University of Idaho

NAME: Lisette P. Waits

DATE: 10/24/20

RANK OR TITLE: Distinguished Professor

DEPARTMENT: Fish and Wildlife Sciences

OFFICE LOCATION AND CAMPUS ZIP: CNR 103D, 1136 WEB:<u>http://www.uidaho.edu/cnr/fishwild/lisettewaits</u> FAX: (208) 885 - 9080 EMAIL: lwaits@uidaho.edu

DATE OF FIRST EMPLOYMENT AT UI: November 1997

DATE OF TENURE: 2003

DATE OF PRESENT RANK OR TITLE: 2015

EDUCATION BEYOND HIGH SCHOOL:

PhD (Genetics), 1996, University of Utah, Salt Lake City, Utah BS (Genetics), 1991, University of Georgia, Athens, Georgia

EXPERIENCE:

Teaching, Extension and Research Appointments:

November 1997 - current, Professor, Department of Fish and Wildlife

August 1997 - current, Environmental Science Faculty member

August 2000 - current, Bioinformatics program Faculty member

August 2001 - current, Affiliate faculty, CATIE, Costa Rica

May 1996 – Sept 1997, Postdoctoral Fellow, Laboratoire de Biologie des Populations d'Altitude, Universite Joseph Fourier, France

February 1996 – April 1996, Postdoctoral Fellow, Department of Human Genetics, Univ. of Utah

August 1991 – January 1996, Research Assistant, Department of Human Genetics, Univ. of Utah

2015- current, International Union for Conservation of Nature (IUCN) Conservation Genetics North American Working Group

Academic Administrative Appointments:

July 2014 – current Department Head Fish and Wildlife Sciences, University of Idaho

July 2016- current IUCN SSC Conservation Genetics Specialist Group

July 2004 – 2007 – Co-founder and Co-Director of UI Center for Research on Invasive Species and Small Populations

- August 1999 December 2001 Co-Director and Co-founder Natural Resources Ecology and Conservation Biology Undergraduate Program in College of Natural Resources
- January 1998 2001 Co-Founder and Co-Director of Laboratory for Ecological, Evolutionary and Conservation Genetics

TEACHING ACCOMPLISHMENTS:

Areas of Specialization: Conservation Biology/Conservation Genetics/Landscape Genetics

Courses Developed and Taught at UI:

Fish and Wildlife Applications, WLF201, 2016-20120, 1 cr, enrollment ~58 Conservation Biology, WLF440, 1998 – 2014, 3 cr, enrollment ~ 55 Conservation Genetics, WLF540, 1999 – 2020, 3-4 cr, enrollment ~ 30 Landscape Genetics, WLF 561, 2006 – 2020, 2-4 cr, ~15 enrollment Advanced Topics in Conservation Biology, WLF515, 1999, 3 cr, enrollment 10 Ecuador Summer Research Planning, WLF 499/502, 2011-2017, 1 cr, enrollment 8 Ecology and Conservation Biology Seminar, WLF200, 1999 – 2001, 1 cr, enrollment ~15 Integrated Natural Resource Problem Solving, WLF470, 1999 - 2000, 3 cr, enrollment ~40 Microsatellite Analysis Seminar, WLF503, 2000, 1 cr, enrollment, 11 Gene Flow Seminar, WLF503, 2001, 1 cr, enrollment 14 New Wild West, Core 101/102, 2001-2002, 3 –4 credit, enrollment ~30 Interdisciplinary Research Methods, WLF504, 2002 – 2012, 2 cr, enrollment ~10 Spatial Methods in Ecology and Conservation, 2008, 3 cr, enrollment 11 Space Matters Seminar, WLF503, 2008, 1 cr, enrollment 22

Students Advised:

Undergraduate Students: (~20 per year in Wildlife and Conservation Biology), ~2-4 per year in undergraduate research projects.

Graduate Students:

2020 - present, Elise Gosselin, Ecology, systematics and genetics of Galapagos bats

- 2019-present, Victor Manuel Santiago Plata, Landscape genetics of neotropical otters
- 2019- present, Molly Garrett, PhD, Landscape and community genomics of animal taxa in sagebrush ecosystems
- 2019 present, Elise Stacy, MS, Landscape genetics of wolverines in Alaska
- 2019 present, Lukas Grossfurthner, PhD, Phylogeography and landscape genomics of sagebrush
- 2018 present, Cameron Macias, MS, Cougar and bobcat occupancy and abundance
- 2017 present, Manoj Bhusal, MS, Red panda occupancy in Langtang NP, Nepal

- 2016 present, Stacey Nerkowski, PhD, Pygmy rabbit genetic monitoring
- 2000 present, Bill Leacock, PhD, Genetic structure of Kamchatka brown bears
- 2007 2017, Paulina Viteri, PhD, Conservation biology/genetics of Andean bears
- 2019 2020, Robert Deeble, MS, Env Sci (non-thesis)
- 2018 2019, Kevin O'Conner, MS, Env Sci (non-thesis)
- 2017 2019, Ashley Banta, MS, Env Sci (non-thesis)
- 2017 2018, Amanda Siedler, MS, Env Sci (non-thesis)
- 2017 2018, LaDonn Robbins, MS, Env Sci (non-thesis)
- 2017 2018, Laura Laurino, Masters in Natural Resources (non-thesis)
- 2017 2018, Chris Handel, MS Env Sci (non-thesis)
- 2017 2018, Bart George, Masters in Natural Resources (non-thesis)
- 2016 2019, Heather Clendenin, MS, Gray wolf genetic monitoring
- 2015 2019, Roberto Salom Perez, PhD, Connectivity of medium and large size mammals through biological corridors in Costa Rica

2012 – 2015, Susannah Woodruff, PhD, Non-invasive genetic monitoring of endangered Sonoran pronghorn

2012-2015, Robert Lonsinger, PhD, Non-invasive genetic monitoring of kit fox and coyote

2011- 2016, Paul Rhodes (co-advised, Sanford Eigenbrode), PhD, Evaluating bee diversity and landscape genetics in Palouse prairie fragments

2011 – 2015, Stephanie DeMay (co-advised, Janet Rachlow), PhD, Non-invasive genetic monitoring of the endangered Washington pygmy rabbit

2010 – 2016, Andre Sanfiorenzo, PhD, Functional connectivity of understory trees in the San Juan/La Selva biological corridor, Costa Rica

2010 – 2016, Kate Cleary, PhD, Functional connectivity of bats in the San Juan/La Selva biological corridor, Costa Rica

2009-2014, Matt Mumma, PhD, Non-invasive genetic monitoring of carnivores in Newfoundland

2010 - 2014, Joel Tebbencamp (co-advised, Kerry Reese), MS, Sage grouse genetic diversity and connectivity

2009 - 2012, Carisa Stansbury, MS, Gray wolf population monitoring

- 2007 2011, Justin Bohling, PhD, Evaluating the red wolf/coyote hybrid zone
- 2007 2009, Jennifer Stenglein, MS, Fecal DNA monitoring of gray wolves
- 2005 2009, Niko Balkenhol, PhD, Landscape genetic theory and applications
- 2003 2009, Caren Goldberg, PhD, Amphibian ecology and landscape genetics
- 2002 2009, Marta DeBarba, PhD Non-invasive genetic sampling of Italian brown bears
- 2005 2007, Jessica Hoisington, MS, Landscape genetics/systematics ground squirrels
- 2004 2007, Kara Gebhardt, MS, Peruvian Macaw genetics
- 2004 2007, Paulina Viteri, MS, Population size and genetic diversity of Andean bears
- 2004 2006, Stacie Robinson, MS, Kenai black bear population structure
- 2002 2006, Jennifer Adams, PhD, Red wolf genetics
- 2000 2002, Christine Cegelski, MS, Genetic diversity and structure in wolverines
- 1999 2002, Jennifer Adams, MS, Non-invasive detection of hybridization in red wolves

1998 – 2003, Craig Miller, PhD, Evaluation of historical levels and patterns of genetic diversity of brown bears

1998 – 2002, David Roon, PhD, Non-invasive genetic tracking of brown bears and black bears (switched to Oz Garton Spring 2002, graduated spring 2003)

1998 – 2001, Melanie Murphy, MS, Fecal DNA analysis of brown bears.

PostDoctoral Researchers Mentored

Kim Andrews, David Onorato, Caren Goldberg, Steve Spear, Jennifer Adams

Undergraduate Research Projects:

Academic Year 1998 – Angie Grosland, Environmental Science 1998 – Jay Shepard, Wildlife 1998 – 1999, Sarah Jo Congelton, Zoology 1999 – 2000, Dan Sullivan, Wildlife 2000 – 2002, Chris McDaniel 2000 – 2002, Crystal Strobel 2000 – 2002, Robyn Januszewski 2002 – 2006, Adair Muth 2003 – 2006, Jon Keehner 2004 – 2007, Shiela Arias 2005 – Ricky Perez, Env Sci

2006 - 2006, Gavin Tyler

2006 - 2008, Sean Howard 2007 - Adam Schmoeger, Env Sci 2007 – Noel Sanyal, Env Sci 2007 – 2008 Joe Holbrook, Wildlife 2008 – 2009 Mike Callen, Env Sci 2008 – 2009, Michelle Meredith, Env Sci 2008 - 2010, Jack Torresdal 2009 - 2010, Danelle Russell 2010 – 2011, Shannon Torstrom 2011 – 2013, Rebecca Johnson 2012 – 2013, Rhianna Hohbein 2013 – 2014, Paige Byerly 2013 – 2014, Genevieve Pugesek 2014 - 2015, Elyce Gosselin 2015 – 2016, Lauren Turner 2017 – 2018, Aspen Welker 2017 – 2018, Austin Dupuis 2018 - 2019, Chloe Beall 2018 - 2019, Lydia Druin Summer Research Experience for Undergraduates

> 2019, Veronica Bridges 2018, Taylor Azizeh 2018, Megean Myers 2017, Elyce Gosselin 2017, Aspen Welker 2017, Austin Dupuis 2014, Jens Johnson 2014, Chelsea Sink 2013, Mikki Brinkmeyer 2010, Dustin Houghton 2009, Wilfredo Linero 2006, Jay Loveland 2006, Connor Williams 2004, Ramona Flatz 2003, Miranda Thomas 2003, Dustene Cummings 2003, Becky Ternes 2002, Mark Couture 2002, Theresia Radtke 2001, Joe Chivaro 2000, Laura Fairham 2000, Jonathan Teeters 2000, Andrea Bristol 1999, Carol Perugini 1999, Dan Sullivan 1998, Amy Campbell

Graduate Committee Involvement

2019 - present, Lacy Dolan, PhD, Wildlife, Mississippi State University

- 2019 present, Peter Rebholtz, MS, Natural Resources
- 2019 present, Stuart Featherson, MS, Wildife, S. Dakota State
- 2018 present, Valerie Stephan, PhD, Env Sci
- 2018 present, Ty Styl, PhD, Biology
- 2018 present, Kevin Lamp, MS, Wildlife Ecology, University of Delaware
- 2017 2019, Catilin Kuperman, MS, Natural Resources
- 2016 present, Odbayar Tumendemberel, PhD, Norwegian University of Life Sciences
- 2016 2017, Lindsay Welfelt, MS, Natural Resources, WSU
- 2016 present, Travis King, PhD, Zoology, WSU
- 2015 2018, Sarah Hendricks, PhD, Bioinformatics
- 2013 2018, Erin Poor, PhD, Virgina Tech
- 2012 present, Chris Baugher, PhD, Plant Soil and Entomological Science
- 2015 2017, Sarah Bassing, MS, Univ Montana
- 2015 2017, John Draper, MS, Auburn
- 2010 present, Denim Jochimsen, PhD, Biology
- 2012 2016, Steven Micheletti, PhD, Zoology, WSU
- 2013 2015, Stephanie Graham, MS, Auburn
- 2011 2015, Dana Morin, PhD, Wildlife, Virginia Tech
- 2010 2014, Sarah Emel, PhD, Zoology, WSU
- 2010 2015, Daryl Trumbo, PhD, Zoology, WSU
- 2008 2013, Brice Sarver, PhD, Biology
- 2012 2015, Amy Klegarth, PhD, Biology, Notre Dame
- 2010 2014, Nathan Borg, MS, Wildlife, Univ of Montana
- 2007 2013, Claudia Wultsch, PhD, Wildlife, Virginia Tech
- 2010 2012, Barbara Fanin, MS, Wildlife, Univ of Montana
- 2007 2012, Justin Teisberg, PHD, Zoology, WSU
- 2007 2012, Doni Schwalm, PhD, Wildlife, Texas Tech
- 2005 2012, Dana Wiegel, PhD, Fisheries
- 2005 2012, Tom Thompson, PhD, Wildlife
- 2009 2011, Indrani Sasmal, PhD, South Dakota State
- 2002 2011, Pete Bloom, PhD, Fish and Wildlife
- 2004 2008, Hua Feng, PhD, Statistics
- 2005 2009, Steve Spear, PhD, Zoology, Washington State University
- 2004 2010, Stacey Dunn, PhD, Biology
- 2003 2010, Jan Schipper, PhD, Fish and Wildlife
- 2005 2008, Sarah Hird, MS, Biology
- 2006 2008 Tom Gieson, PhD, Environmental Science
- 2003 2007, Gabe Colbeck, MS, Zoology (WSU)
- 2003 2008, Wendy Estes-Zump, PhD, Fish and Wildlife
- 2006 2007, Judy Morgan, WSU, PhD Zoology
- 2005 2007, Shannon Knapp, PhD, Statistics, Purdue University
- 2004 2007, Shannon Donovan, PhD, Environmental Science
- 2004 2006, Thor Hansen, PhD, Forest Resources
- 2003 2004, Leslie Davis, MS, Zoology (WSU)
- 2002 2004, Barley Hyde, MS, Biology
- 2002 2003, Wayde Morse, PhD, Resource Recreation and Tourism
- 2001 2004 Alisse Garner, MS Wildlife
- 2001 2004, Jason Hicks, MS Wildlife
- 2001 2006, Fernando Azevedo, PhD Wildlife
- 2000 2002 Luigi Mairano, PhD Wildlife
- 2000 2004, Holly Gates, Resource Recreation and Tourism
- 2000 2003 Hua Feng, Statistics

2000 – 2001, Fran Bonier, MS Biology
2000 – 2002, Chad VanOrmer, MS Resource Recreation and Tourism
1999 – 2002, Kim Romain, MS Wildlife (WSU)
1998 – 2000, Marilyn Neilson, MS Fisheries
1998 – 2002, Matt Carling, MS Biology
1997 – 2002, Paul Anders, PhD Fisheries

Mentoring International Scientists

Daniela Arias, Ecuador (Spring 2014) Odbayar Tumendemberel, Mongolia (Fall 2013, Spring 2014) Jivan Shakya, Nepal (Fall 2011) Sulochana Manandhar, Nepal (Fall 2011) Kanchan Thapa, Nepal (Summer 2010) Rodrigo Ciscernos, Ecuador (Fall 2007 – Fall 2010) Tomaz Skrbinsek, Slovenia (Spring 2006) Paulina Viteri, Ecuador (Fall 1999, Summer 2001, Spring – Fall 2003) Igor Khorozyan, Armenia (Spring 2001) Marta DeBarba, Italy (Summer 2001 – Spring 2002)

Non-credit Classes, Workshops, Seminars, etc.:

Conservation Genetics for Natural Resource Managers 2001 - 2010

Education Meeting Presentations

Waits, LP (2000). Student assessment of alternative learning tools. University Education in Natural Resources. Columbia, MO

Waits, LP, K. Launchbaugh, B. McLaughlin, J. Force, and A. Campbell (2000) Re-designing a capstone course in integrated natural resource problem solving: a team approach. University Education in Natural Resources. Columbia, MO.

