

Jeff A. Johnson

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formal appointments

2014-present	Associate Professor, Department of Biological Sciences, Institute of Applied Sciences, University of North Texas
2012-present	Editor, journal of <i>Animal Conservation</i>
2008-present	Board Member, High Arctic Institute (www.higharctic.org)
2010-2011	Associate Editor, journal of <i>Animal Conservation</i>
2008-2014	Assistant Professor, Department of Biological Sciences, Institute of Applied Sciences, University of North Texas
2005-2008	Assistant Research Scientist (<i>evolution, ecology & genetics</i>), University of Michigan Museum of Zoology and The Peregrine Fund
2000-2002	Adjunct faculty (<i>science lecturer</i>), Milwaukee Institute of Art & Design
1998-99	Research Assistant (<i>DNA sequencing</i>), Genome Systems, St. Louis, MO
1998	Field Assistant (<i>avian biodiversity</i>), Smoky National Park, NC-TN
1997-98	Research Assistant (<i>whale skeleton preparation</i>), Os Company – North Carolina Natural History Museum, Raleigh, NC

formal education

Postdoctoral Fellow	2003-05	University of Michigan, Ann Arbor, Michigan
Ph.D. in Biology	1999-2003	University of Wisconsin-Milwaukee
M.S. in Zoology	1995-98	North Carolina State University, Raleigh, NC
B.S. in Biology	1991-95	Drury University, Springfield, MO

grants

2016-2017	NSF-Behavioral and Cognitive Sciences (\$55,069), <i>Title: The use of ancient DNA for interpreting predation and mammalian population dynamics (PI: Wolverton, coPI: Johnson)</i>
2016-2017	The Peregrine Fund (\$12,450), <i>Title: Temporal analysis of genetic diversity and effective population size of the south Texas Aplomado Falcon population (PI: Johnson)</i>
2016-2017	Texas Parks & Wildlife Department's Wildlife Diversity Program (\$59,320), <i>Title: Assessing the current distribution and taxonomic status of <i>Bombus sonorus</i> (<i>Bombus pensylvanicus sonorus</i>) in Texas. (PI: Atkinson, coPI: Johnson)</i>
2016-2017	Park Cities Quail (\$30,000), <i>Title: The influence of landscape features on the connectivity of northern bobwhite populations using landscape genetic methods. (PIs: Reyna, Johnson)</i>
2015-2017	TAMU AgriLife (\$67,799), <i>Title: Environmental neonicotinoid effects on Northern Bobwhites integrating functional measurements throughout their life history with genomic quantification, Renewal w/ addendum (PI: Reyna; coPI: Johnson, Crossley)</i>
2014-2016	Park Cities Quail (\$146,250), <i>Title: Prevalence of the lethal parasite <i>Baylisascaris procyonis</i> and implications for Northern Bobwhites (PI: Reyna; coPI: Johnson)</i>
2014-2016	Iowa Dept of Natural Resources (\$12,300), <i>Title: Genetic assessment of Greater Prairie-chicken translocation efforts (PI: Johnson)</i>
2014-2016	TAMU AgriLife (\$67,799), <i>Title: Environmental neonicotinoid effects on Northern Bobwhites integrating functional measurements throughout their life history with genomic quantification (PI: Reyna; coPI: Johnson, Crossley)</i>

