University of Toronto Scarborough	Formation flight and group behavior in bats using field 3D motion capture. Hristov NI , Hedrick TL, Allen LC, Kunz TH, Breuer KS, Swartz SM, Brown University	Multiple gains of red coloration in blackbirds: convergence and parallelism in the evolution of carotenoid use. Friedman NR , McGraw KJ, Omland KE, University of Maryland Baltimore County
12:15 PM	Sexy males can be dangerous: female field crickets incur increased parasitism risk when near preferred song. Martin CM , Wagner Jr WE, University of Nebraska-Lincoln	Speed-accuracy tradeoffs: Merging neuroeconomics with optimality models. Papaj DR , Leonard AL, Dornhaus A, University of Arizona, Tucson	Heritability of melanin-based color in North American barn swallows. Hubbard JK , Safran RJ, University of Colorado
12:30	Lunch, 12:30-2:00		

Thursday Afternoon, 1st Session			
Time	Room Chesapeake A	Commonwealth Auditorium	Room Chesapeake B/C
	Session: Sexual Selection 4 Moderator: Trevor Pitcher	Symposium: Collective animal behavior: Decision-making of groups. Organizer: Noa Pinter-Wollman	Session: Genetics and Evolution 2 Moderator: Brian Wisenden
2:00 PM	Temperate biases in studies of sexual dimorphism: plumage and song evolution in orioles. Omland KE , Price J, Hofmann CM, Friedman NR, Jacobsen F, University of Maryland Baltimore County	Collective animal behavior: Decision-making of groups. Pinter-Wollman N , Stanford University	Niche construction and the evolution of learning: preliminary analyses in a butterfly. Snell-Rood EC , Indiana University
2:15 PM	Herding in fiddler crabs: consequences to females of an apparently coercive mating tactic. Pope DS , Haney BR, Mount Holyoke College		The evolution of mimicry in Peruvian poison frogs: phenotypic and genetic analyses. Yeager J, Twomey E, Brown JL, Cummings M, Chouteau M, Morales V, Summers K , Tulane University
2:30 PM	Social experience in field crickets modifies precopulatory and postcopulatory female choice in parallel. Rebar D , Zuk M, Bailey N, University of Wisconsin-Milwaukee	Collective antipredator signaling in treehopper broods. Cocroft RB , Ramaswamy K, Mohan A, Catanho M, Nair S, University of Missouri	A genetic analysis of guarding and stinging behaviors in the honey bee. Shorter J , Hunt G, Purdue University
2:45 PM	Experience matters: female preference plasticity in <i>Xiphophorus cortezi</i> . Robinson D , Ohio University		Local adaptation in song sparrows (<i>Melospiza melodia</i>). Sarquis Adamson Y , Kewin JM, Lapierre JM, MacDougall-Shackleton EA, University of Western Ontario
3:00 PM	The role of condition and mating tactic on sperm quality in horseshoe crabs. Sasson DA , Johnson SL, Brockmann HJ, University of Florida	Are fish schools an appropriate model of a decentralized intelligence? Parrish J , Grunbaum D, Morgansen K, University of Washington	Sex-biased dispersal in a terrestrial amphibian, <i>Plethodon cinereus</i> . Liebgold EB , Brodie III ED, Cabe PR, University of Virginia
3:15 PM	Aerobic capacity predicts the quality of sexual display in satin bowerbirds (<i>Ptilonorhynchus violaceus</i>). Savard JF , Keagy J, Siani J, Coleman S, Chappell M, Borgia G, University of Maryland		How does selection shape species differences in the winner effect? Fuxjager MJ , Montgomery J, Marler CA, University of Wisconsin - Madison
3:30 PM	Sequential episodes of sexual selection in fireflies. South A , Lewis SM, Tufts University	Ant colony: a micro chemical factory. Deneubourg JL , Buffin A, Université Libre de Bruxelles	Social selection study of spiderling growth: early interaction effects, Riechert SE , Wolf JB, Pruitt JN, University of Tennessee
3:45 PM	Afternoon Break 3:45-4:15		Afternoon Break 3:45-4:15
Afternoon Break, 3:45-4:15			

Thursday Afternoon, 2nd Session; Thursday Evening

Thursday Afternoon, 2nd Session; Thursday Evening			
Time	Room Chesapeake A	Commonwealth Auditorium	Room Chesapeake B/C
	Session: Sexual Selection 5 Moderator: Jodie Jawor	Symposium: Collective animal behavior: Decision-making of groups. Organizer: Noa Pinter-Wollman	Session: Cognition and Learning 2 Moderator: Vladimir Pravosudov
4:15 PM	Relationship between brood sex ratio and male ornaments depends on male age in a warbler. Taff CC , Freeman-Gallant CR, Dunn PO, Whittingham LA, University of California, Davis	Organizational structure and disease dynamics in a social group. Naug D , Colorado State University	Chickadees are selfish group members when it comes to food caching. Pravosudov VV , Roth TC, LaDage LD, University of Nevada Reno
4:30 PM	Weapon size predicts dominance in the jumping spider <i>Lyssomanes viridis</i> . Tedore C , Johnsen S, Duke University		Adaptation to an environmental change in the olfactory system of <i>Drosophila</i> . Robertson K , Walter R, Bennett A, Westminster College
4:45 PM	Effects of energetically costly mate searching on male mating success in a sexually cannibalistic spider. Ting JJ , Stoltz JA, Andrade MCB, University of Toronto Scarborough	Behavioral mechanisms for collective movement by ant colonies. Pratt S , Arizona State University	Repeatability of searching and memory in <i>Frontinella</i> spiders (Linyphiidae). Rodriguez RL , Gloudeman MD, Univ. of Wisconsin-Milwaukee
5:00 PM	Variation among environments in the reliability of a preferred male signal. Wagner Jr WE , Tolle AE, University of Nebraska		Learning capabilities enhanced in harsh environments: the role of inheritance. Roth TC , LaDage LD, Pravosudov VV, University of Nevada, Reno
5:15 PM	Effect of stress on reproduction and ornament development in female striped plateau lizards. Weiss SL , Mulligan EE, Kabelik D, University of Puget Sound		Interaction networks and foraging ecology in harvester ants. Gordon DM , Stanford University
5:30 PM	Condition-dependent complex courtship signals and corresponding female preferences in a wolf spider. Wilgers DJ , Hebets EA, University of Nebraska-Lincoln	Symposium Discussion. Pinter-Wollman , Stanford University	Social learning in juvenile big brown bats (<i>Eptesicus fuscus</i>). Spanjer Wright G , Wilkinson GS, Moss CF, University of Maryland College Park
5:45 PM	Costs of female counterstrategies to infanticide by males in wild langurs. Zhao Q , Borries C, Pan W, Peking University		Numerical competence in Grey parrots: Similarities to, and differences from, young children. Pepperberg IM , Carey S, Harvard University
6:00 PM		Poster Session B. 6-7:30PM Tidewater Rooms & Sadler Center lobby	
Eve	BANQUET		