Waits, LP, NA Bosque-Pérez NA, PZ Klos, JE Force, LP Waits, K Cleary, P Rhoades, SM Galbraith, AL Bentley Brymer, M O'Rourke, SD Eigenbrode, B Finegan, JD Wulfhorst, N Sibelet, JD Holbrook (2016) A pedagogical model for team-based interdisciplinary doctoral education. University Education in Natural Resources. Steven Point, WI.

SCHOLARSHIP ACCOMPLISHMENTS:

Refereed Publications

<u>Published or in press</u> * denotes graduate student author, ^ denotes undergraduate student author

232. Hoban, S., Bruford, M., Jackson, J. D. U., Lopes-Fernandes, M., Heuertz, M., Hohenlohe, P. A., LP Waits... & Aitken, S. (2020). Genetic diversity targets and indicators in the CBD post-2020 Global Biodiversity Framework must be improved. *Biological Conservation*, *248*, 108654.

231. Ausband, DE, LP Waits. (2020). Does harvest affect genetic diversity in grey wolves? Molecular Ecology, 29:3187-3195.

evolution. 10:7627-7643.

- 229. Balkenhol N*, MK Schwartz, RM Inman, JP Copeland, JS Squires, NJ Anderson, LP Waits (2020) Landscape genetics of wolverines (*Gulo gulo*): Scale-dependent effects of bio-climatic, topographic and anthropogenic variables. Journal of Mammalogy 101:790-803.
- 228. Clendenin* HR, JR Adams, DE Ausband, JA Hayden, PA Hohenlohe, LP Waits (2020) Combing harvest and genetics to estimate reproduction in wolves. Journal of Wildlife Management 84:492-504.
- 227. Wirsing AJ, TP Quinn, JR Adams, LP Waits (2020) Optimizing selection of brown bear hair for noninvasive genetic analysis. Wildlife Society Bulletin 44:94-100.
- 226. Weigel DE, JR Adams, MA Jepson, LP Waits, CC Caudill (2019) Introgressive Hybridization Between Native and Non-local Steelhead (Oncorhynchus mykiss). Aquatic Conservation: Marine and Freshwater Ecosystems 29(2), 292-302.
- 225. Morin DJ, SD Higdon, RC Lonsinger, EN Gosselin, MJ Kelly, LP Waits (2019) Comparing Methods of Estimating Carnivore Diets with Uncertainty and Imperfect Detection. Wildlife Society Bulletin 43:651-660.
- 224. Mumma MA, G Bastille-Rousseau, SE Gullage, CE Soulliere, SP Mahoney, LP Waits (2019) Intrinsic traits of woodland caribou *Rangifer tarandus* caribou calves depredated by black bears *Ursus americanus* and coyotes *Canis latrans*. Wildlife Biology 1.
- 223. Seaborn T, SS Hauser, L Konrade, LP Waits, CS Goldberg (2019) Landscape genetic inferences vary with sampling scenario for a pond-breeding amphibian. Ecology and evolution. 9(9):5063-5078.
- 222. Lonsinger RC, D Daniel, JR Adams, LP Waits (2019) Consideration of sample source for establishing reliable genetic microsatellite data from mammalian carnivore specimens held in natural history collections. Journal of Mammalogy. 100(5):1678-89.
- 221. Tumendemberel O, Zedrosser A, Proctor MF, Reynolds HV, Adams JR, Sullivan JM, Jacobs SJ, Khorloojav T, Tserenbataa T, Batmunkh M, Swenson JE, LP Waits (2019) Phylogeography, genetic diversity, and connectivity of brown bear populations in Central Asia. PloS one. 14(8): e0220746
- 220. Nathan LR, N Mamoozadeh, HR Tumas, S Gunselman, K Klass, A Metcalfe, C Edge, LP Waits, P Spruell, E Lowery, E Connor (2019) A spatially-explicit, individual-based demogenetic simulation framework for evaluating hybridization dynamics. Ecological Modelling 401:40-51.
- 219. Karmacharya D, P Manandhar, S Manandhar, AM Sherchan, AN Sharma, J Joshi, M Bista, S Bajracharya, NP Awasthi, N Sharma, B Llewellyn, LP Waits et al. (2019) Gut microbiota and their putative metabolic functions in fragmented Bengal tiger population of Nepal. PloS one. 14(8): e0221868

- 218. Bassing SB, DE Ausband, MS Mitchell, P Lukacs, A Keever, G Hale, & LP Waits. (2019). Stable pack abundance and distribution in a harvested wolf population. Journal of Wildlife Management *83*: 577-590.
- 217. Monterroso P, R Godinho, T Oliveira, P Ferreras, MJ Kelly, DJ Morin, LP Waits, PC Alves, LS Mills (2019) Feeding ecological knowledge: the underutilised power of faecal DNA approaches for carnivore diet analysis. Mammal Review 49: 97-112.
- 216. Lonsinger* R, Lukacs, P, Gese, E, Knight, R, Waits, L (2018) Estimating densities for sympatric kit foxes (Vulpes macrotis) and coyotes (Canis latrans) using noninvasive genetic sampling. Canadian Journal of Zoology 96: 1080–1089.
- 215. Lonsinger* RC, JR Adams, LP Waits (2018). Evaluating effective population size and genetic diversity of a declining kit fox population using contemporary and historical specimens. Ecology and Evolution 8:12011-12021.
- 214. Murphy SM, BC Augustine, JR Adams, LP Waits, JJ Cox (2018). Integrating multiple genetic detection methods to estimate population density of social and territorial carnivores. Ecosphere, 9: e02479.
- 213. Murphy, S. M., Adams, J. R., Cox, J. J., & Waits, L. P. (2018). Substantial red wolf genetic ancestry persists in wild canids of southwestern Louisiana. Conservation Letters, e12621.
- 212. Wirsing AJ, TP Quinn, CJ Cunningham, JR Adams, AD Craig, LP Waits (2018). Alaskan brown bears (Ursus arctos) aggregate and display fidelity to foraging neighborhoods while preying on Pacific salmon along small streams. Ecology and Evolution 8: 9048-9061.
- 211. Karmacharya D, AM Sherchan, S Dulal, P Manandhar, S Manandhar, J Joshi, S Bhattarai, TR Bhatta, N Awasthi, AN Sharma, M Bista, NR Silwal, P Pokharel, RR Lamichhane, N Sharma, B Llewellyn, MJ Kelly, D Gour, LP Waits, JM Hero, J Hughes (2018) Species, sex and geo-location identification of seized tiger (Panthera tigris tigris) parts in Nepal- a molecular forensic approach. PLOS one 13(8):e0201639.
- 210. Andrews K.R., De Barba M., Russello M.A., Waits L.P. (2018) Advances in Using Noninvasive, Archival, and Environmental Samples for Population Genomic Studies. In: . Population Genomics. Springer, Cham. https://doi.org/10.1007/13836_2018_45
- 209. Andrews KR, JR Adams, EF Cassirer, RK Plowright, C Gardner, M Dwire, PA Hohenlohe, LP Waits (2018) A bioinformatic pipeline for identifying informative SNP panels for parentage assignment from RADseq data. Molecular Ecology Resources 18:1263-1281.
- 208. Hendricks^{*} SA, RM Schweizer, RJ Harrigan, JP Pollinger, R Brown, K Mansfield, JR Adams, LP Waits, BM vonHoldt, PA Hohenlohe, RK Wayne (2018) Natural re-colonization and admixture of wolves (*Canis lupus*) in the US pacific northwest. Heredity. DOI: 10.1038/s41437-018-0094-x
- 207. Thapa* K, S Manandhar, M Bista, J Shakya, G Sah, M Dhakal, N Sharma, B Llewellyn, LP Waits, MJ Kelly, D Karmacharya (2018) Assessment of genetic diversity, genetic structure, and gene flow of tigers (*Panthera tigris tigris*) in the Terai Arc Landscape, Nepal. PLos One 13(3): e0193495.

- 206. Woodruff* S, P Lukacs, LP Waits (2018) Comparing Performance of Multiple Noninvasive Genetic Capture-Recapture Methods for Abundance Estimation: A Case Study from Sonoran Pronghorn. Oryx DOI: 10.1017/S003060531800011X
- 205. Carroll EL, MW Bruford, A DeWoody, G Leroy, A Strand, LP Waits, J Wang (2018) Genetic and genomic monitoring with minimally invasive sampling methods. Evolutionary Applications 11:1097-1119.
- 204. Sanfiorenzo^{*} A, M Sanfiorenzo, R Vargas, L Waits, B Finegan (2018) Potential Pollinators of understory populations of *Symphonia globulifera* in the Neotropics. Journal of Pollination Ecology 22:1-10.
- 203. Byerly^A PA, RC Lonsinger^{*}, EM Gese, AJ Kozlowski, LP. Waits (2018) Resource partitioning between two sympatric canids: a comparison of historical and contemporary dietary overlap. Canadian Journal of Zoology. 96: 497–504.
- 202. Rayl* ND, G Bastille-Rousseau, JF Organ, MA Mumma, SP Mahoney, CE Soulliere, KP Lewis, RD Otto, DL Murray, LP Waits, TK Fuller (2018) Spatiotemporal heterogeneity in prey abundance and vulnerability shapes the foraging tactics of an omnivore. Journal of Animal Ecology 87:874-887.

201. Draper* JP, Waits LP, Adams JR, Seals CL, Steury TD (2017) Genetic health and population monitoring of two small black bear (*Ursus americanus*) populations in Alabama, with a regional perspective of genetic diversity and exchange. PLoS ONE12(11): e0186701.

200. Leroy G, EL Carroll EL, MW Bruford, JA Dewoody, A Strand, LP Waits, J Wang (2018) Nextgeneration metrics for monitoring genetic erosion within populations of conservation concern. Evolutionary Applications 11:1066-1083.

199. Morin* D, LP. Waits, DC McNitt, MJ Kelly (2018) Efficient single-survey estimation of carnivore density using fecal DNA and spatial capture-recapture: a bobcat case study. Population Ecology 60:197-209.

198. Plowright RK, K Manlove, TE Besser, D Paez, KR Andrews, PE Matthews, LP Waits, PJ Hudson, EF Cassirer. (2017) Age-structured variation in infectious period explains epidemiological features of pneumonia in bighorn sheep. Ecology Letters 20:1325-1336.

197. Mumma* M, J. Holbrook, N Rayl, C Zieminski, T Fuller, J Organ, S Mahoney, LP Waits (in press) Testing predictions of the intraguild predation hypothesis in an altered predator complex. Oecologia

196. Cleary* KA, LP Waits, Bryan Finegan (2017) Comparative landscape genetics of two frugivorous bats in a biological corridor undergoing agricultural intensification. Molecular Ecology 26:4603–4617.

195. Rhoades* P, T Griswold, LP Waits, NA Bosque-Pérez, CM Kennedy, SD Eigenbrode (2017) Sampling technique affects detection of habitat factors influencing wild bee communities. Journal of Insect Conservation 21:703-714. 194. Bohling JH, LL Mastro, JR Adams, EM Gese, SF Owen, LP Waits (2017) Panmixia and Limited Interspecific Introgression in Coyotes (Canis latrans) from West Virginia and Virginia, USA. Journal of Heredity 108:608-617

193. Zero* V, A Barocas*, D Jochimsen*, A Pelletier, X Giroux-Bougard, D Trumbo, J Castillo, D Evans Mack, M Linnell, Rachel Pigg, J Hoisington-Lopez, S Spear, M Murphy, LP Waits (2017) Complementary network-based approaches for exploring genetic structure and functional connectivity in two vulnerable, endemic ground squirrels. Frontiers in Genetics 8:81. doi: 10.3389/fgene.2017.00081

192. Ausband D, MS. Mitchell, LP Waits (2017) Effects of breeder turnover and harvest on group composition and recruitment in a social carnivore. Journal of Animal Ecology 86: 1094–1101.

191. Ausband D, MS. Mitchell, CR Stansbury, JL Stenglein, LP Waits (2017) Harvest and group effects on pup survival in a cooperative breeder. Proceedings of the Royal Society London, Series B 284: 20170580.

190. Lonsinger* RC, EM Gese, LL Bailey, LP Waits (2017) The roles of habitat and intraguild predation by coyotes on the spatial dynamics of kit foxes. Ecosphere 8: e01749.

189. Hohenlohe PA, LY Rutledge, LP Waits, KR Andrews, JR Adams, JW Hinton, RM Nowak, BR Patterson, AP Wydeven, BN White, PA Wilson (2017) Whole-genome data do not support recent hybrid origins of red wolves and eastern wolves (response). Science Advances 3: e1602250.

188. *DeMay SD, PA Becker, JL Rachlow, LP Waits (2017) Genetic monitoring of an endangered species recovery: demographic and genetic trends for reintroduced pygmy rabbits (*Brachylagus idahoensis*). Journal of Mammalogy 98: 350-364

187. *Borg NJ, MS Mitchell, PM Lukacs, CM Mack, LP Waits, PR Krausman (2017) Behavioral connectivity among bighorn sheep groups suggests potential for disease spread. Journal of Wildlife Management 81: 38-45.

186. [^]Gosselin EN, R Lonsinger, LP Waits (2017) Comparing Morphological and Molecular Diet Analyses and Fecal DNA Sampling Protocols for a Terrestrial Carnivore. Wildlife Society Bulletin. 41:362-369.

185. Sparkman AM, M Blois, J Adams, L Waits, DA Miller, DL Murray (2017) Evidence for sexspecific reproductive senescence in monogamous cooperatively breeding red wolves. Behavioral Ecology and Sociobiology 71:6

184. Karmacharya D, S Manandhar, J Shakya, K Thapa, M Bista, GP Sah, AN Sharma, A Sherchan, M Dhakal, J-M Hero, J Hughes, J Janecka, M Kelly, LP Waits (2016) Incidental discovery of non-focal carnivore species during genetic study of Bengal tiger (*Panthera tigris tigris*) and snow leopard (*Panthera uncia*) in Nepal. Asian Journal of Conservation Biology 5:81-88.

183. Morin DJ, SD Higdon, JL Holub, DM Montague, ML Fies, LP Waits, MJ Kelly (2016) Bias in carnivore diet analysis resulting from misclassification of predator scats based on field identification. Wildlife Society Bulletin 40:669-677.