- 2014-2015 TAMU AgriLife (\$120,328), *Title: Utility of soft-release technique for Northern Bobwhite while quantifying habitat and genetic diversity on release sites (PI: Reyna, Johnson)*
- 2014-2015 U.S. Fish & Wildlife Service Research Grant (\$53,200), *Title: Use of single nucleotide polymorphisms (SNPs) for reconstructing pedigrees (PI: Johnson)*
- 2013-2016 Island Conservation (\$17,890), *Title: Phylogeography of Galápagos short-eared owl (*Asio flammeus galapagonensis*) (PI: Johnson)*
- 2013-2014 Craighead Berengia South Research Grant (\$3,000), *Title: Using genetic data to discern the demographic history of greater sage-grouse in northwest Wyoming (PI: Johnson)*
- 2010-2014 NSF-Evolutionary Processes Program (\$266,000), *Title: Balancing selection and MHC variation in an endangered bird (PI: Dunn, Whittingham, Johnson)*
- 2011-2012 Big Horn Environmental Consultants (\$2,500), *Title: Connectivity of greater sage-grouse populations in northeast WY (PI: Johnson)*
- 2011-2012 Iowa Dept of Natural Resources (\$2,500), *Title: Population genetic assessment of the Iowa Greater Prairie-chicken population (PI: Johnson)*
- 2010 UNT Jr. Faculty Summer Fellowship (\$5,000), *Title: Bridging the gap between genotype and phenotype: influence of climate change on gyrfalcon plumage distribution and adaptation (PI: Johnson)*
- 2010 The Peregrine Fund Research Grant (\$10,000), *Title: Using genetics to investigate gyrfalcon nest site turnover over a 10-year period in western Greenland (PI: Johnson)*
- 2010-2013 U.S. Fish & Wildlife Service Research Grant (\$62,500), *Title: Proposal to determine the taxonomic distinctiveness of Attwater's prairie-chicken relative to other *Tympanuchus* grouse (PI: Johnson)*
- 2009 UNT Research Initiation Grant (\$7,500), *Title: Determining the levels of mercury contamination across avian trophic levels at Caddo Lake, Texas (PI: Johnson)*
- 2009-2011 Craighead Beringia South Research Grant (\$20,000), *Title: Greater Sage-Grouse population genetic structure (investigate degree of isolation of sage grouse in and around Jackson, WY) (PI: Johnson)*
- 2008 UNT Research Initiation Grant (\$5,000), *Title: Utility of SNPs in the estimation of effective population size (PI: Johnson)*
- 2008 Society of Tympanuchus Cupido Pinatus (\$14,000) (PI: Johnson)
- 2008 The Peregrine Fund Research Grant (\$10,000), *Title: Aplomado falcon population genetics of a reintroduced population (PI: Johnson)*
- 2006 U.S. Fish & Wildlife Service Research Grant (\$11,000), *Title: Population genetics of the endangered Attwater's prairie-chicken (PI: Johnson)*
- 2003-2007 The Peregrine Fund Research Grant (\$100,000), *Title: Conservation Genetics of diurnal birds of prey (PI: Mindell, Johnson)*
- 2003 U.S. Fish & Wildlife Service Research Grant (\$10,800), *Title: Population genetics of the endangered Attwater's prairie-chicken (PI: Johnson)*
- 2003 The Nature Conservancy Research Grant (\$10,000), *Title: Population genetics of the endangered Attwater's prairie-chicken (PI: Johnson)*
- 2002 NSF Dissertation Improvement Grant (\$9,500), *Title: Phylogeography of *Tympanuchus cupido* (PI: Dunn, Johnson)*
- 2002-2003 Society of Tympanuchus Cupido Pinnatus Research Grant (\$10,000), *Title: Population genetics of Wisconsin Greater Prairie-chicken (PI: Johnson)*
- 2000 American Ornithologists' Union Research Grant (\$2,500), *Title: Range wide survey of levels of genetic diversity among Greater Prairie-chicken populations throughout its distribution (PI: Johnson)*
- 2000-2001 Zoological Society of Milwaukee County Research Grant (\$5,000), *Title: Assessment of inbreeding levels in Greater Prairie-chicken (PI: Johnson)*

journal publications

- (52) Steeves TE, Johnson JA, Hale ML (2017) Maximizing evolutionary potential in functional proxies for extinct species: a conservation genetic perspective on de-extinction. *Functional Ecology* 31:1032-1040.
- (51) Gobeli A, Crossley II D, Johnson JA, Reyna K (2017) The effects of neonicotinoid exposure on embryonic development and organ mass in northern bobwhite quail (*Colinus virginianus*). *Comparative Biochemistry and Physiology Part C* 195:9-15.
- (50) Zhang Y, Simon SE, Johnson JA, Allen MS (2017) Spatial microbial composition along the gastrointestinal tract of captive Attwater's Prairie-chicken. *Microbial Ecology* 73:966-977.
- (49) Ribolli J, Hoehinghaus DJ, Johnson JA, Zaniboni-Filho E, de Freitas PD, Galetti PM Jr. (2017) Isolation-by-time population structure in potamodromous Dourado *Salminus brasiliensis* in southern Brazil. *Conservation Genetics* 18:67-76.
- (48) Johnson JA, Brown JW, Fuchs J, Mindell DP (2016) Multi-locus phylogenetic inference among New World Vultures (Aves: Cathartidae). *Molecular Phylogenetics and Evolution* 105:193-199.
- (47) Gordon IJ, Altwegg R, Evans DM, Ewen JG, Johnson JA, Pettorelli N, Young JK (2016) Reducing agricultural loss and food waste: how will nature fare? *Animal Conservation* 19:305-308.
- (46) Bateson ZW, Hammerly SC, Johnson JA, Morrow ME, Whittingham LA, Dunn PO (2016) Specific alleles at immune genes, rather than genome-wide heterozygosity, are related to immunity and survival in the critically endangered Attwater's Prairie-chicken. *Molecular Ecology* 25:4730-4744.
- (45) Johnson JA, Altwegg R, Evans DM, Ewen JG, Gordon IJ, Pettorelli N, Young JK (2016) Is there a future for genome-editing technologies in conservation? *Animal Conservation* 19:97-101.
- (44) Minias P, Bateson ZW, Whittingham LA, Johnson JA, Oyeler-McCance S, Dunn PO (2016) Contrasting evolutionary histories of MHC class I and class II loci in grouse – effects of selection and gene conversion. *Heredity* 116: 466-476.
- (43) Oyeler-McCance SJ, DeYoung RW, Fike JA, Hagan CA, Johnson JA, Larsson LC, Patten MA (2016) Rangwide genetic analysis of Lesser Prairie-chicken reveals population structure, range expansion, and possible introgression. *Conservation Genetics* 17:643-660.
- (42) Hammerly SC, de la Cerda DA, Bailey H, Johnson JA (2016) A pedigree gone bad: increased offspring survival after using DNA-based relatedness to minimize inbreeding in a captive population. *Animal Conservation* 19:296-303.
- (41) Bateson, ZW, Whittingham LA, Johnson JA, Dunn PO (2015) Contrasting patterns of selection and drift between two categories of immune genes in prairie-chickens. *Molecular Ecology* 24: 6095-6106.
- (40) Schulwitz SE, Chumchal MM, Johnson JA (2015) Mercury concentrations in birds from two atmospherically contaminated sites in north Texas, USA. *Archives of Environmental Contamination and Toxicology* 69: 390-398.
- (39) Galla SJ, Johnson JA (2015) Differential introgression and effective size of marker type influence phylogenetic inference of a recently divergent avian group (Phasianidae: *Tympanuchus*). *Molecular Phylogenetics and Evolution* 84:1-13.
- (38) Evans DM, Altwegg R, Garner TWJ, Gompper ME, Gordon IJ, Johnson JA, Pettorelli N (2015) Biodiversity offsetting: what are the challenges, opportunities and research priorities for animal conservation? *Animal Conservation* 18:1-3.
- (37) Fuchs J, Johnson JA, Mindell DP (2015) Rapid diversification of falcons (Aves: Falconidae) due to expansion of open habitats in the Late Miocene. *Molecular Phylogenetics and Evolution* 82:166-182.
- (36) Ishtiaq F, Prakash V, Green RE, Johnson JA (2015) Management implications of genetic studies for ex situ populations of three critically endangered Asian Gyps vultures. *Animal Conservation* 18:259-270.
- (35) Schulwitz S, Bedrosian B, Johnson JA (2014) Low neutral genetic diversity in an isolated greater sage-grouse (*Centrocercus urophasianus*) population in northwest Wyoming. *The Condor* 116:560-573.

- (34) Burnham KK, Sinnett DR, [Johnson JA](#), Burnham JL, Baroch J, Konkel BW (2014) New species records and changes in abundance of waterfowl in northwest Greenland. *Polar Biology* 37:1289-1300.
- (33) Beasley RR, Lance SL, Jones KL, Berry RB, [Johnson JA](#) (2014) Development of polymorphic microsatellite markers for the orange-breasted falcon (*Falco deiroleucus*). *Conservation Genetics Resources* 6:743-745.
- (32) Bateson ZW, Dunn PO, Hull SD, Henschen AE, [Johnson JA](#), Whittingham LA (2014) Genetic restoration of a threatened population of greater prairie-chickens. *Biological Conservation* 174:12-19.
- (31) Gordon IJ, Evans DM, Garner TWJ, Katzner T, Gompper ME, Altwegg R, Branch TA, [Johnson JA](#), Pettorelli N (2014) Enhancing communication between conservation biologists and conservation practitioners: Letters from the Conservation Front Line. *Animal Conservation* 17:1-2.
- (30) Hammerly SC, Morrow ME, [Johnson JA](#) (2013) A comparison of pedigree- and DNA-based measures for identifying inbreeding depression in the critically endangered Attwater's Prairie-chicken. *Molecular Ecology* 22:5313-5328.
- (29) Katzner T, [Johnson JA](#), Evans DM, Garner TWJ, Gompper ME, Altwegg R, Branch TA, Gordon IJ, Pettorelli N (2013) Challenges and opportunities for animal conservation from renewable energy development. *Animal Conservation* 16:367-369.
- (28) Pettorelli N, Evans DM, Garner TWJ, Katzner T, Gompper ME, Altwegg R, Branch TA, [Johnson JA](#), Acevedo-Whitehouse KA, DaVolls L, Rantanen E, Gordon IJ (2013) Addressing gender imbalances in Animal Conservation. *Animal Conservation* 16:131-133.
- (27) [Johnson JA](#), Burnham KK (2013) Timing of breeding and offspring number covary with plumage colour among Gyrfalcons *Falco rusticolus*. *Ibis* 155:177-188.
- (26) Burnham KK, [Johnson JA](#), Konkel B, Burnham JL (2012) Nesting common eider (*Somateria mollissima*) population quintuples in northwest Greenland. *Arctic* 65:456-464.
- (25) [Johnson JA](#), Ambers AD, Burnham KK (2012) Genetics of plumage color in the Gyrfalcon (*Falco rusticolus*): analysis of the melanocortin-1 receptor gene. *Journal of Heredity* 103:315-321.
- (24) Fuchs J, [Johnson JA](#), Mindell DP (2012) Molecular systematics of the caracaras and allies (Falconidae: Polyborinae) inferred from mitochondrial and nuclear sequence data. *Ibis* 154:520-532.
- (23) [Johnson JA](#) (2011) More than meets the eye: importance of recognizing life history and population structure in monitoring populations. *Animal Conservation* 14:333-335.
- (22) Bollmer JL, Ruder EA, [Johnson JA](#), Eimes J, Dunn PO (2011) Drift and selection influence geographic variation at immune loci of prairie-chickens. *Molecular Ecology* 20:4695-4706.
- (21) Fuchs J, Chen S, [Johnson JA](#), Mindell DP (2011) Pliocene diversification within the South American forest falcons (Falconidae: *Micrastur*). *Molecular Phylogenetics and Evolution* 60:398-407.
- (20) Pruett C, [Johnson JA](#), Larsson LC, Wolfe D, Patten M (2011) Low effective population size and survivorship in a grassland grouse. *Conservation Genetics* 12:1205-1214.
- (19) Eimes JA, Bollmer JL, Whittingham LA, [Johnson JA](#), van Oosterhout C, Dunn PO (2011) Rapid loss of MHC class II variation in a bottlenecked population is explained by drift and loss of copy number variation. *Journal of Evolutionary Biology* 24:1847-1856.
- (18) [Johnson JA](#), Talbot SL, Burnham KK, Brown JW, Maechtle TL, Seegar WS, Yates MA, Anderson B, Mindell D (2010) The use of genetics for the management of a recovering population: temporal assessment of migratory peregrine falcons in North America. *PLoS ONE* 5:e14042.
- (17) Lerner HRL, [Johnson JA](#), Lindsay AR, Kiff LF, Mindell DP (2009) It's not too late for the harpy eagle (*Harpia harpyja*): high levels of genetic diversity and differentiation can fuel conservation programs. *PLoS ONE* 4, e7336.
- (16) [Johnson JA](#), Tingay RE, Culver M, Hailer F, Clarke M, Mindell DP (2009) Long-term survival despite low genetic variability in the critically endangered Madagascar fish-eagle. *Molecular Ecology* 18,54-63.