182. Craig E, JR Adams, LP Waits, MR Fuller, DM Whittington (2016) Nuclear and mitochondrial DNA analyses of Golden Eagles (*Aquila chrysaetos canadensis*) from three regions in Western North America; initial results with conservation implications. PLOS ONE 11(10): e0164248.

181. Bohling JH, J Dellinger, JM McVey, DT Cobb, CE Moorman, LP Waits (2016) Describing a developing hybrid zone between red wolves and coyotes in eastern North Carolina, USA. Evolutionary Applications. 9(6): 791–804.

180. DeMay SM, PA Becker, LP Waits TR Johnson JL Rachlow (2016) Consequences for conservation: population density and genetic effects on reproduction of an endangered lagomorph Ecological Applications 26:784-795.

179. Stansbury CR, DE Ausband, P Zager, CM Mack, LP Waits (2016) Identifying Gray Wolf Packs and Dispersers Using Noninvasive Genetic Samples. Journal Wildlife Management 80:1408-1419.

178. Goldberg CS, CR Turner, K Deiner, KE Klymus, PF Thomsen, MA Murphy, SF Spear, A McKee, SJ Oyler-McCance, RS Cornman, MB Laramie, AR Mahon, RF Lance, DS Pilliod, KM Strickler, LP Waits, AK Fremier, T Takahara, JE Herder, P Taberlet (2016) Critical considerations for the application of environmental DNA methods to detect aquatic species. Methods in Ecology and Evolution 7:1299–1307.

177. Cleary, KC, LP Waits, P Hohenlohe (2016) Development and characterization of fourteen novel microsatellite markers for the chestnut short-tailed fruit bat (*Carollia castanea*), and cross-amplification to related species. PeerJ 4:e2465 https://doi.org/10.7717/peerj.2465

176. Woodruff* S, T Johnson, LP Waits (2016) Examining the use of faecal pellet morphometry to differentiate age classes in Sonoran pronghorn. Wildlife Biology 22:217-227.

175. Woodruff* S, P Lucaks, D Christianson, LP Waits (2016) Estimating endangered Sonoran pronghorn (*Antilocapra americana sonoriensis*) abundance and survival using fecal DNA and capture-recapture methods. Conservation Biology 30:1102-1111.

174. Bosque-Pérez NA, PZ Klos*, JE Force, LP Waits, K Cleary*, P Rhoades*, SM Galbraith*, AL Bentley Brymer*, M O'Rourke, SD Eigenbrode, B Finegan, JD Wulfhorst, N Sibelet, JD Holbrook* (2016) A pedagogical model for team-based, problem focused interdisciplinary doctoral education. Bioscience 66: 477-488.

173. Eigenbrode SD, Davis S, J Adams, D Husebye*, LP Waits, D Hawthorne (2016) Host-adapted aphid populations differ in their migratory patterns and capacity to colonize crops. Journal of Applied Ecology 53:1382-1390.

172. Mesa Cruz* JB, J Brown, LP Waits, M Kelly (2016) Non-invasive genetic sampling reveals diet shifts, but little difference in endoparasite richness and faecal glucocorticoids, in Belizean felids inside and outside protected areas. Journal of Tropical Ecology. 32:226–239

171. Rhoades* PR, JB Koch, LP Waits, JP Strange, S Eigenbrode (2016) Evidence for *Bombus occidentalis* (Hymenoptera: Apidae) Populations in the Olympic Peninsula, the Palouse Prairie, and Forests of Northern Idaho. Journal of Insect Science DOI: http://dx.doi.org/10.1093/jisesa/iev155

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- 32. *Felicetti, LA, CC Schwartz, RO Rye, KA Gunther, MA Haroldson, LP Waits, CT Robbins (2004) Use of naturally-occurring mercury to determine the importance of cutthroat trout to Yellowstone grizzly bears. Canadian Journal of Zoology 82:493-501.
- 31. *Romain, K, R Wielgus, M Austin, L Waits, W Kasworm, W Wakkinen (2004) Density and population size estimates for North Cascade grizzly bears using DNA hair-sampling techniques. Biological Conservation 117:417-428.
- 30. *Miller, CR, J Adams*, LP Waits (2003) Pedigree based assignment tests for reversing coyote (*Canis latrans*) introgression into the wild red wolf (*Canis rufus*) population. Molecular Ecology 12: 3287-3301.
- 29. *Cegelski, C, LP Waits, NJ Anderson (2003) Assessing population structure and gene flow in Montana wolverines (*Gulo gulo*) using assignment-based approaches. Molecular Ecology 12:2907-2918.

- 28. *Murphy, MA, LP Waits, KC Kendall (2003) Impact of diet on faecal DNA amplification and sex identification brown bears (*Ursus arctos*). Molecular Ecology 12:2261-2265.
- 27. *Adams, JR, LP Waits, B Kelly (2003) Using faecal DNA sampling and GIS to monitor hybridization between red wolves (*Canis rufus*) and coyotes (*Canis latrans*). Molecular Ecology 12:2175-2186.
- 26. *Miller CR, LP Waits (2003) The History of Effective Population Size and Genetic Diversity in the Yellowstone Grizzly (*Ursus arctos*): Implications for Conservation. Proceedings of the National Academy of Science USA 100:4334-4339.
- 25. Adams, J, J Leonard, LP Waits (2003) Genetic evidence for introgression of domestic dog mitochondrial DNA into the wild coyote population. Molecular Ecology 12:541-546.
- 24. *Roon D, LP Waits, KC Kendall (2003) A quantitative evaluation of two methods for preserving hair samples. Molecular Ecology Notes 3:163-166.
- 23. Gunther, KM, MJ Biel, N Anderson, LP Waits (2002) Probable grizzly bear predation on American black bear in Yellowstone National Park. Ursus 13:372-374.
- 22. *Murphy M, LP Waits, KC Kendall, S Wasser, J Higbee, R Bogden (2002) An evaluation of longterm preservation methods for brown bear (*Ursus arctos*) faecal DNA samples. Conservation Genetics 3:435-440.
- Hofreiter, M, C Capelli, M Krings, LP Waits et al (2002) Ancient DNA analyses reveal high mitochondrial DNA sequence diversity and parallel morphological evolution of late Pleistocene cave bears. Molecular Biology and Evolution 19:1244-1250.
- 20. *Miller, C, P Joyce, LP Waits (2002) A maximum likelihood based model for detecting microsatellite genotyping errors. Genetics 160:357-366.
- 19. *Miller, J, C Miller*, M Scott, LP Waits (2002) Endangered Species Act: Salvation or starvation, Bioscience 52:163-168.
- *Goossens, B, L Chikhi, P Taberlet, LP Waits, D Allainé (2001) Microsatellite analysis of genetic variation among and within Alpine marmot populations in the French Alps. Molecular Ecology 10:41-52.
- 17. Waits, LP, G Luikart, P Taberlet (2001) Estimating the probability of identity among genotypes: Cautions and guidelines. Molecular Ecology 10:249-256.
- 16. *Murphy, M, LP Waits, KC Kendall (2000) Quantitative evaluation of drying methods for brown bear fecal samples. Wildlife Society Bulletin 28:951-957.
- 15. Waits, LP, P Taberlet, J Swenson, A Sandegren, R Franzen (2000) Genetic diversity and gene flow in the Scandinavian brown bear. Molecular Ecology 9:421-431.
- 14. Waits, LP (1999) Molecular genetic applications for bear research. Ursus 11:253-260.
- Waits, LP, J Sullivan, SJ O'Brien, RH Ward (1999) Rapid radiation events in the family Ursidae indicated by likelihood phylogenetic estimation from multiple gene fragments. Molecular Phylogenetics and Evolution 13:82-92.

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- 12. Taberlet, P, LP Waits, G Luikart (1999) Non-invasive genetic sampling: look before you leap. Trends in Ecology and Evolution 14:323-327.
- 11. *Goossens, B, LP Waits, P Taberlet (1998) Hair samples as a source of DNA: reliability of dinucleotide microsatellite genotyping. Molecular Ecology 7:1231-1241.
- *Goossens, B, L Graziani, LP Waits, E Farand, S Magnolon, J Coulon, M-C Bel, D Allainé, (1998) Extra-pair paternity in the monogamous alpine marmot revealed by nuclear DNA microsatellite analysis. Behavioural Ecology and Sociolbiology 43:281-288.
- 9. Paetkau, D, LP Waits, P Clarkson, L Craighead, E Vyse, R Ward, C Strobeck (1998) Dramatic variation in genetic diversity across the range of North American brown bears. Conservation Biology 12:418-429.
- 8. Waits, L, S Talbot, RH Ward, G Shields (1998) Phylogeography of the North American brown bear and implications for conservation. Conservation Biology 12:408-417.
- 7. Waits, L, D Paetkau, C Strobeck, RH Ward (1998). A comparison of mitochondrial DNA and microsatellite DNA variability in brown bear populations from Alaska, Canada, and the lower 48 states. Ursus 10:307-314.
- 6. Taberlet, P, LP Waits (1998) Non-invasive genetic sampling (letter). Trends in Ecology and Evolution 13:26-27.
- 5. Paetkau, D, LP Waits, P Clarkson, L Craighead, C Strobeck (1997) An empirical evaluation of genetic distance statistics for use with microsatellite loci. Genetics 147:1943-1957.
- Taberlet, P, JJ Camarra, S Griffin, E Uhres, O Hanotte, LP Waits, C Dubois-Paganon, T Burke, J Bouvet (1997) Non-invasive genetic tracking of the endangered Pyrenean brown bear population. Molecular Ecology 6:869-876
- 3. Taberlet, P, S Griffin, B Goossens, S Questiau, V Manceau, N Escaravage, LP Waits, J Bouvet (1996) Reliable genotyping of samples with very low DNA quantities using PCR. Nucleic Acids Research 24:3189-3194.
- 2. Dunkle, S, T Reust, D Nowack, L Waits, M Paulik, DM Morre, DJ Morre (1991) Temperature- and acceptor-specificity of cell-free vesicular transfer from transitional endoplasmic reticulum to the cis Golgi apparatus. Biochemistry Journal 288: 969-976.
- Waits, L, S Dunkle, FE Wilkinson, P Moreau, K Safranski, T Reust, DM Morre, DJ Morre (1990). Cell-free transfer of sterols from dictyosome-like structures to plasma membrane vesicles of guinea pig testes. Protoplasma 154:815-824.

Peer-Reviewed Other Publications:

Books

N Balkenhol, S Cushman, A Storfer, LP Waits (2015) Landscape genetics: Concepts, methods, applications, Blackwell.

Book Chapters

- Andrews KR, M De Barba, MA Russello, LP Waits (2018) Advances in high-throughput DNA sequencing and SNP genotyping for non-invasive, archival, and environmental samples. In: PA Hohenlohe, OP Rajora (ed.) Population Genomics: Wildlife, Springer Nature 1-37.
- Spear SF, JM Parker, CR Peterson, CL Jenkins, LP Waits. 2017. Modeling the Effect of Roads on Habitat Area and Connectivity of Midget Faded Rattlesnakes (*Crotalus oreganus concolor*) across Southwest Wyoming. Pp. 22–33 in Dreslik, M. J., W. K. Hayes, S. J. Beaupre, and S. P. Mackessy (eds.), The Biology of Rattlesnakes II. ECO Herpetological Publishing and Distribution, Rodeo, New Mexico.
- Cleary, KC, A Sanfiorenzo, LP Waits (2015) Genetics as a tool for biodiversity conservation: examples from Central America in Central American Biodiversity - Conservation, Ecology, and a Sustainable Future, F. Huettmann, Ed, Springer
- Francois, O, LP Waits (2015) Assignment & clustering methods in landscape genetics in *Landscape genetics: Concepts, methods, applications*, N Balkenhol, S Cushman, A Storfer, LP Waits, eds, Blackwell.
- Waits, LP, CW Epps (2015) Population genetics and wildlife habitat. In *Habitats in Peril: concepts, challenges, and solutions,* Michael L. Morrison, Editor, John Hopkins University Press
- Waits, LP, S Spear, S Cushman (2015) Applications of landscape genetics in terrestrial wildlife research in *Landscape genetics: Concepts, methods, applications*, N Balkenhol, S Cushman, A Storfer, LP Waits, eds, Blackwell.
- Waits, LP, A Storfer (2015) Basics of population genetics in Landscape genetics: Concepts, methods, applications, N Balkenhol, S Cushman, A Storfer, LP Waits, eds, Blackwell.
- Waits, LP (2010) Box 4: Sex identification and population size of grizzly bears by using noninvasive genetic sampling in DeWoody et al, eds. Molecular approaches in natural resource conservation. Cambridge University Press, New York.
- Johnson,WE, E Eizirik, LP Waits, SJ OBrien (2007). Molecular ecology and carnivore conservation: the application of molecular techniques for inferring identity, kinship, and social structure in the Neotropics. In: Neotropical Carnivore Conservation.
- Waits, LP (2007) Microsatellite DNA genotyping identifies killer bear and cubs Example box in Eds. F Allendorf and G Luikart, Conservation and Genetics of Populations. Blackwell, Mass.
- Miller, C and LP Waits, (2007, 2012) Estimating effective population size in Yellowstone Grizzly bears in Example Box in ed. F Allendorf and G Luikart Conservation and Genetics of Populations. Blackwell, Mass.
- Allendorf, F, Miller, C and Waits, L (2005) Genetically effective sizes of grizzly bear populations in Meffe and Carroll. Principles of Conservation Biology, Sinauer, Mass.
- Waits, LP (2004) Using non-invasive genetic sampling to detect and count rare wildlife species in B. Thompson (Ed) Sampling Rare or Elusive Species, Island Press.
- Waits, LP (2004) Taxonomic Placement of the Giant Panda Based on Molecular Data in DH Lindberg (ed) Giant Panda Conservation, University of California Press.
- Haufler, J, R Baydack, H Campa, B Kernohan, LJ O'Neil, LP Waits, C Miller (2002) Performance measures for Ecosystem Management. Wildlife Society Technical Report.
- Waits, L, D Paetkau, C Strobeck (1999) The genetics of the bears of the world. In: Bears: Status Survey and Conservation Action Plan (C. Servheen, ed) IUCN. Gland, Switzerland.

Other Publications

- Pilliod, DS, CS Goldberg, MB Laramie, LP Waits. 2013. Application of environmental DNA for inventory and monitoring of aquatic species: U.S. Geological Survey Fact Sheet 2012-3146.
- Wultsch, C, M. Kelly, L.P. Waits 2011. Noninvasive Monitoring of Elusive Jaguars (*Panthera onca*) and other Forest Felids in Belize, Central America: a powerful survey approach for the tropics. Wild Field Monitor

- Mumma, M and LP Waits. 2011. Using Genetic Techniques to Inform Wildlife Management Decisions in Newfoundland, Canada. Safari Club International Newsletter
- Waits, LP, D Roon, M Murphy. (1999) Non-invasive genetic sampling of bear populations. International Bear Association Newsletter 8:23-25
- Waits, LP, E Meijarrd, (1997) A report on the bear ecology session of the 11th International Conference of Bear Research and Management. International Bear Association Newsletter
- Wooding, S, LP Waits. (1994) Mitochondrial DNA sequence analysis as a tool in bear biology. International Bear Association Newsletter 3:2-3.