- (15) Bouzat JL*, Johnson JA*, Toepfer JE, Simpson SA, Esker TL, Westemeier RL (2009) Beyond the beneficial effects of translocations as an effective tool for the genetic restoration of isolated populations. *Conservation Genetics* 10, 191-201 (*equal contribution)
- (14) Johnson JA, Gilbert M, Virani MZ, Asim M, Mindell DP (2008) Temporal genetic analysis of the critically endangered oriental white-backed vulture in Pakistan. *Biological Conservation* 141, 2403-2409.
- (13) Johnson JA (2008) Recent range expansion and divergence among North American prairie grouse. *Journal of Heredity* 99, 165-173.
- (12) Johnson JA, Burnham KK, Burnham WA, Mindell DP (2007) Genetic structure among continental and island populations of gyrfalcons. *Molecular Ecology* 16, 3145-3160.
- (11) Johnson JA, Thorstrom R, Mindell DP (2007) Systematics and conservation of the hook-billed kite including two island taxa from Cuba and Grenada. *Animal Conservation* 10, 349-359.
- (10) Johnson JA, Dunn PO, Bouzat JL (2007) Effects of recent population bottlenecks on reconstructing the demographic history of prairie-chickens. *Molecular Ecology* 16, 2203-2222.
- (9) Gilbert M, Watson RT, Ahmed S, Asim M, Johnson JA (2007) Vulture restaurants and their role in reducing diclofenac exposure in Asian vultures. *Bird Conservation International* 17, 63-77.
- (8) Johnson JA, Lerner HRL, Rasmussen PC, Mindell DP (2006) Systematics within *Gyps* vultures: a clade at risk. *BioMed Central Evolutionary Biology* 6, 65. [highly accessed]
- (7) Ross JD, Arndt AD, Smith RFC, Johnson JA, Bouzat JL (2006) Re-examination of the historical range of the greater prairie chicken using provenance data and DNA analysis of museum collections. *Conservation Genetics* 7, 735-750.
- (6) Johnson JA, Dunn PO (2006) Low genetic variation in the Heath Hen prior to extinction and implications for the conservation of prairie-chicken populations. *Conservation Genetics* 7, 37-48.
- (5) Johnson JA, Watson RT, Mindell DP (2005) Prioritizing species conservation: does the Cape Verde kite exist? *Proceedings of the Royal Society of London Series B* 272, 1365-1371. (selected by Faculty of 1000)
- (4) Johnson JA, Bellinger MR, Toepfer JE, Dunn PO (2004) Temporal changes in allele frequencies and low effective population size in greater prairie-chickens. *Molecular Ecology* 13, 2617-2630.
- (3) Johnson JA, Toepfer JE, Dunn PO (2003) Contrasting patterns of mitochondrial and microsatellite population structure in fragmented populations of greater prairie chickens. *Molecular Ecology* 12, 3335-3347.
- (2) Bellinger MR, Johnson JA, Toepfer JE, Dunn PO (2003) Loss of genetic diversity in Wisconsin greater prairie chickens following a population bottleneck in Wisconsin, USA. *Conservation Biology* 17, 717-724.
- (1) Johnson JA, Niedzlek-Feaver M (1998) A histological study on copulation duration, patterns of sperm transfer and organization inside the spermatheca of a grasshopper, *Dichromorpha viridis* (Scudder). *Journal of Orthoptera Research* 7, 139-146.

book chapter or book

- Burnham KK, Burnham WW, Newton I, Johnson JA, Gosler AG (2012) The history and range expansion of peregrine falcons in the Thule area, northwest Greenland. Museum Tusulanum Press (ISBN: 9788763539005)
- Johnson JA, Schroeder MA, Robb LA (2011) Greater Prairie-Chicken (*Tympanuchus cupido*), The Birds of North America (A. Poole, ed.). Ithaca: Cornell Lab of Ornithology.