Invited Research Talks

- 2019, Genetic contributions to ecology and conservation in Ecuador and the Neotropics Universidad Tecnica Particular de Loja, Loja, Ecuador
- 2019, Building community in landscape genetics International Association of Landscape Ecology, Fort Collins, Colorado
- 2019, The value of genetic monitoring for wildlife management, World Wildlife Fund, Katmandu Nepal
- 2019, The value of genetic monitoring for wildlife management, Center for Molecular Dynamics Nepal, Katmandu Nepal
- 2019, Conservation Genetics and Genetic Monitoring Royal Thimphu College, Bhutan
- 2019, Genetic monitoring of wildlife for conservation and management: Examples from pygmy rabbits and large carnivores, Mississippi State University
- 2018, The future of the wildlife profession, Idaho Chapter of the Wildlife Society, Fort Hall, ID
- 2018, Red wolf taxonomy, National Academy of Sciences
- 2017, Genetic monitoring of wildlife populations: case studies from endangered carnivores, ungulates and lagomorphs, Auburn University
- 2017, Comparative landscape genetics of amphibians, bats and rain forest trees in Idaho and Costa Rica, Penn State University
- 2017, Monitoring Species of Concern on Military Lands using Noninvasive Genetic Sampling, National Meeting of Fish and Wildlife Association, Spokane Washington
- 2017, Pygmy rabbit monitoring update, Scientific Advisory Board, Columbia Basin Pygmy Rabbit Recovery Program, Spokane, WA
- 2017, Genetic contributions to research and management of deer and elk, Western Association of Fish and Wildlife Agencies, Deer and Elk Conference, Sun Valley Idaho.
- 2017, Noninvasive Genetic Monitoring Of Sonoran Pronghorn Along The United States-Mexico Border, The Wildlife Society, Albuquerque, NM
- 2017, Evaluating the Effectiveness of Corridors and Corridor Structures Using Genetic Data, The Wildlife Society, Albuquerque, NM
- 2016, Pygmy rabbit monitoring update, Scientific Advisory Board, Columbia Basin Pygmy Rabbit Recovery Program, Spokane, WA
- 2016, Update on the status of hybridization among red wolves and coyotes in North Carolina, USGS/USFWS Workshop, Atlanta, GA
- 2016, Genetic Monitoring of Reintroduced Wildlife Populations, Keynote talk, Conservation Genomics Conference, Porto, Portugal.
- 2016, Landscape genetic contributions to quantifying functional connectivity: Case studies from terrestrial animals including jaguar and puma, CATIE, Costa Rica
- 2016, A Comparative Analysis of Genetic Diversity and Structure in Jaguars (*Panthera onca*), Pumas (*Puma concolor*) and Ocelots (*Leopardus pardalis*) in Belize, University of Costa Rica, July 2016.
- 2016, Interactions of Human-Caused Mortality, Genetic Introgression and Management among Wild Red Wolves in NC, Panel member and presenter, The Wildlife Society, Raleigh, NC.
- 2015, An overview of the contributions of landscape genetics to connectivity research in terrestrial animals, International Association of Landape Ecologists, Portland.

- 2014, Landscape genetics applications for wildlife biology, ecology and management, University of Texas, Austin
- 2013, Tracking hybridization of red wolves and coyotes: lessons for ecology, evolution and recovery. Iowa State University
- 2013, Approaches for ensuring accuracy in aquatic environmental DNA studies, eDNA symposium, Society for Conservation Biology Meeting, Baltimore, MD.
- 2013, Using noninvasive genetic sampling approaches to monitor terrestrial and aquatic biodiversity, American Museum of Natural History, New York.
- 2013, Tracking hybridization of red wolves and coyotes: lessons for ecology, evolution and recovery. Kansas State University
- 2012, Contributions of genetics to the conservation and management of wildlife populations, Biotechnology symposium, Katmandu, Nepal.
- 2012, Genetic Diversity and Fitness, Medical University, Katmandu, Nepal
- 2012, Conservation Genetic, landscape genetics and molecular ecology, Katmandu University, Nepal
- 2012, Non-invasive genetic sampling contributions to wildlife ecology, conservation and management, Memorial University Newfoundland, Canada
- 2012, Balancing it all: teaching, research, service and family, Memorial University Graduate Student Symposium, Newfoundland, Canada
- 2012 The use of non-invasive genetic sampling to monitor terrestrial carnivores in the Symposium Transformative Research and Management in Northwestern Large and Meso-Carnivores Wildlife Society, Portland.
- 2011 Molecular genetic tools and techniques for improving management of wildlife and game species. International Union of Game Biologists, Barcelona (Keynote talk)
- 2011 An Overview of the Contributions of Non-invasive Genetic Sampling and Landscape Genetics to the Conservation of Wildlife Populations. 8th International Conference on Behaviour, Physiology and Genetics of Wildlife, Berlin
- 2011 Recovering the endangered red wolf (Canis rufus): addressing the challenge of hybridization. WSU Student Chapter of the Wildlife Society
- 2011 Contributions of genetics to wildlife conservation and management. Zoo, Exotics and Wildlife Symposium. Pullman, Washington.
- 2011 Contributions of bioinformatics and computational biology to conservation genetics. IBEST seminar Series, University of Idaho.
- 2010 Landscape Genetics Contributions to Wildlife Management, Texas Tech University
- 2010 Historical DNA analyses of brown bears in North America, Stockholm Univ, Sweden
- 2010 An introduction to Landscape Genetics Conservation Genetics Workshop, Florida
- 2010 Genetic Contributions to Red Wolf Recovery Conservation Genetics Workshop, Florida
- 2010 Genetic Consideration for lynx recovery in Europe Lynx Conference, Slovenia
- 2009 Landscape Genetics of Wildlife, Northern Arizona University
- 2009 Noninvasive genetic sampling for carnivore surveys. Carnivores 2009, Denver, Colorado
- 2008 Realizing the potential of non-invasive genetic sampling of wildlife populations. Biometry Symposium. Wildlife Society Meetings. Miami, FL.
- 2008 New directions in landscape genetics: examples from simulations and North American Amphibians. EU funded workshop on Landscape Genetics, Grenoble, France.
- 2008 Wolverine conservation genetics, Friends of the Clearwater Public Meeting, Moscow, Idaho 2008 Getting the scoop from scat, Univ Idaho, Alumni Association, Moscow, Idaho
- 2007 Molecular genetic contributions to the recovery of the red wolf, Univ. of California, Davis
- 2007 Genetic structure of Kenai Black bears, Alaska Chapter of Wildlife Society, Juneau
- 2007 Landscape genetics revolution, Idaho State University
- 2006 Conservation Genetics of the Red Wolf, Uppsala University, Sweden
- 2006 Non-invasive genetic sampling past, present and future, Wildlife Society Meetings, Alaska
- 2005 Non-invasive Genetic sampling in Europe, International Bear Association
- 2005 Achieving science driven recovery planning for endangered species, Utah State University

- 2005 The Landscape genetic revolution, Purdue University
- 2005 The Value of Conservation Genetics, Los Amigos Research Station, Peru
- 2004 Conservation Genetics for Wildlife, Universite de San Francisco de Quito Ecuador
- 2004 The Landscape genetic revolution, Kansas State University Women in Science Seminar
- 2004 Developing an interdisciplinary graduate program, UI interdisciplinary colloquium
- 2003 Addressing the Challenge of Hybridization in the Red Wolf, Conservation Genetics Conference sponsored by American Genetics Association, Fort Royal, Virginia.
- 2002 Promise and pitfalls of non-invasive DNA sampling for studying the abundance of rare and/or elusive wildlife species, Wildlife Society Conference, Bismark
- 2002 Controlling Introgression the Red Wolf, Oxford University, England
- 2002 Established protocols for dealing with reliability in highly contentious data sets, Northwest Chapter Wildlife Society Meetings, Spokane.
- 2001 Molecular Genetic Tools for the Conservation and Management of Natural Populations, Animal Genomics Symposium, NC State University
- 2001 Interagency Grizzly Bear Study Team Meeting, Post Falls
- 2001 Interagency Grizzly Bear Study Team meeting, Jackson Hole, Wy
- 2000 Panda 2000 Conference, San Diego, Taxonomic placement of the giant panda based on molecular data
- 2000 University of British Columbia Zoology Dept Conservation genetics and molecular ecology of brown bears
- 1999 Univ. of Idaho, Biology Dept Conservation Genetics of the Scandinavian Brown Bear,
- 1998 Univ. of Montana, Genetic diversity and Gene Flow in the Scandinavian Brown bear
- 1998 Idaho Chapter Wildlife Society, Brown bear conservation genetics
- 1998 Conservation Genetics of Scandinavian Brown Bear, Working group for conservation of Spanish brown bears, Spain,
- 1997 Recent advances in the conservation genetics and molecular ecology of the brown bear (Ursus arctos) Department of Zoology, Washington State
- 1996 Department of Mathematics, University of Southern California, Conservation genetics of bears data analyses and mutational models
- 1995 Department of Wildlife Biology, Utah State, Phylogeny and genetic variation of the brown bear and implications for management
- 1994 University of California, Berkeley Museum of Natural History, Phylogenetics and genetic variation within the Ursidae estimated using mtDNA sequence analysis

Workshops/Symposia Organized

- 2019, Do the Genetics, The Wildlife Society, Reno, 30 attendees
- 2017, Conservation Genetics, The Wildlife Society, New Mexico, 30 attendees
- 2016, Landscape Genetics International Online Course Synthesis Meeting, Courdelane, ID 28 attendees
- 2014, Landscape Genetics International Online Course Synthesis Meeting, Courdelane, ID 26 attendees
- 2013, Landscape Genetics Workshop, Society for Conservation Biology, Baltimore, MD 25 attendees
- 2012, Conservation Genetics Workshop, Loja, Ecuador 20 attendees
- 2011, Conservation Genetics Workshop, Kathmandu, Nepal 15 attendees
- 2010, Landscape Genetics Workshop, Society for Conservation Biology, Edmonton, Canada
- 2008, Landscape Genetics Workshop, Wildlife Society Meetings, Miami, Florida
- 2008, Introduction to landscape genetics for landscape ecologists Workshop, US Association of Landscape Ecologists, Madison, WI.
- 2007, Conservation Genetics Workshop, Wildlife Society Meetings, Tuscon, AZ
- 2007, Introduction to landscape genetics for Landscape ecologists Workshop, International association of Landscape Ecologists, Netherlands
- 2007, Landscape genetics for wildlife management and conservation Symposium, Wildlife Society Meetings, Alaska

- 2005, Balancing biodiversity conservation and sustainable development, Symposium, Society for Conservation Biology, Brasilia, Brazil
- 2005, Non-invasive genetic sampling, Workshop, International Bear Association, Italy.
- 2000, Non-invasive genetic sampling of carnivores, Symposium, Carnivore 2000 Conference, Denver

1998, Conservation Genetics, Symposium International Bear Association, Gatlinburg, Tenn.

Professional Meeting Presentations (1st author presented)

- Singh-Gour D, S DeMay, M Wright, JR Adams, LP Waits (2019) Genetic diversity and population structure of the pygmy rabbit in Northern Utah. Northwest Science Association, Lewiston, ID.
- Barbosa S[#], KR Andrews, AR Goldberg, D Singh-Gour, PA Hohenlohe, CJ Conway, LP Waits (2019) Landscape Genomics of Adaptive Differentiation in Two Sister Species of Idaho Ground Squirrels. Idaho Chapter of the Wildlife Society, Boise, ID.
- Adams JA, M McGuire, Oakleaf, Waits LP (2019) Genetic Pedigree Reconstruction for the Endangered Mexican Wolf. Idaho Chapter of the Wildlife Society, Boise, ID.
- Clendenin H, JA Adams, DE Ausband, JA Hayden, PA Hohenlohe, LP Waits (2019) Finding Litters Among the Harvest: Genetic Reconstruction of Gray Wolf Sibling Groups Using Microsatellites and SNPS. Idaho Chapter of the Wildlife Society, Boise, ID.
- Cassier F, K Andrews, E Landguth, H Miasaki, LP Waits (2019) Do Genetic Profiles of Restored Bighorn Sheep Populations Reflect Translocation History? Idaho Chapter of the Wildlife Society, Boise, ID.
- Macias* C, K Sager-Fradkin, LP Waits (2019) Cougar and Bobcat Population Estimation and Occupancy Modeling in the Lower Elwha Klallam Tribe's Historic Use Area. Idaho Chapter of the Wildlife Society, Boise, ID (poster).
- Azizeh T[^], M Myers[^], R Cisneros, D Roon, L Waits (2019) Ecotoxicology of Bats in Urban, Pasture, and Forested Sites of the Southern Ecuadorian Andes. Idaho Chapter of the Wildlife Society, Boise, ID (poster).
- M Myers[^], R Cisneros, Azizeh T[^], D Roon, L Waits (2019) Determining Species Richness and Abundance of Bats in Urban, Forested, and Pasture-Mosaic Habitats in the Southern Ecuadorian Andes. Idaho Chapter of the Wildlife Society, Boise, ID (poster).
- Lonsinger LC, JR Adams, LP Waits (2019) Museum specimens offer historical perspectives on the effective population size and genetic diversity of a declining kit fox population. American Society of Mammalogists, Washington, DC.
- Wagner H, M Murphy, LP Waits (2019) Interdisciplinary training through a distributed graduate course: DGS Landscape Genetics. International Association for Landscape Ecology, Milan, Italy.
- Nerkowski* SA, J Gallie, PA Hohenlohe, K Warheit, LP Waits (2019) Genetic Monitoring of the Columbia Basin Pygmy Rabbit (*Brachylagus idahoensis*): From Captive Breeding to Wild Populations. Washington Chapter of the Wildlife Society, Olympia, WA.
- Lonsinger LC, JR Adams, LP Waits (2019) Genetic consequences of population decline in kit foxes: insights from historical specimens and implications for management. The Wildlife Society, Reno, NV.
- Nerkowski* SA, PA Hohenlohe, K Warheit, LP Waits (2019) Genomic assessment of pygmy rabbit populations including the endangered Columbia Basin pygmy rabbit (*brachylagus idahoensis*. The Wildlife Society, Reno, NV.
- Wirsing A, T Quinn, C Cunningham, JR Adams, A Craig, LP Waits (2019) Local and landscape drivers of brown bear aggregation and predation in salmon spawning streams in southwester Alaska. The Wildlife Society, Reno, NV.
- Lamp* KJ, J Haus, H Spiker, LP Waits, J Bowman (2019) Assessment of noninvasive survey methods for bobcats in western Maryland. The Wildlife Society, Reno, NV (poster).
- Macias* C, K Sager-Fradkin, LP Waits (2019) Cougar and Bobcat Population Estimation and Occupancy Modeling in the Lower Elwha Klallam Tribe's Historic Use Area. The Wildlife Society, Reno, NV (poster).
- Green* S, Waits LP (2019) Balancing Life as a Professional with Family, The Wildlife Society, Reno, NV.
- Barbosa[#] S, D Singh-Gour, J Adams, M Jeffress, J Van Gunst, P Hohenlohe, LP Waits (2019) Genetic species identification of Nevada shrews. The Wildlife Society, Reno, NV.
- Barbosa S[#], KR Andrews, AR Goldberg, D Singh-Gour, PA Hohenlohe, CJ Conway, LP Waits (2019) Landscape Genomics of Adaptive Differentiation in Two Sister Species of Idaho Ground Squirrels. International Association for Landscape Ecology – North America, Fort Collins, CO.