proceedings

- Johnson JA, Burnham KK (2011) Population differentiation and adaptive selection on plumage color distributions in Gyrfalcons. In Watson RT, Cade TJ, Fuller M, Hunt G, Potapov E (Eds.). Gyrfalcons and Ptarmigan in a Changing World. The Peregrine Fund, Boise, Idaho, USA. <http://dx.doi.org/10.4080/gpcw.2011.0108>

reports

- Johnson JA (2016) Genetic assessment of levels of genetic variability in a greater prairie-chicken population in southern Iowa before and after translocation from Nebraska. Final Report to Iowa State University, Dr. Jennifer Vogel (14 Nov 2016)
- Galla SJ, Johnson JA (2013) Exploring the evolutionary distinctiveness of the Attwater's Prairie-chicken (*Tympanuchus cupido attwateri*) using multi-locus coalescent analyses. Final Report to US Fish & Wildlife Service (12 June 2013)
- Bouzat JL, Dunn PO, Haig S, Johnson JA, Oyler-McCance S, Sloss B, Swanson BJ (2013) 2013 Wisconsin greater prairie-chicken conservation genetics panel meeting – executive summary. Final Report to Wisconsin Dept of Natural Resources (01 Feb)
- Johnson JA (2012) Reassessment on levels of genetic variability in a greater prairie-chicken population in southern Iowa. Final report to Iowa Dept of Natural Resources.
- Johnson JA (2010) Temporal genetic assessment on levels of variability in Attwater's prairie-chicken relative to other *Tympanuchus* grouse. Final Report to US Fish & Wildlife Service (24 November).
- Johnson JA (2008) Population genetics of the reintroduced population of Greater Prairie-chicken in southwest Iowa. Final report to Iowa Dept of Natural Resources.
- Johnson JA (2006-present) Annual report on the conservation genetics of diurnal raptors concerning projects in collaboration with The Peregrine Fund.
- Bouzat JL, Dunn PO, Haig S, Johnson JA, Oyler-McCance S, Sloss BL, Swanson BJ (2005) Conservation genetics plan for the management and recovery of Greater Prairie-chickens in Wisconsin. Final Report to Wisconsin Dept of Natural Resources (9 January).
- Johnson JA (2004) Temporal genetic assessment on levels of variability in Attwater's Prairie-chicken. Final Report to US Fish & Wildlife Service (15 July).

awards or fellowships

- 2015 Visiting Erskine Fellowship, University of Canterbury, Christchurch, New Zealand.
- 2016 Elected Member of the American Ornithological Society

teaching experience

Formal lecture courses (all new courses that required development)

Principles in Evolution (UNT, MIAD), Conservation Biology (UNT), Ornithology (UNT), Topics in Conservation Biology (UNT), Molecular Ecology (UNT), Population Genetics (UNT), Molecular Phylogenetics (UNT), Landscape Genetics (UNT), Genetics (UNT), Environmental Science (MIAD),

Seminar Discussion-based courses (all new courses that required development)

Speciation (UNT), Genetic Diversity and Fitness (UNT), Population Genetics (UNT)

Field course

Tracing Darwin's Path Navarino Is., Chile (UNT)

Lab-based courses (indicate new course that required development)*

*Ornithology (UNT, UWM), *Evolution (UNT), *Phylogenetic Methods (UNT), General Biology (UWM, NCSU), Zoology (UWM), Botany (UWM), Comparative Anatomy, Histology and Embryology (NCSU)

community service

- 2015-16 Project Coordinator – Revive & Restore program for the extinct Heath Hen and endangered Attwater's Prairie-chicken
- 2008-16 Annual 5-Year Planning Meeting – The Peregrine Fund, Boise, ID
- 2005-16 Annual Attwater's Prairie-chicken Recovery Team meeting

- 2015 Prairie & Timber Audubon Society Chapter meeting, McKinney, TX; Title: *Conservation of the Attwater's Prairie-chicken and its future.*
- 2012 Texas Master Naturalist Elm Fork Chapter meeting, Denton, TX; Title: *Feeding adaptations in birds: the beak says it all*
- 2005 Wisconsin Dept. of Natural Resources, Madison, WI; Title: *Conservation of the Greater Prairie-chicken and its future in Wisconsin*
- 2002 Wisconsin Dept. of Natural Resources, Madison, WI; Title: *Genetic Variability in Wisconsin Greater Prairie-chicken populations*
- 2002 Riveredge Nature Center Ornithological Club, Newburg, WI; Title: *Conservation of the Greater Prairie-chicken*
- 2002 Natural History Seminar, Univ. of Kansas, Lawrence, KS; Title: *The effects of habitat fragmentation on genetic variability of Greater Prairie-chicken populations*
- 2001 Wisconsin Dept. of Natural Resources, Wisconsin Rapids, WI; Title: *Microsatellite DNA variability in a fragmented population*

award committees

- 2015 Graduate Student Research Award Committee at annual American Ornithologists' Union meeting (28 July – 2 August, University of Oklahoma, Norman, OK)
- 2010-13 Graduate Student Research Award Committee at UNT's Department of Biological Sciences Graduate Research Day
- 2013 Student Poster Award Committee at annual International Congress for Conservation Biology (21-25 July, Baltimore, MD)
- 2009 Graduate Student Research Award Committee at annual Raptor Research Foundation meeting (29 Sept – 4 Oct, Pitlochry Scotland)