- Sanfiorenzo A, LP Waits, B Finegan (2019) Forest Fragmentation and Agricultural Intensification Reduce Genetic Diversity and Increase Genetic Structure within Understory Populations of Symphonia globulifera (Clusiaceae). American Geographers Union, San Francisco, CA.
- Bhusal^{*} M, LP Waits, S Gilbert, R Long, D Becker, S Malla, S Subba, S Koirala (2018) Spatial Ecology and Citizen Science Monitoring of Red Panda in Nepal. Wildlife Society National Meeting, Cleveland OH.
- Andrews K, S Hunter, D Gour, J Adams, D New, M Fagnan, P Hohenlohe, LP Waits (2018) Paragon amplicon sequencing for parentage analysis of Mexican gray wolves using blood, hair, and fecal samples. Plant and Animal Genome Conference. San Diego, CA.
- Nerkowski^{*} SA, PA.Hohenlohe, K Warheit, and LP Waits (2018) Identification and characterization of SNP markers for the Columbia Basin pygmy rabbit (*Brachylagus idahoensis*). Washington Chapter of the Wildlife Society, Portland, Oregon.
- Dupuis, A[^], A Welker[^], S Nerkowski^{*}, J Rachlow, L Shipley, LP Waits (2018) Vegetative analysis of Columbia Basin pygmy rabbit (*Brachylagus idahoensis*) habitat. Idaho Chapter of the Wildlife Society, Fort Hall, ID
- Jensen EL, PVC de Groot, M Branigan, M Dyck, LP Waits, SC Lougheed (2018) Genomic tools to enable non-invasive monitoring of polar bears. Arctic Net Conference, Ottowa, Canada.
- Azizeh T[^], M Myers[^], R Cisneros, D Roon, L Waits (2018) Ecotoxicology of bats in urban, pasture, and forested sites of the Southern Ecuadorian Andes. Wildlife Society National Meeting, Cleveland OH.
- Azizeh T[^], M Myers[^], R Cisneros, D Roon, L Waits (2018) Ecotoxicology of bats in urban, pasture, and forested sites of the Southern Ecuadorian Andes. Congreso Nacional de Manejo de Vida Silvestre and Congreso Ecuatoriano de Mastozoología. Loja, Ecuador
- M Myers[^], R Cisneros, Azizeh T[^], D Roon, L Waits (2018) Determining species richness and abundance of bats in urban, forested, and pasture-mosaic habitats in the southern Ecuadorian Andes using various sampling method. Wildlife Society National Meeting, Cleveland OH.
- Andrews K, F Cassirer, E Landguth, H Miyasaki, LP Waits (2018) Does population of origin affect translocation success in bighorn sheep? Northern Wild Sheep and Goat Council, Whitefish, MT
- Caudill CC, DE Weigel, JR Adams, MA Jepson, LP Waits. (2018) Introgressive Hybridization Between Native and Artificially Propagated Non-native Steelhead (*Oncorhynchus mykiss* spp.), Washington American Fisheries Society Conference. Kelowna, BC.
- Clendenin H, J Hayden, D Ausband, P Hohenlohe, LP Waits (2018) A new method for estimating a minimum count of annual breeding pairs of gray wolves, *Canis lupus*, through the genetic reconstruction of sibling groups among harvested young of the year. Idaho Chapter of the Wildlife Society, Fort Hall, Idaho
- Nerkowski^{*} SA, PA.Hohenlohe, K Warheit, and LP Waits Genetic Monitoring of the Columbia Basin Pygmy Rabbit (*Brachylagus idahoensis*): From Captive Breeding to Wild Populations (2018) American Association of Zoos and Aquariums meeting, Seattle, WA.
- Nerkowski^{*} SA, PA.Hohenlohe, K Warheit, and LP Waits (2018) Assessment of ancestry in the Columbia Basin pygmy rabbit (*Brachylagus idahoensis*) Wildlife Society National Meeting, Cleveland OH.
- Adams J, R Brown, R Morgan, L Waits (2017) Getting the scoop from poop: telling the story of the expanding wolf population in Oregon. American Society of Mammalogists Annual Meeting, Moscow, ID.
- Adams J, C Gardner, D Straughan, M Dwire, S Barrett, L Waits (2017) Using genetic pedigree reconstruction to support recovery of the wild Mexican gray wolf population. Wildlife Society Annual Meeting, Albuquerque, NM.
- Waits LP, Andrews KR, F Cassirer, H Miyasaki, N Borg, J Adams, D Gour. 2017. Population Genetic Analysis of Native Bighorn Sheep in Idaho Using Historic and Current Samples. Public lecture: Jack O'Connor Hunting Heritage and Education Center, Lewiston, ID.

- Andrews KR, JR Adams, F Cassirer, R Plowright, C Gardner, S Barrett, M Dwire, PA Hohenlohe, L Waits. 2017. Comparing the effectiveness of RADseq and microsatellites for parentage assignment in mammal populations. Society for Mammalogy Conference, Moscow ID
- Andrews KR, J Good, M Miller, L Waits, G Luikart, P Hohenlohe. 2017. Harnessing the power of RADseq for ecological and evolutionary genomics. Biogenomics Conference, Washington DC
- Andrews KR, F Cassirer, H Miyasaki, N Borg, T Besser, J Adams, D Gour, L Waits. 2017. Population genetics and potential for pathogen transmission among bighorn sheep. 2017. Annual Idaho Chapter of the Wildlife Society & Idaho Chapter of the American Fisheries Society Joint Meeting.
- Bassing S, D Ausband, M Mitchell, P Lukacs, M Schwartz, G Hale, LP Waits (2017) Variable effects of harvest within and across wolf packs in the Rocky Mountains. The Wildlife Society Annual Conference, Albuquerque, NM.
- Bassing SB, DE Ausband, MS Mitchell, MK Schwartz, LP Waits (2017) Immigration as a compensatory mechanism to offset harvest mortality in wolf populations. The Wildlife Society ID State Chapter and MT State Chapter Conferences, Moscow, ID & Helena, MT.
- Clendenin H, J Adams, J Hayden, J Struthers, P Hohenlohe, L Waits (2016) Comparing SNPs and microsatellites for sibship analysis in gray wolves (Canis lupus). Global Biodiversity Genomics Conference, Washington, D.C.
- Clendenin H, J Adams, J Hayden, J Struthers, P Hohenlohe, L Waits (2016) Comparing SNPs and microsatellites for sibship analysis in gray wolves (Canis lupus). American Society of Mammalogists Annual Meeting, Moscow, ID.
- Gosselin[^] E, R Cisneros Vidal, L Ordoñez Delgado, D Roon, L Waits (2017). The Impacts of Land-use on Bird and Bat Communities in Southern Ecuador. Wildlife Society Annual Meeting, Albuquerque, NM. Poster
- Higdon[^] SD, DJ Morin, JL Holub, DM Montague, ML Fies, LP Waits, MJ Kelly (2017) Estimating Detection of Prey Items in Bobcat Diet Using an Occupancy Framework. Wildlife Society Annual Meeting, Albuquerque, NM.
- Lonsinger RC, EM Gese, LL Bailey, LP Waits (2017) Evaluating the Influence of Intraguild Predation on the Spatial Dynamics of Kit Foxes. American Society of Mammalogists Meeting, Moscow, ID.
- Lonsinger RC, EM Gese, LL Bailey, LP Waits (2017) The Application of Occupancy Models to Investigate the Dynamics of Co-occurring Canids. Midwest Furbearer Workshop, Decorah, IA.
- Lonsinger RC, LP Waits (2017) Coupling Noninvasive Genetic Sampling with Capture-Recapture and Occupancy Analyses to Facilitate Multi-Species Monitoring of Sympatric Carnivores. Wisconsin Chapter of The Wildlife Society, Milwaukee, WI.
- Morin* DJ, LP Waits, DC McNitt, MJ Kelly (2017) Single Survey Bobcat Density Estimation Using Fecal DNA and Spatial Capture Recapture. Wildlife Society Annual Meeting, Albuquerque, NM.
- Nerkowski*, SA K. Warheit, P.A. Hohenlohe, and L.P. Waits. Poster Presentation: Identification and characterization of SNP markers for the Columbia Basin pygmy rabbit (*Brachylagus idahoensis*). Biogenomics 2017 – Global Biodiversity Genomics Conference, February 2017, Smithsonian National Museum of Natural History, Washington D.C.
- Nerkowski*, SA, K. Warheit, P.A. Hohenlohe, and L.P. Waits. Poster Presentation: Identification and characterization of SNP markers for the Columbia Basin pygmy rabbit (Brachylagus idahoensis). American Society of Mammologists Annual Meeting, June 2017, University of Idaho, Moscow, ID
- Price Tack JL, CP Mcgowan, SS Ditchkoff, LP Waits (2017) Estimating coyote density using a multisite spatial capture-recpature analysis. Poster
- Rayl* N, G Bastille-Rousseau, JF Organ, MA Mumma, SP Mahoney, CE Soulliere, KP Lewis, RD Otto, DL Murray, LP Waits, TK Fuller (2017) Spatiotemporal heterogeneity in prey abundance and vulnerability shapes the foraging decisions of an omnivore. American Society of Mammalogists, Moscow, ID
- Sanfiorenzo A, Cleary KA, Shaver I, Chain-Guadarrama A, Santiago-Garcia RJ, Finegan B, Hormel L, Sibelet L, Vierling LA, Bosque-Pérez NA, DeClerck F, Fagan ME, Waits LP (2017) Coupled social and ecological outcomes of agricultural intensification in Costa Rica and the future of biodiversity

conservation in tropical agricultural regions. American Geophysical Union Meeting, New Orleans, LA.

- Schmieder A, T Graham, M DeBarba, LP Waits, MJ Kelly, K Krampis, and C Wultsch (2017) Jaguar Feeding Ecology: Advances from Next-Generation Sequencing. SCCS-NY Conference, American Museum of Natural History, NY, U.S. (Poster)
- Wultsch, C, LP Waits, MJ Kelly, H Quigley, G Amato, and K Krampis (2017) Exploring the Gut Microbiome in Neotropical Jaguars and Pumas. 28th International Congress for Conservation Biology, Society for Conservation Biology, Cartagena, Colombia.
- Wultsch, C, LP Waits, MJ Kelly, H Quigley, G Amato, and K Krampis (2017) Feeding Ecology of Neotropical Jaguars: Advances and New Perspectives from Next-Generation Sequencing. 24th Annual Conference, The Wildlife Society, Albuquerque, New Mexico, U.S.
- Cleary, K.A., Shaver, I., Chain-Guadarrama, A., Sanfiorenzo, A. Santiago-Garcia, R.J., Finegan, B., Hormel, L., Sibelet, N., Vierling, L.A., Bosque-Pérez, N.A., DeClerck, F. Fagan, M.E., Waits, L.P. (2017) Coupled social and ecological systems in tropical agricultural regions: quantifying linked outcomes of agricultural intensification. American Association of Geographers, Boston, MA.
- Waits LP, K Nicholson (2017) Creating A Diverse Work Force of Wildlife Biologists: How Are We Doing? The Wildlife Society, Raleigh, NC.
- Waits LP, S Woodruff, P Lukacs, D Christianson (2016) Developing A Noninvasive Genetic Sampling Approach For Future Monitoring Of The Endangered Sonoran Pronghorn,
- Waits LP (2016) The power of noninvasive genetic sampling for monitoring endangered wildlife populations, Conservation Genetics Workshop, International Union for Conservation of Nature, Honolulu HI.
- Waits LP (2016) Twenty-five years of bear genetic studies: What have we learned? International Bear Association Meeting, Anchorage AK.
- Lonsinger R, E Gese, L Bailey, L) Waits (2016) The Roles of Habitat and Intraguild Predation on the Spatial Dynamics of a Subordinate Mesocarnivore. Wildlife Society Annual Meeting, Raleigh, NC.
- Ausband DE, MS Mitchell, CR Stansbury, JL Stenglein, LP Waits (2016) Effects of harvest on recruitment and wolf pack structure. Idaho TWS conference, Coeur d' Alene
- Plowright RK, KR Manlove, TE Besser, PE Matthews, D Paez, KR Andrews, LP Waits, PC Cross, EF Cassirer (2016) Understanding the dynamics of Mycoplasma ovipneumoniae carriers in a bighorn sheep population. 20th Biennial Symposium of the Northern Wild Sheep and Goat Council. Moscow, ID
- Adams JA, K Andrews, P Hohenlohe, LP Waits (2016) Genetic insights into red wolf taxonomy. Red and Mexican Wolf Species Survival Meeting, Chico Hot Springs, MT.
- Bosque-Pérez NA, JE Force, LP Waits, SD Eigenbrode, JD Wulfhorst, K Cleary, JD Holbrook, SM Galbraith, AL Bentley Brymer, Z Klos, P Rhoades, M O'Rourke, B Finegan, N Sibelet (2016) A model for team-based interdisciplinary doctoral education. Science of Team Science Meeting. Phoenix, Arizona.
- Draper J, T Steury, LP Waits (2016) Black Bear Genetic Diversity and Health in Alabama', International Association for Bear Research & Management Annual Meeting, Anchorage AK
- Draper J, T Steury, LP Waits (2016) Black Bear Demographics and Genetic Health in Alabama', Alabama State Wildlife Division Annual Meeting, Auburn AL
- Cleary K, LP Waits, B Finegan (2016) Agricultural intensification differentially impacts genetic diversity and structure of two frugivorous bats in a biological corridor. Paper presented at the congress of the Society for Conservation Biology, Madison, WI.
- Cleary K, I Shaver, A Chain-Guadarrama, A Sanfiorenzo, RJ Santiago-Garcia, B Finegan, L Hormel, N Sibelet, LA Vierling, NA Bosque-Pérez, F DeClerck, ME Fagan, LP Waits, (2016) Coupled social and ecological outcomes of agricultural intensification in Costa Rica and the future of biodiversity conservation in tropical agricultural regions. Paper presented at annual meeting of the Ecological Society of America, Ft Lauderdale, FL.

- Bassing SB, DE Ausband, MS Mitchell, MK Schwartz, LP Waits (2016) Immigration as a compensatory mechanism to offset harvest mortality in wolf populations. The Wildlife Society Annual Conference, Raleigh, NC.
- Bassing SB, MS Mitchell, PM Lukacs, DE Ausband, LP Waits, G Hale (2016) Wolf pack distribution in relation to heavy harvest in southwest Alberta. The Wildlife Society MT State Chapter Conference, Missoula, MT.
- Andrews KR, G Luikart, LP Waits, P Hohenlohe (2015) Harnessing the power of RADseq for ecological and evolutionary genomics. Invited presentation at 21st Biennial Conference on the Biology of Marine Mammals Genomics Workshop, San Francisco, CA.
- Balkenhol N, Schwartz MK, Inman R, Copeland J, Squires J, Packilla M, Anderson N & Waits LP (2015) Landscape Genetics of Wolverines (*Gulo gulo*) in the Contiguous United States. The Wildlife Society, Winnipeg, Canada.
- Bassing SB, M Mitchell, D Ausband, LP Waits, G Hale (2015) Developing a Monitoring Framework to Estimate Wolf Distribution and Abundance in Southwest Alberta. Montana Chapter of The Wildlife Society Conference, Helena MT.
- Bassing SB, M Mitchell, D Ausband, P Lukacs, LP Waits, G Hale (2015) Developing a Monitoring Framework to Estimate Wolf Occupancy Dynamics in Southwest Alberta. The Wildlife Society, Winnipeg, MB Canada.
- Baugher C, J Sullivan, J Adams, L Waits, M Ederer, J Johnson-Maynard (2015) A phylogeny for Driloleirus americanus, the Giant Palouse earthworm, of the Pacific Northwest. Ecological Society of America. Baltimore, MD.
- DeMay SM, LP Waits, JL Rachlow, PA Becker (2015) Recovery Update for the Columbia Basin Pygmy Rabbit: Monitoring Using Fecal DNA. Washington Chapter of the Wildlife Society, Grand Mound, WA.
- DeMay SM, PA Becker, TR Johnson, LP Waits, and JL Rachlow (2015) Breeding like rabbits: Reproductive output, multiple paternity, and juvenile breeding by pygmy rabbits. Idaho Chapter of the Wildlife Society, Pocatello, ID.
- Gosselin E, R Lonsinger, LP Waits (2015) Sampling Methodology and a Comparison of Traditional and Molecular Diet Analyses. Idaho Chapter of the Wildlife Society, Pocatello, ID.
- Higdon SD, DJ Morin, MJ Kelly, LP Waits (2015) Bias in Carnivore Diet Analysis As a Result of Misclassification of Predator Scats Based on Field Identification. The Wildlife Society, Winnipeg, Canada.
- Higdon SD, DJ Morin, J Holub, DM Montague, LP Waits, MJ Kelly (2015) Diet competition among Virginia's three dominant predators. Virginia Chapter of The Wildlife Society, Natural Bridge, Virginia.
- Holub J, DJ Morin, SD Higdon, DM Montague, LP Waits, MJ Kelly (2015) Uncertainty in traditional diet analysis for carnivores: a case study with bobcats, coyotes, and bears in western Virginia. Virginia Chapter of The Wildlife Society, Natural Bridge, Virginia.
- Lonsinger R, LP Waits (2015) Conservation Genetics: Using Noninvasive Genetic Sampling to Investigate Two Sympatric Carnivores. Dugway Natural Resource Program Meeting, Dugway, UT
- Mumma M, J Holbrook, N Rayl, C Zieminski, T Fuller, S Mahoney, LP Waits (2015) Patterns of selection in a changing predator complex. The Wildlife Society, Winnipeg, Canada.
- Rhoades PR, LP Waits, SD Eigenbrode, NA Bosque-Pérez, SW Sheppard (2015) Landscape genetics of *Bombus bifarius* in the inland Pacific Northwest at fine and coarse scales. Entomological Society of America Pacific Branch Annual Meeting. Coeur d'Alene, Idaho.
- Rhoades, PR, SD Eigenbrode, NA Bosque-Pérez, LP Waits, SW Sheppard (2015) Influence of exotic annual grass invasion on native bee community structure and functional diversity in the Palouse Prairie. Entomological Society of America Pacific Branch Annual Meeting. Coeur d'Alene, Idaho.
- Waits LP, S Spear, S Cushman (2015) An overview of the contributions of landscape genetics to connectivity research in terrestrial animals. International Association of Landscape Ecologist Meeting, Portland, Oregon.

- Waits LP, S DeMay, R Lonsinger, S Woodruff (2015) Noninvasive genetic sampling approaches for monitoring wildlife. Idaho Chapter of Wildlife Society, Pocatello, Idaho.
- Waits LP, R Lonsinger, S Woodruff (2015) Monitoring Species of Concern Using Noninvasive Genetic Sampling and Capture-recapture Methods, SERDP & ESTCP Joint Annual Meeting, Arlington, VA
- Woodruff S, P Lukacs, LP Waits (2015) Monitoring Sonoran Pronghorn using Noninvasive Genetic Sampling, The Wildlife Society, Winnipeg, Canada
- Woodruff S, R Lonsinger, LP Waits (2015) Monitoring Species of Concern on Military Lands using Noninvasive Genetic Sampling, North American Wildlife and Natural Resources Conference. Omaha, Nebraska.
- Wultsch C, LP Waits, MJ Kelly, H Quigley, G Amato (2015) An individual-based landscape genetics approach for assessing the influence of landscape features on genetic connectivity of Neotropical jaguars and pumas. The Wildlife Society, Winnipeg, Canada.
- Wultsch C, LP Waits, MJ Kelly, H Quigley, G Amato (2015) An individual-based landscape genetics approach for assessing the influence of landscape features on genetic connectivity of Neotropical jaguars and pumas. XIX Congress SMBC Mexico, Villahermosa, Mexico.
- Wulfhorst JD, N Bosque-Pérez, JE Force, L Waits, S Eigenbrode, B Finegan, P Morgan, N Sibelet, Z Klos (2015) Training for teams as a new era of interdisciplinary research. International Technology, Education, & Development conference. Madrid, Spain.
- Wultsch C, LP Waits, MJ Kelly (2014) Noninvasive tracking of wild felids in Belize, Central America: Lessons learned and future directions. XVIII Congress SMBC Honduras, Copan Ruinas, Honduras.
- Waits LP, S Woodruff (2014) Monitoring species of concern using noninvasive genetic sampling and capture-recapture. Department of Defense SEDRP and ESTCP Joint annual Fall In Progress Review. Arlington, VA.
- Waits LP, K Thapa, D Karmacharya, M Kelly, M Dhakal (2014) Genetic structure and gene flow of tigers across the Terai Arc of Nepal. The Wildlife Society, Pittsburg, PA.
- Spear SF, M Freake, L Williams, J Groves, T Floyd, C Jenkins, LP Waits (2014) Using environmental DNA to detect presence and assess population status in Eastern Hellbenders. *Invited* at The Wildlife Society, Pittsburgh, PA.
- Morin DJ, MJ Kelly, LP Waits (2014) The role of density-dependence and competition in coyote space use, dispersal, and population dynamics in a high mortality, low resource environment. Invited at The Wildlife Society, Pittsburgh, PA.
- DeMay, SM, LP Waits, JL Rachlow, PA Becker (2014) Noninvasive genetic monitoring of EP the Columbia Basin pygmy rabbit recovery. Washington Chapter of the Wildlife Society, Pasco, WA.
- Cleary K, L Waits, B Finegan (2014) Agricultural intensification in a biological corridor: can functional connectivity be maintained for bats? North American Congress for Conservation Biology, Missoula, MT
- Mumma M, N Rayl, T Fuller, J Organ, S Mahoney, LP Waits (2014) Evaluating predator densities across a landscape in the midst of a predator avoidance strategy. North American Congress for Conservation Biology, Missoula, MT.
- Woodruff S, P Lukas, LP Waits (2014) Simultaneous demographic monitoring of predator and prey population sizes using fecal DNA sampling. 2014. North American Congress for Conservation Biology, Missoula, MT.
- Woodruff S, LP Waits (2014) Preliminary results of non-invasive genetic sampling for mark-recapture studies of endangered Sonoran pronghorn and coyotes with Sonoran pronghorn range. Collaborator meeting, Cabeza Prieta National Wildlife Refuge, Ajo, AZ.
- Waits LP, R Lonsinger, S Woodruff (2014) Designing effective noninvasive genetic sampling approaches for monitoring wildlife populations. North American Society for Conservation Biology, Missoula, MT.

- DeMay, SM, LP Waits, JL Rachlow, PA Becker (2014) Noninvasive genetic monitoring to assess the recovery of endangered Columbia Basin pygmy rabbits. Society for Conservation Biology North American Congress for Conservation Biology, Missoula, MT. (poster)
- Lonsinger R, LP Waits (2014) Conservation Genetics of Kit Foxes and Coyotes: Using Noninvasive Genetic Sampling to Investigate Two Sympatric Carnivores. Integrated Natural Resource Management Annual Meeting, Salt Lake City, UT
- Lonsinger R, E Gese, and L Waits (2014) Balancing Scat Deposition and Fecal DNA Degradation Rates to Optimize Concurrent Noninvasive Genetic Sampling of Intraguild Predator and Prey Species, Gordon Research Conference on Predator-Prey Interactions, Ventura, CA
- Baugher, C, JL Johnson-Maynard, LP Waits, JR Adams (2014) Determining presence/absence and habitat characteristic of the rare, native earthworm, *Driloleirus americanus*. 10th International Symposium on Earthworm Ecology, Athens, GA.
- Cleary K, LP Waits, B Finegan (2014) Agricultural intensification in a biological corridor: maintaining functional connectivity for frugivorous bats. Idaho Chapter of The Wildlife Society Meeting, Boise, ID.
- Pugesek G, M Mumma, S Gullage, S Mahoney, LP Waits (2014) A genetic evaluation of the effects of supplementary feeding on black bear diet. Idaho Chapter of The Wildlife Society, Boise, Idaho.
- Mumma M, C Soulliere, S Mahoney, LP Waits (2014) A predictive model of predator species at caribou calf kill sites in a multi-predator community. Idaho Chapter of The Wildlife Society, Boise, Idaho.
- Preliminary results of non-invasive genetic sampling for mark-recapture studies of endangered Sonoran pronghorn. 2014. Idaho Chapter of the Wildlife Society, Annual Meeting, Boise, ID
- Waits LP, O Tumendemberel, M Proctor, H Reynolds, T Khorloojav, A Luvsanjamba, T Tserenbataa, N Yanjin, U Ramakrishnan (2014) Population estimation and systematics of brown bears (Ursus arctos) in Mongolia. Idaho Chapter of The Wildlife Society Meeting, Boise, ID.
- Arias, D, R Cisneros, LP Waits (2014) Developing molecular methods for population genetic analysis of Andean fox in southern Ecuador. Idaho Chapter of the Wildlife Society, Boise, ID.
- Byerly P, R Lonsinger, LP Waits (2014) Resource Partitioning Between Sympatric Carnivores: A Comparison of Historic and Contemporary Dietary Overlap. Idaho Chapter of the Wildlife Society, Boise, ID
- Brinkmeyer M, R Cisneros, D Roon, LP Waits (2014) Fecal DNA sampling and phylogeographic analysis of the spectral bat, *Vampryum spectrum*, in southern Ecuador. Idaho Chapter of the Wildlife Society, Boise, ID
- Sage AH, CW Epps, BK Johnson, LP Waits (2014) Estimating density of a black bear population in northeastern Oregon using dogs and genetic mark-recapture techniques. Oregon Chapter of The Wildlife Society, Eugene, OR.
- DeMay SM, LP Waits, JL Rachlow, PA Becker (2014) Noninvasive genetic monitoring of the Columbia Basin pygmy rabbit recovery. Washington Chapter of the Wildlife Society, Pasco, WA.
- Adams JR, A Beyer, LP Waits (2013) Understanding the Evolutionary History of Canis in North America: A Multiple Molecular Dataset Approach. The Wildlife Society, Milwaukee, WI.
- Baugher, C, G Filippi, JR Adams, JL Johnson-Maynard, LP Waits (2013) A nondestructive, noninvasive genetic test for the presence/absence of the Giant Palouse earthworm (*Driloleirus americanus*). Ecological Society of America. Minneapolis, MN.
- Becker, PA, SM DeMay, LP Waits, JL Rachlow, and C Warren (2013) Evaluating pygmy rabbit recovery efforts in Washington's Columbia Basin. The Wildlife Society, Milwaukee, WI.
- Bosque-Pérez, N.A. J.E. Force, L. Waits, S. Eigenbrode, J.D. Wulfhorst, B. Finegan, P. Morgan, S. Gunter, and N. Sibelet (2013) An international, team-based graduate education and research program: Lessons from an Idaho-Costa Rica collaboration. Entomological Society of America Annual Meeting. Austin, TX (Invited)
- Cleary K, A Chain, A Sanfiorenzo, R Santiago, I Shaver, LP Waits, B Finegan, L Vierling, N Sibelet, N Bosque-Perez, and L Hormel (2013) Quantifying linkages among land-use policies, agricultural

intensification, habitat fragmentation, and social-ecological systems in a neotropical biological corridor. Wallace Conference: Turrialba, Costa Rica.