conference proceedings

- Johnson JA, Athrey G, Adams R, Castoe T, & Novak B (2016) Heath Hen de-extinction: prospects and considerations based on whole genome analysis. North American Ornithological Conference, Aug 16-20, Washington DC.
- Bateson Z, Hammerly S, Johnson JA, Morrow M, Whittingham L, & Dunn PO (2016) What genes are important to immunity and survival in the endangered Attwater's Prairie-chicken? North American Ornithological Conference, Aug 16-20, Washington DC.
- Schulwitz S, Bedrosian B, Oylor-McCance S, & Johnson JA (2016) Timing of isolation of the Jackson Hole, Wyoming Greater Sage-grouse population. North American Ornithological Conference, Aug 16-20, Washington DC.
- Johnson JA, Novak B, Athrey G, Shapiro B, Phelan R, Brand S (2015) Whole genome sequence analysis reveals evolutionary history of extinct Heath Hen. International Grouse Symposium, 4-7 September, Reykjavik, Iceland.
- Schulwitz S, Castaño P, Campbell K, Johnson J (2015) Genetic distinctiveness of the Galápagos Short-eared Owl and implications for its conservation. American Ornithologists' Union Conference 28 July-2 August, University of Oklahoma, Norman, OK.
- Hammerly S, de la Cerda D, Bailey H, Johnson J (2015) A pedigree gone bad: increased offspring survival using DNA-based relatedness to minimize inbreeding in a captive population. American Ornithologists' Union Conference 28 July-2 August, University of Oklahoma, Norman, OK.
- Johnson JA, Novak B, Athrey G, Shapiro B, Phelan R, Brand S (2015) Whole genome sequence analysis reveals evolutionary history of extinct Heath Hen. American Ornithologists' Union Conference 28 July-2 August, University of Oklahoma, Norman, OK.
- Johnson JA, Fuchs J, Mindell DP (2014) Rapid diversification of falcons (Aves: Falconidae) due to expansion of open habitats in the Late Miocene. Raptor Research Foundation Conference. 24-28 September, Corpus Christi, TX.

- Galla S, Johnson JA (2014) Exploring the evolutionary distinctiveness of the Attwater's Prairie-chicken using multi-locus coalescent analyses. Texas Chapter of The Wildlife Society. 19-22 February, Austin, TX. ** best graduate student presentation award
- Hammerly SC, Johnson JA (2014) An evaluation of inbreeding, immunocompetence and survival in the critically endangered Attwater's Prairie-chicken. Texas Chapter of The Wildlife Society. 19-22 February, Austin, TX.
- Schulwitz SE, Bedrosian B, Johnson JA (2014) Identification of an isolated populations of Greater Sage-grouse in northwest Wyoming. Texas Chapter of The Wildlife Society. 19-22 February, Austin, TX.
- Johnson JA (2014) Using reduced representation genomic sequencing to characterize individual genetic diversity levels in the Attwater's Prairie-chicken. Texas Chapter of The Wildlife Society. 19-22 February, Austin, TX.
- Galla S, Johnson JA (2013) Acknowledging life history strategy in the choice of molecular marker for resolving phylogenetic relationships among recently divergent taxa. American Ornithologists Union. 12-17 August, Chicago, IL.
- Bateson ZW, Dunn PO, Hull SD, Henschen AE, Johnson JA, Whittingham LA (2013) Genetic restoration of a Greater Prairie-chicken population. American Ornithologists Union. 12-17 August, Chicago, IL.
- Johnson JA, Hammerly SC, Morrow ME (2013) A pedigree gone astray! Implications for the captive management of the critically endangered Attwater's Prairie-chicken. International Congress for Conservation Biology. 21-25 July, Baltimore, MD.
- Hammerly SC, Johnson JA (2013) Surviving in the wild: the role of inbreeding and immunocompetence in post-release survival of the critically endangered Attwater's Prairie-chicken. International Congress for Conservation Biology. 21-25 July, Baltimore, MD.
- Johnson JA (2012) Extinction of the heath hen: a long path with a dead-end. The Wildlife Society's 19th Annual Conference, 13-18 Oct, Portland, OR (invited speaker)
- Johnson JA, Burnham KK (2012) Timing of breeding covaries with plumage color among breeding Gyrfalcons in central-west Greenland. North American Ornithological Conference, 14-19 Aug, Vancouver, British Columbia, Canada
- Hammerly SC, Johnson JA, Dunn PO, Whittingham LA (2012) An evaluation of inbreeding and possible fitness consequences associated with immunocompetence and survival of the critically endangered Attwater's Prairie-chicken. North American Ornithological Conference 14-18 August, Vancouver, British Columbia, Canada
- Galla S, Johnson JA (2012) Exploring the evolutionary distinctiveness of the critically endangered Attwater's Prairie-chicken using coalescent multi-locus analyses. North American Ornithological Conference 14-18 August, Vancouver, British Columbia, Canada
- Schulwitz S, Bedrosian B, Johnson JA (2012) Isolated population of Greater Sage-grouse in northwest Wyoming revealed by microsatellite data. North American Ornithological Conference 14-18 August, Vancouver, British Columbia, Canada
- Johnson JA, Burnham KK (2011) Phylogeography and adaptive selection on plumage color distributions in the Gyrfalcon. Gyrfalcons and Ptarmigan in a Changing World. 1-3 February, Boise, ID.
- Johnson JA, Burnham KK (2011) Adaptive significance of plumage color in gyrfalcon. Society for the Study of Evolution 17-22 June, Norman, OK.
- Hammerly SC, Johnson JA (2011) Evaluation of inbreeding and potential fitness consequences in the captive breeding population of Attwater's Prairie-chicken. Society for the Study of Evolution 17-22 June, Norman, OK.
- Galla S, Johnson JA (2011) A multi-locus approach to investigate the demographic history of prairie grouse (Genus: *Tympanuchus*). Society for the Study of Evolution 17-22 June, Norman, OK.
- Eimes JA, Bollmer JL, Whittingham LA, Johnson JA, Van Oosterhout C, Dunn PO (2011) Rapid loss of MHC class II variation in a bottlenecked population is explained by drift and loss of copy number variation. Society for Molecular Evolution and Biology 26-30 July, Kyoto, Japan.