- Cleary K, LP Waits and B Finegan (2013) Agricultural intensification in a neotropical biological corridor: can functional connectivity for frugivorous bats be maintained? Association for Tropical Biology and Organization for Tropical Studies, San Jose, Costa Rica.
- Cleary K, LP Waits and B Finegan (2013) Agricultural intensification in a neotropical biological corridor: can functional connectivity for frugivorous bats be maintained? American Society of Mammologists, Philadelphia, PA.
- DeMay, SM, JL Rachlow, LP Waits, and PA Becker (2013) Comparing noninvasive genetic sampling and telemetry to monitor survival and dispersal of juvenile pygmy rabbits. The Wildlife Society, Milwaukee, WI. (poster)
- DeMay, SM, JL Rachlow, LP Waits, and PA Becker (2013) Comparing telemetry and fecal DNA sampling methods to quantify survival and dispersal of juvenile pygmy rabbits. American Society of Mammalogists, Philadelphia, PA.
- DeMay, SM, PA Becker, CA Eidson, JL Rachlow, TR Johnson, and LP Waits (2013) Evaluating noninvasive genetic sampling as a monitoring method for the endangered pygmy rabbit. University of Idaho Innovation Showcase, Moscow, ID.
- DeMay, SM, PA Becker, CA Eidson, JL Rachlow, TR Johnson, and LP Waits (2013) Evaluating DNA degradation rates in faecal pellets of the endangered pygmy rabbit. Idaho Chapter of The Wildlife Society, Couer d'Alene, ID.
- Goldberg CS, K Strickler, A Fremier, LP Waits (2013) Factors affecting detection probability of fishes and amphibians using environmental DNA sampling. American Fisheries Society, Little Rock, AR. (Invited)
- Goldberg CS, K Strickler, A Fremier, LP Waits (2013) Designing efficient monitoring programs using environmental DNA. International Congress for Conservation Biology, Baltimore, MD. (Invited)
- Goldberg CS, K Strickler, A Fremier, LP Waits (2013) Detection of macroorganisms across environmental gradients using aquatic environmental DNA. International Association of Landscape Ecology, Austin, TX. (Invited)
- Goldberg CS, DS Pilliod, RS Arkle, LP Waits (2013). Detection of stream-breeding amphibians using environmental DNA. California/Nevada Amphibian Population Task Force meeting, Arcata, CA.
- Hohbein R, K Cleary, LP Waits (2013) Habitat loss and fragmentation effects upon C. castanea, a shorttailed fruit bat. Idaho Chapter of The Wildlife Society, Couer d'Alene, ID. (best student presentation award)
- Lonsinger, RC and LP Waits (2013) Monitoring Species of Concern Using Noninvasive Genetic Sampling. Dugway Integrated Natural Resource Management Annual Meeting, Salt Lake City, UT
- Lonsinger, RC, EM Gese, and LP Waits (2013) Balancing Scat Deposition and Fecal DNA Degradation Rates to Optimize Noninvasive Genetic Sampling of Carnivores. The Wildlife Society Annual Meeting, Milwaukee, WI
- Morin, D.J., M.J. Kelly, L.P. Waits (2013) Incorporating Territoriality and Relatedness to Better Understand Coyote Space Use In The Forests Of Western Virginia Using Relocation Data And Fecal DNA. The Wildlife Society, Milwaukee, WI
- Mumma M, C Soulliere, S Mahoney, LP Waits (2013) CSI Newfoundland: Molecular identification of caribou calf predators. Idaho Chapter of The Wildlife Society, Coeur d'Alene, Idaho.
- Pilliod, DS, CS Goldberg, RS Arkle, LP Waits Successes and challenges of using eDNA to monitor amphibians in high-gradient streams. International Congress for Conservation Biology, Baltimore, MD
- Spear SF, M Freake, J Groves, L Williams, C Goldberg, C Jenkins, LP Waits (2013) Using environmental DNA methods to improve detectability and assess reproductive status in hellbender (*Cryptobranchus alleganiensis*) monitoring programs. International Congress for Conservation Biology, Baltimore, MD

- Spear SF, J Parker, CL Jenkins, CR Peterson, LP Waits (2013) Modeling Western Rattlesnake habitat use and connectivity to inform the current and potential impacts of energy development. Joint Meetings of Herpetology, Albuquerque, NM (invited)
- Spear SF, C Jenkins, B Olson, LP Waits (2013) The effects of seasonal habitat use on functional connectivity in Eastern Indigo Snakes in Georgia. US Chapter of the International Association for Landscape Ecology, Austin, TX (invited)
- Waits, LP, C Goldberg (2013) Approaches for ensuring accuracy in aquatic environmental DNA studies. International Congress for Conservation Biology, Baltimore, MD
- Wultsch C, MJ Kelly, LP Waits (2013) Comparison of population density estimation methods for sympatric jaguars and pumas in Belize, Central America using non-invasive genetic sampling, remote- camera trapping and capture-recapture models. The Wildlife Society, Milwaukee, WI.
- Wultsch C, MJ Kelly, LP Waits (2013) Non-invasive Genetic Tracking of Jaguars (*Panthera onca*) and Co-Occurring Felids in Belize, Central America. International Mammalogical Congress, Belfast, Northern Ireland.
- Bosque-Pérez, NA, JE Force, LP Waits, S Eigenbrode, Z Klos (2012) An interdisciplinary team-based graduate research and education Free program: The University of Idaho IGERT project. Workshop on Developing and Sustaining Interdisciplinary Graduate Programs. Coeur d'Alene, ID.
- DeMay, SM, PA Becker, CA Eidson, JL Rachlow, TR Johnson, LP Waits (2012) Non-invasive genetic monitoring of the Columbia Basin pygmy rabbit: evaluation of fecal DNA degradation. The Wildlife Society 19th Annual Conference, Portland, OR, US.
- Dunn, S, LP Waits, J Byers (2012) Sexual selection in the wild. Palouse Ecology Evolution and Systematics, Moscow, ID.
- Goldberg, CS, DS Pilliod, RS Arkle, LP Waits (2012) Detection of stream-breeding amphibians using environmental DNA. World Congress of Herpetology, Vancouver, B.C., Canada.
- Mumma, MA, LP Waits, KP Lewis, D Fitfield (2012) A comparison of density estimation techniques for black bears and coyotes. American Society of Mammalogists, Reno, NV.
- Pilliod, DS, RS Arkle, Goldberg, CS LP Waits (2012) Using Environmental DNA from Filtered Water Samples to Detect Rocky Mountain Tailed Frogs and Idaho Giant Salamanders. Department of Environmental Quality Workshop. Boise, ID.
- Rhoades, PR, LP Waits, NA Bosque-Pérez, WS Sheppard, C Davis, SD Eigenbrode (2012) Effects of landscape context on native bee communities in Palouse Prairie fragments. Annual meeting of the Entomological Society of America, Knoxville, TN. Poster presentation.
- Rhoades, PR, LP Waits, NA Bosque-Pérez, WS Sheppard, C Davis, SD Eigenbrode (2012) Using landscape factors to estimate abundance, species richness and genetic structure of native bees: a conceptual approach. Annual meeting of the Pacific Branch of the Entomological Society of America. Portland, OR. Poster presentation.
- Schwalm, DL, MA Murphy, LP Waits, WB Ballard (2012) Multiple factors influence gene flow in the Great Plains: the swift fox as a case study. Annual Conference of the Texas Chapter of The Wildlife Society, Fort Worth, TX.
- Schwalm, DL, SA Cushman, MA Murphy, L. P. Waits (2012) Identifying connectivity networks and corridors in a fragmented mesocarnivore population with a novel resistance surface. Annual Conference of The Wildlife Society, Portland, OR.
- Shaver, I, K Cleary, A Sanfiorenzo, R Santiago, A Chain-Guadarrama, L Waits, B Finegan, L Vierling, L Hormel, NA Bosque-Pérez (2012) Evaluating social-ecological interactions in fragmented forests and the agricultural matrix in a dynamic biological corridor landscape in Costa Rica. IGERT PI Meeting. Washington, DC, (Poster presentation)
- Spear, S, M Freake, C Jenkins, LP Waits (2012) Using environmental DNA to detect hellbender (*Cryptobranchus alleganiensis*) presence in Tennessee and Georgia. Annual meeting of the Southeast Partners in Amphibian and Reptile Conservation, Pikeville, TN.
- Spear, S, D Stevenson, C Jenkins, B Olson, LP Waits (2012) Conservation Genetics of the threatened Eastern Indigo Snake. World Congress of Herpetology, Vancouver, BC.

- Spear, S, J Parker, C Peterson, C Jenkins, LP Waits (2012) Natural and anthropogenic factors influencing habitat use and connectivity of Midget Faded Rattlesnakes (*Crotalus oreganus concolor*). Invited talk, Annual meeting of the Southwest Partners in Amphibian and Reptile Conservation, Las Vegas, NV.
- Tebbenkamp, J, LP Waits, KP Reese, S Gardner (2012) Genetic structure and genetic diversity of greater sage-grouse in Mono County, California. Annual Conference of The Wildlife Society, Portland, OR
- Torstrom, S and LP Waits (2012) Detecting the presence of pygmy rabbits (*Brachylagus idahoensis*) using DNA extracted from fecal pellets of mixed species groups. McNair Undergraduate Research National Conference.
- Wultsch, C, M Kelly, LP Waits (2012) Noninvasive Tracking of Jaguars (*Panthera onca*) and Co-Occurring Wild Felids in Belize. Belize Natural Resource Management Annual Meeting, Belize.
- Waits, LP, CS Goldberg, DS Pilliod, RS Arkle (2011) Molecular detection of aquatic species in water samples using environmental DNA. The Wildlife Society 18th Annual Conference, Waikaloa, HI, US.
- Adams, JR, MA Mumma, CJ Zieminski, TK Fuller, CE Soulliere, LP Waits (2011) Molecular identification of multiple prey species remains in predator scats. The Wildlife Society 18th Annual Conference, Waikaloa, HI.
- Wultsch, C., MJ Kelly, and LP Waits (2011) Noninvasive Tracking of Jaguars and Cooccurring Felids by Combining Molecular Scatology, Remote Camera Trapping and GIS in Belize, Central America. The Wildlife Society 18th Annual Conference, Waikaloa, HI.
- Stansbury, CR, Ausband, DE, Mack CM, Zager P, Mitchell M, LP Waits (2011) A non-invasive genetic sampling approach for monitoring gray wolves in Idaho. The Wildlife Society 18th Annual Conference, Waikaloa, HI.
- Lewis, K, M Mumma, LP Waits, C Zieminski, C Soulliere (2011) Preliminary estimates of black bear density in caribou calving areas, Newfoundland, Canada, International Bear Association, Canada.
- Mumma, M, LP Waits, C Soulliere (2011) CSI Newfoundland: Molecular determination of caribou calf predators Arctic Ungulate Conference, Yellowknife, Canada.
- Seamster, VA, LP Waits, SA Macko, HH Shugart (2011) Shifts in the base of the coyote food chain in response to long- and short-term vegetation change. New Mexico Chapter of the Wildlife Society, Albuquerque.
- Cisneros, R, J. Armijos, C. Narváez, A. Ontaneda, L. Waits (2011) Ecology, diversity, and conservation of the spectacled bear (Tremarctos ornatus) in the Podocarpus-El Condor Biosphere Reserve. Ecuadorian Mammal Conference, Quito, Ecuador.
- Wultsch, C, MJ Kelly, and LP Waits (2011) Noninvasive Tracking of Jaguars (Panthera onca) and Cooccurring Feline Species in Belize by Genotyping Feces and Remote Camera Trapping. Mountain Lion Workshop 2011, Bozeman, MT, US.
- Wultsch, C, MJ Kelly, and LP Waits (2011) Noninvasive Tracking of Jaguars (Panthera onca) and Cooccurring Feline Species in Belize, Central America. Student Conference on Conservation Science, New York City, NY, US.
- Cleary, K. and LP Waits. (2011) Does the matrix matter?: Structural and functional connectivity for phyllostomid bats in the San Juan-La Selva biological corridor, Costa Rica. Montana Chapter, Society for Conservation Biology 4th Annual Research Symposium. Missoula, MT.
- Schwalm, D., Ballard, W.B., and L.P. Waits (2011) An assessment of genetic structure and diversity among swift fox populations in the United States. Texas Tech University Association of Biologists, Lubbock, TX. Awarded best presentation, Ecology section.
- Schwalm, D., Ballard, W.B., Waits, L.P., McIntyre, N.M., Gipson, P., Young, J., and M.A. Cronin (2011) Genetic implications for management of swift fox in Texas. American Society of Mammalogist, Portland, OR
- Goldberg, C. S., E. B. Rosenblum, D. Davis, W. R. Bosworth, L. P. Waits (2011) Patterns of prevalence of a newly-emerged multi-host pathogen across an amphibian community: amphibian chytrid

fungus (Bd) in north Idaho (poster). Ecology and Evolution of Infectious Diseases, 9th Annual Conference, Santa Barbara, CA.

- Goldberg, C. S., E. B. Rosenblum, D. Davis, W. R. Bosworth, L. P. Waits (2011) Predicted effects of climate change on the distribution of invasive threats to amphibians in north-central Idaho. 26th Annual Symposium of the United States Regional Chapter of the International Association of Landscape Ecology, Portland, OR.
- Goldberg, C. S., D. Davis, E. B. Rosenblum, W. R. Bosworth, L. P. Waits (2011) Predicted expansion of the American bullfrog and amphibian pathogenic chytrid fungus in the inland Northwest under climate change scenarios. Society for Northwestern Vertebrate Biology and Washington Chapter of The Wildlife Society 2011 Joint Annual Meeting, Gig Harbor, WA.
- Goldberg, C. S., D. S. Pilliod, R. S. Arkle, L. P. Waits (2011) Molecular detection of aquatic species in water samples using environmental DNA. 6th National New Zealand Mudsnail Conference, Moscow, ID.
- Spear, SF, MD Anderson, DA Keinath, JM Parker, CR Peterson, LP Waits (2011) Using distribution models to predict seasonal habitat use in the midget faded rattlesnake (*Crotalus oreganus concolor*). Annual Meeting of the Society for Northwestern Vertebrate Biology, Gig Harbor, WA.
- Spear, SF, MD Anderson, DA Keinath, JM Parker, CR Peterson, LP Waits (2011). Using distribution models to predict fine-scale resource use in a northern temperate rattlesnake. Annual Meeting of the US Regional Association of the International Association for Landscape Ecology, Portland, OR.
- Spear, SF, JM Parker, CR Peterson, MD Anderson, DA Keinath, LP Waits (2011) Integrating Genetics and Habitat Modeling to Inform Conservation of Midget Faded Rattlesnakes (*Crotalus oreganus concolor*). Biology of the Rattlesnakes, Tucson, AZ.
- Stansbury, CR, Ausband, DE, Mack CM, Zager P, Mitchell M, LP Waits (2011) A non-invasive genetic sampling approach for monitoring gray wolves in Idaho. Idaho Chapter of the Wildlife Society, Idaho Falls, ID.
- Borg, N., LP Waits, P Zager, M Mitchell (2011) Evaluating the Genetic Distinctiveness of the Salmon River Drainage Bighorn Sheep and their Connectivity to Neighboring Populations. Idaho Chapter of the Wildlife Society, Idaho Falls, ID.
- Goldberg, C. S., W. R. Bosworth1, D. C. Tank, L. P. Waits (2011). Species designation of the Bruneau tiger beetle (Cicindela waynei) is supported by phylogenetic analysis of mitochondrial DNA sequence data. Idaho Chapter of The Wildlife Society, Idaho Falls, ID.
- Baumgardt, J, C. S. Goldberg, K. P. Reese, J. W. Connelly, D. D. Musil, E. O. Garton, L. P. Waits (2011). A method for estimating the population sex ratio of greater sage-grouse from fecal DNA. Idaho Chapter of The Wildlife Society, Idaho Falls, ID.
- Schwalm, DL, WB Ballard, LP Waits, MA Cronin, P Gipson, J Young (2010) An Assessment of Genetic Structure and Diversity Among Swift Fox Populations in the United States. Mammalogy Society Meetings. Portland.
- Stansbury CR, DE Ausband, CM Mack, P Zager, M Mitchell, LP Waits (2010) A noninvasive genetic sampling approach for monitoring gray wolves in Idaho. Wildlife Society Meeting. Snowbird, UT
- Mumma MA, Waits LP, Zieminski CJ, Fuller TK, and Soulliere CE (2010) Evaluating seasonal changes in populations size of the major predators of Newfoundland caribou using multiple non-invasive genetic sampling strategies. Wildlife Society Meeting. Snowbird, UT
- Seamster, G, SA Macko, LP Waits, HH Shugart (2010) Long-term and short-term variation in coyote feeding ecology. Wildlife Society Meeting. Snowbird, UT.
- Bosque-Pérez, N, LP Waits, JE Force, S Eigenbrode, J.D. Wulfhorst, P Morgan, B Finegan, F De Clerck, D Stoian, J Jones (2010) Bridging the disciplinary divide: Lessons learned from the University of Idaho-CATIE IGERT project. Enhancing Interdisciplinary Communication. Coeur D'alene ID.