- Schulwitz SE, Chumchal MM, Burnham J, Burnham K, Johnson JA (2011) Comparison of mercury in birds at temperate, sub-Antarctic and Arctic locations. Ecological Society of America 7-12 August, Austin, TX.
- Larsson LC, Pruett CL, Johnson JA, Wolfe DH, Patten MA (2011) Low effective population size and survivorship in lesser prairie-chicken. The Wildlife Society's Annual Conference 5-10 Nov, Waikoloa, Hawaii.
- Burnham JL, Burnham K, Chumchal M, Johnson JA (2011) Quantification and spatial distribution of mercury in avian species of Northwest Greenland. Association of American Geographers Annual Meeting. 16 Apr, Seattle, WA.
- Schulwitz S, Steadman K, Chumchal M, Johnson JA (2010) Mercury in the Caddo Lake avian ecosystem. Texas Society for Ecological Restoration 5-7 November, Tyler, TX.
- Hammerly SC, Johnson JA (2010) Use of molecular techniques to evaluate the captive breeding program of the Attwater's prairie-chicken. American Ornithologists' Union 7-11 February, San Diego, CA.
- Eimes JA, Bollmer JL, Whittingham LA, Johnson JA, van Oosterhout C, Dunn PO (2010) Drift and gene conversion reduce MHC variation following a population bottleneck. Society for the Study of Evolution 25-29 June, Portland, OR.
- Johnson JA, Tingay RE (2009) Long-term survival despite low genetic variability in the critically endangered Madagascar fish-eagle. Raptor Research Foundation 29 Sept – 4 Oct, Pitlochry, Scotland.
- Johnson JA, Mindell DP (2007) *Temporal population genetic stability of Peregrine Falcons migrating through Padre Island, Texas*. American Ornithologists' Union. August 8-11, Laramie, WY.
- Johnson JA, Mindell DP (2006) *Vultures and hook-billed kites – phylogenetics and conservation*. 4th N.A. Ornithological Conference. Oct.3-7, Veracruz, Mexico
- Johnson JA, Burnham KK (2005) *Population genetic structure of a circumpolar species: the Gyrfalcon*. Raptor Research Foundation Ann. Meeting. Oct.12-16, Green Bay, WI.
- Johnson JA, Bouzat JL, Toepfer JE (2005) *Genetics and prairie grouse: lessons learned & recommendations for their conservation*. Proceedings of the 26th Prairie Grouse Technical Council. Sept. 19-23, Valentine, NE.
- Johnson JA, Mindell DP (2004) *Milvine kite systematics and genetic distinctiveness of the endangered Cape Verde Kite*. Society for the Study of Evolution. June 26-30, Forth Collins, CO.
- Johnson JA, Dunn PO (2003) *The effects of habitat fragmentation on levels of genetic variability in populations of greater prairie chickens over a fifty-year period*. Society for Conservation Biology. June 28-July 2, Duluth, MN.
- Johnson JA, Dunn PO (2003) *Genetic signature of the extinct Heath Hen*. American Ornithologists' Union. August 6-9, Champaign-Urbana, IL.
- Johnson JA, Dunn PO (2003) *Loss of genetic variation in greater prairie chickens over a 50year period in Wisconsin*. Proceedings of the 25th Prairie Grouse Technical Council. Sept. 29-Oct. 3, Siren, Wisconsin.
- Johnson JA, Dunn PO (2002) *Conservation genetics of the greater prairie chicken*. Society for the Study of Evolution. June 28-July 2, Urbana, IL.
- Johnson JA, Dunn PO (2002) *Population genetics of the greater prairie chicken*. North American Ornithological Conference. Sept. 24-28, New Orleans, LA.
- Johnson JA, Bellinger MR, Toepfer JE, Dunn PO (2001) *Levels of genetic variability among fragmented populations of greater prairie chickens*. Prairie Grouse Technical Council. Nov 5-8, Woodward, OK.
- Johnson JA (2001) *Range-wide survey of levels of genetic variability among fragmented populations of greater prairie chicken*. American Ornithologists' Union. August 15-18, Seattle, WA

invited seminars

- 2016 Uppsala University (Uppsala, Sweden, 15 Sept), Title: Phylogenomics of the Heath Hen and its possible de-extinction.
University of Wyoming (Laramie, WY, 7 Oct), Title: Phylogenetics of the prairie-grouse, Genus: *Tympanuchus*.

- 2015 University of Canterbury (Christchurch, NZ, June), Title: Reinforcement's Dripping Faucet – implications for discerning phylogenetic relationships among North American prairie grouse (*Tympanuchus*) and possible de-extinction of the Heath Hen.
- 2015 University of North Texas (Denton, TX, 04 Dec), Title: Phylogenomics of the Heath Hen and its possible de-extinction.
- 2014 Texas State University – San Marcos (San Marcos, TX, 28 Feb), Title: A Grouse and Men: a tale of understanding (science) in an effort to prevent the extinction of the Attwater's Prairie-chicken.
- 2012 University of Texas - Arlington (Arlington, TX, 04 Oct), Title: Living in the Arctic: the role of plumage color in Gyrfalcon adaptation
- 2011 Augustana Center for Polar Studies Seminar (Rock Island, Illinois, 28 April), Title: Adaptive Significance of White Plumage Color in High Arctic Gyrfalcons
- 2011 Augustana College (Rock Island, Illinois, 29 April), Title: Long-term survival despite low genetic variability in the critically endangered Madagascar fish-eagle
- 2009 Smithsonian Institute, The National Zoo (Washington D.C., 9-11 April), Title: Bottlenecking grouse: influence of population decline on estimates of demographic history
- 2009 Attwater's Prairie-chicken Recovery Team meeting (Sealy, TX, 5-6 Feb), Title: Attwater's Prairie-chicken genetic distinctiveness
- 2008 UNT Dept of Biological Sciences' departmental seminar (19 Sept), Title: Influence of migratory patterns on arctic falcon population structure

professional memberships Society for Conservation Biology, Society for the Study of Evolution, American Ornithologists' Union, American Genetic Association, Raptor Research Foundation, Wildlife Society

reviews for: *Molecular Ecology, Evolution, Conservation Biology, Journal of Heredity, Genetica, Journal of Biogeography, Systematic Biology, Molecular Phylogenetics and Evolution, Heredity, Auk, Condor, Ibis, Avian Biology, Animal Conservation, Biological Conservation, Conservation Genetics, Proceedings of the Royal Society of London B, Biology Letters, Ecography, Emu, Oryx, Journal of Raptor Research, Journal of Ethnobiology, Ornithological Monographs, Biochemical Systematics & Evolution, PLoS ONE, BMC Research Notes, Comparative Biochemistry and Physiology*

Grant reviews: NSF, USGS, USFWS, Rannsóknamiðstöð Íslands [Icelandic Centre for Research], Estonia Science Foundation

graduate students advised

Ph.D. chaired committees:

Amy Eddins (projected completion date: Spring 2018)

Pradeep Khanal (projected completion date: Spring 2019)

MS chaired committees:

Alex Stock (projected completion date: Spring 2017)

Ph.D. committees:

Jeff Mabe, Heather Perry, Jeff Whitt, Amy Wynia, Rocio Jara Millar, Ramiro Crego, Ashleigh Tynes

MS committees:

Caitlin Thomas

completed Ph.D. and M.S. committees:

Kelly Reyna, Dept of Biological Sciences; PhD Dissertation: Thermal stress during pre-incubation induces subsequent developmental plasticity in northern bobwhites (2010) – role: committee member

Karista Hudelson, Dept. of Biological Sciences; MS Thesis: Ultraviolet radiation tolerance in high elevation copepods from the Rocky Mountains of Colorado (2011) – role: committee member

Sarah Schulwitz, Dept. of Biological Sciences; MS Thesis: Detection of mercury among avian trophic levels at Caddo Lake and Lake Lewisville, TX (2012) – role: primary advisor

Brannon Barr, Institute of Applied Sciences; MS Thesis: Environmental determinates of body size in white-tailed deer spatial scale considerations, population density, and habitat characteristics (2012) – role: committee member

Sarah Hammontree, Dept of Biological Sciences; MS Thesis: Evaluating the habitat requirements of the Golden Orb Mussel (*Quadrula aurea*) for conservation purposes (2012) – role: committee member

Stephanie Galla, Dept of Biological Sciences; MS Thesis: Exploring the evolutionary history of North American prairie grouse (Genus: *Tympanuchus*) using multi-locus coalescent analyses (2013) – role: primary advisor

Shiho Matsubayashi, Institute of Applied Sciences, PhD Dissertation: Quantifying forest vertical structure to determine bird habitat quality in the Greenbelt corridor, Denton (2013) – role: committee member

Stephanie Simon, Dept of Biological Sciences; MS Thesis: Cloacal microbiota of captive-bred and wild Attwater's Prairie-chicken, *Tympanuchus cupido attwateri* (2014) – role: committee member

Susan Hammerly, Dept of Biological Sciences; PhD Dissertation: The effects of inbreeding on fitness traits in the critically endangered Attwater's Prairie-chicken (2014) – role: primary advisor

Ana Hoenighaus, Dept of Biological Sciences; PhD Dissertation: Thresholds and legacy effects of tropical floodplain fish assemblages in response to flood attributes (2015) – role: committee member

Lucas Driver, Dept of Biological Sciences; PhD Dissertation: Dynamics of stream fish metacommunities in response to drought and re-connectivity (2015) – role: committee member

Catherine Connon, Dept of Biological Sciences; PhD Dissertation: Improving processing efficiency for forensic DNA samples (2015) – role: committee member

Jessica Beckham, Dept of Biological Sciences; PhD Dissertation: An investigation into the conservation of declining bumblebees (Hymenoptera: Apidae) in urban spaces of Denton County, Texas (2016) – role: committee member

Amanda Gobeli, Dept of Biological Sciences; MS Thesis: The effects of neonicotenoid exposure on embryonic development and organ mass in northern bobwhite quail (2016)

Lauren Pulliam, Dept of Biological Sciences; MS Thesis: Biodiversity and genetic structure of benthic macroinvertebrates along an altitudinal gradient: a comparison of the Windhond and Róbaló River communities on Navarino Island, Chile (2016) – role: committee member

Sarah Schulwitz, Dept of Biological Sciences; PhD Dissertation: Informing conservation management using genetic approaches: Greater Sage-grouse and Galápagos Short-eared Owls (2016) – role: primary advisor