- Waits, LP, J. Adams, J. H. Bohling (2010) Quantifying hybridization and introgression by reconstructing the pedigree of the endangered red wolf (*Canis rufus*) population Society for Conservation Biology, Edmonton, Alberta, Canada.
- Goldberg, C. S., A. Pocewicz, M. Nielson-Pincus, L. P. Waits, P. Morgan, J. E. Force, L.Vierling (2010). Predicting ecological impacts of alternative policy scenarios on a rural landscape in northern Idaho (poster). Society for Conservation Biology, Edmonton, Alberta, Canada.
- Russell, D., C. S. Goldberg, L. P. Waits, E. B. Rosenblum (2010). Variation in prevalence and intensity of infection by the amphibian chytrid fungus across seasons for the Columbia Spotted Frog in north Idaho. Idaho Chapter of The Wildlife Society, Boise, ID.
- Balkenhol, N., Holbrook, J., Zager, P., Rachael, J., Onorate, D., DeSimone, R, White, C., Waits, L.P (2009) Hierarchical, Multi-scale Analysis of Landscape-Genetic Relationships in Idaho Cougars (Puma concolor). U.S. Regional Meeting of the International Association for Landscape Ecology (US-IALE); Snowbird, UT, USA. (3rd place in best student presentation competition)
- Balkenhol, N., Holbrook , J., Zager, P., Rachael, J., Onorato, D., DeSimone, R, White, C., Waits, L.P (2009) Hierarchical Population Genetic Structure of Cougars (Puma concolor) in Idaho and Western Montana. Idaho Chapter of The Wildlife Society 2009, Moscow, ID.
- Bohling, J.H., L.P. Waits (2009) The history and future of red wolf (*Canis rufus*) recovery in North Carolina. North Carolina Museum of Natural Sciences, Raleigh, NC. (Invited seminar)
- Bohling, J.H., L.P Waits (2009) Evaluating the ability of Bayesian clustering methods to detect hybridization and introgression using an empirical red wolf dataset. Evolution 2009, Moscow, ID.
- Bohling, J.H, A. Beyer, L.P Waits (2009) Factors influencing red wolf-coyote hybridization in eastern North Carolina. Defenders of Wildlife Carnivores Conference, Denver, CO.
- De Barba, M., Waits, L.P., Genovesi, P., Randi, E., Groff, C. (2009) Noninvasive genetic monitoring of population expansion, mating system, and genetic composition of the translocated brown bear (Ursus arctos) population in the Italian Alps. European Conservation Genetics conference, Trondheim, Norway.
- De Barba, M., Waits, L.P., Garton, O.E., Genovesi, P., Randi, E., Groff, C. (2009) Demographic and genetic population viability analysis of a small translocated brown bear population and implications for conservation and management. 7th International Conference on Behaviour, Physiology and Genetics of Wildlife, Berlin, Germany.
- Dunn, S, L.P. Waits, J. Byers (2009) A test of the generality of the Shuster and Wade model of sexual selection. Evolution. Moscow, ID
- Goldberg, C.S., L.P. Waits (2009) Landscape genetics of Columbia Spotted Frogs and Long-toed Salamanders in a rural landscape of northern Idaho, USA. Joint Meeting of Ichthyologists and Herpetologists, Portland, OR.
- Goldberg, C.S., L.P. Waits (2009) Quantification and reduction of bias from sampling larvae to infer population and landscape genetic structure. Evolution 2009: the joint annual meeting of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists, Moscow, ID.
- Goldberg, C.S., A. Pocewicz, M. Nielson-Pincus, L.P. Waits, P. Morgan, J.E. Force, L. Vierling (2009). Predicting ecological impacts of alternative policy scenarios on a rural landscape in northern Idaho. 24th Annual Symposium of the United States Regional Chapter of the International Association of Landscape Ecology, Snowbird, UT.
- Goldberg, C.S., L.P. Waits (2009) Patterns of amphibian chytrid fungus on pond-breeding amphibians of north Idaho. Idaho Chapter of the Wildlife Society, Moscow, ID.
- Jelenčič, M, T Skrbinšek, L Waits, P Trontelj, And I Kos (2009) Genetic diversity of brown bears (Ursus arctos) in Slovenia. European Conservation Biology Meetings
- Kelly, M.J. C.Wultsch , L.Waits, M.L. Davis (2009) A comparative study of felid densities via simultaneous scat detector dog and remote camera trap mark-recapture in Belize, Central America. Carnivore Conference, Denver, US

- Seamster, V. A., S. A. Macko, L. P. Waits, H. H. Shugart (2009) A shift in coyote feeding ecology in response to woody plant encroachment. Ecological Society of America, Albuquerque, NM.
- Skrbinšek, T. M Jelenčič, H Potočnik, L Waits, P Trontelj, I Kos (2009) Population size and sex ratio of brown bears (*Ursus arctos*) in Slovenia estimated using noninvasive genetic sampling and implications for conservation and management. European Conservation Biology Meetings
- Stenglein, J., L Waits, C Mack, D Ausband, M Mitchell, P Zager, S Nadeau (2009) Monitoring gray wolf packs and populations with noninvasive genetic sampling at predicted rendezvous sites. Idaho Chapter of the Wildlife Society Meetings, Moscow, Idaho.
- Waits, L (2009) Landscape genetics: An emerging tool for conservation and management at the landscape scale. College of Natural Resources, 100 years of Forestry Celebration.
- Waits, L (2009) Molecular genetic contributions to noninvasive survey approaches for carnivores. Carnivore Conference, Denver, US (Invited Talk)
- Waits, L, J. Adams, B. Bosworth, J. Rachlow (2009) Development of a fecal DNA detection method for pygmy rabbits. Idaho Chapter of the Wildlife Society Meetings, Moscow, Idaho.
- Waits L and J Adams (2009) Quantifying hybridization and introgression by reconstructing the pedigree of the endangered red wolf (*Canis rufus*) population. Evolution. Moscow, ID
- Wultsch, C, M. Kelly, L. Waits (2009) Using Scat Detector Dogs And Molecular Scatology To Monitor Jaguars And Other Elusive Feline Species Co- Occurring In Belize, Central America. Carnivore Conference, Denver, US (Invited Talk)
- Wultsch, C, M. Kelly, L. Waits (2009) Using Scat Dogs and Remote Cameras to Estimate Jaguar Density and Connectivity in Belize. Felid Session, XIII Mesoamerican Society For Biology and Conservation Symposium, Belize City, Belize (Invited Talk)
- Bohling J and LP Waits (2008) Assessing the extent of hybridization between sympatric red wolves (*Canis rufus*) and coyotes (*Canis latrans*) in coastal North Carolina. Society for Conservation Biology. Chattanooga, TN.
- Schalwm D, W Ballard, LP Waits (2008) Assessment of swift fox population structure in the United States. Society for Conservation Biology. Chattanooga, TN.
- Balkenhol N, L.P. Waits (2008) Using landscape genetics to evaluate functional landscape connectivity for wildlife. Wildlife Society Meetings. Miami, FL.
- Stenglein J, C. Mack, D. Ausband, M. Mitchell, P. Zager, S. Nadeau, L.P. Waits (2008) Evaluating the potential of noninvasive genetic sampling for long-term monitoring of gray wolves in Idaho. Wildlife Society Meetings. Miami, FL.
- Adams J, L.P. Waits, L. Vucetich, R. Peterson, J. Vucetich (2008) A genetic analysis of Isle Royale wolves and moose. Midwest Wolf Stewards Meeting, Hinckley, MN
- Wultsch C, M.J. Kelly, and L.P. Waits (2008) Noninvasive tracking of jaguars (Panthera onca) and cooccurring feline species across protected areas in Belize by combining molecular scatology and GIS: optimizing wildlife population monitoring and connectivity on a large scale. Natural Resource Management Conference, Belize.
- Drummond C, J. Sullivan, LP Waits (2008) Landscape genetics across a species range: modeling population connectivity in tailed frogs (*Ascaphus montanus*). Society for Evolution Meetings.
- Goldberg C, LP Waits (2008) Predicting the impacts of land-use policies on habitat for amphibians across a privately-owned landscape in northern Idaho. Society for Northwestern Vertebrate Biology, Missoula, MT.
- Pocewicz A, M. Nielsen-Pincus, C.S. Goldberg, P. Morgan, J.E. Force, L.P. Waits, L. Vierling (2008) Consequences of alternative residential development scenarios for agriculture, fire, water, and social acceptability in a rural landscape in north Idaho, USA. US Association of Landscape Ecologists, Madison, WI.
- Balkenhol N, L.P. Waits (2008) Understanding landscape genetic relationships in animals: Is landscape resistance all that matters? US Association of Landscape Ecologists, Madison, WI.
- Pocewicz A, M. Nielsen-Pincus, C.S. Goldberg, P. Morgan, J.E. Force, L.P. Waits, L. Vierling (2008) Consequences of alternative residential development scenarios for agriculture, fire, water, and

social acceptability in a rural landscape in north Idaho, USA. US Association of Landscape Ecologists, Madison, WI.

- Balkenhol N, L.P. Waits (2008) Using Landscape Genetics to Evaluate Functional Connectivity in Transportation Planning. NW section of the Wildlife Society, WA
- Waits LP, C. Goldberg (2008) Landscape genetics of the Columbia Spotted Frog in northern Idaho, USA, US Association of Landscape Ecologists, Madison, WI.
- Estes-Zumpf WA, J. L. Rachlow, L.P. Waits, K. Warheit (2008) Gene flow and genetic diversity among populations of pygmy rabbits in Idaho and Montana, Idaho Chapter of the Wildlife Society, ID.
- Howard S, N. Balkenhol, K. Olson, L. Waits (2008) Genetic diversity and population structure of Mongolian wolves. Idaho Chapter of the Wildlife Society, ID.
- Stenglein J, C. Mack, D. Ausband, M. Mitchell, P. Zager, S. Nadeau, L.P. Waits (2008) Evaluating the use of noninvasive genetic sampling for monitoring gray wolves in Idaho. Idaho Chapter of the Wildlife Society, ID.
- Holbrook J, L. Waits, D. Onorato, C. White, J. Rachel, P. Zager, R. Desimone (2008) Genetic diversity, population structure and gene flow among cougar populations in Idaho and Montana. Idaho Chapter of the Wildlife Society, ID.
- Goldberg C, LP Waits (2008) Predicting the impacts of land-use policies on habitat for amphibians across a privately-owned landscape in northern Idaho. Inland Northwest Aquatic, Riparian, and Wetland Symposium, Spokane, WA.
- Kendall K, J.B. Stetz, D.A. Roon, L. P, Waits, J. B. Boulanger, D. Paetkau (2008) Grizzly bear density in Glacier National Park. Montana Chapter of the Wildlife Society, MT.
- Waits L, S. Robinson, I. Martin (2007) Evaluating population structure of black bears on the Kenai peninsula using mitochondrial and nuclear DNA analyses, Alaska Chapter of the Wildlife Society, AK.
- Viteri MP, L. Waits, F. Cuesta, M. Proctor (2007) Genetic Diversity and Population Size of Andean Bears in the Southern Cayambe-Coca Ecological Reserve in Northeastern Ecuador. Conservation Genetics Meetings, NY.
- Balkenhol N, L. Waits. 2007. An evaluation of current methods for linking genetic variation to landscape heterogeneity using simulated data. International Association of Landscape Ecologists Meeting. Netherlands.
- Waits L (2007) Potential contributions of landscape genetics to ecology, conservation and management of riverscape taxa. UI-ISU Riverscape Symposium, Moscow, Idaho.
- Estes-Zumpt W, J. Rachlow, L. Waits (2007) Gene flow and dispersal in a patchy environment: pygmy rabbits in the Lemhi valley, Idaho. American Society of Mammalogists meetings. NM.
- Hoisington J, J. Sullivan, L. Waits, J. Rachlow (2007) Systematics of the Idaho Ground Squirrel (*Spermophilus brunneus*). American Society of Mammalogists Meetings. NM.
- DeBarba M, L. Waits, P. Genovesi, E. Randi. 2007 incorporating demographic and genetic data to project genetic diversity, inbreeding and viability of a small translocated brown bear population. International Bear Association Meetings, Mexico.
- Waits LP, D. Onorato, C. White, J. Rachel, P. Zager, R. Desimone (2007) Genetic diversity, population structure and gene flow among cougar populations in Idaho and Montana. Wildlife Society Meeting, Tucson, AZ
- Howard S, N. Balkenhol, K. Olson, L. Waits (2007) Genetic diversity and population structure of Mongolian wolves. Wildlife Society Meeting, Tueson, AZ.
- Adams J, A. Beyer, W. Wadell, L. Waits (2007) Pedigree reconstructions of the wild red wolf population reveals minimal introgression of coyote genes. Wildlife Society Meeting, Tucson, AZ.
- Kendall K, J.B. Stetz, D.A. Roon, L. P, Waits, J. B. Boulanger (2007) DNA-based density estimate for grizzly bears in Glacier National Park, Montana, Wildlife Society Meeting, Tucson, AZ.
- Goldberg C, L. Waits (2007) Predicting the impacts of land-use policies on habitat for amphibians across a privately-owned landscape in northern Idaho. Wildlife Society Meeting, Tucson, AZ.

- Hoisington J, L. Waits, J. Sullivan, J. Rachlow (2007) Population Connectivity and Landscape Genetics of the Idaho ground squirrel (*Spermophilus brunneus*). Ecological Society Meetings, CA.
- Gebhardt K, L. Waits, D. Brightsmith, G. Powell (2007) An evaluation of Genetic diversity and phylogenetic relationships among three large macaws in Peru. Cooper Society Meetings, Idaho.
- Gebhardt K, L. Waits, D. Brightsmith, G. Powell (2007) Genetic diversity and genetic structure of 4 large parrots in the Peruvian Amazon American Ornithological Union Meeting, WY.
- Keenher J, D. Onorato, L. P. Waits (2006) Using DNA sequence analysis to detect and identify carnivores in National Parks of the Southwest. Idaho Chapter of the Wildlife Society Meeting, Boise, Idaho, March.
- Goldberg CS, L. P. Waits. 2006. Landscape genetics of the Columbia Spotted Frog in the Palouse ecoregion of northern Idaho. Idaho Chapter of the Wildlife Society Meeting, Boise, Idaho, March.
- Tserenbattaa T, L. P. Waits, H. V. Reynolds, D.J. Craighead, L. Amgala, B. Mijiddorj (2006) Genetic analysis of the taxonomic status of the Gobi bear. International Bear Association Meeting, Japan. (Best oral presentation award).
- Kendall K, J.B. Stetz, D.A. Roon, L. P, Waits, J. B. Boulanger, and D. Paetkau (2006) Grizzly bear population density in Glacier National Park, Montana. International Bear Association Meeting, Japan.
- Viteri MP, L. P. Waits, B McLaughlin (2006) Genetic Diversity and Structure among Andean Bear population in Ecuador. International Bear Association Meeting, Japan.
- Roon DA, L. P. Waits, J. Stetz, K. Kendall (2006) A non-invasive genetic estimate of abundance for black bears (Ursus americanus) in the Greater Glacier Ecosystem. Wildlife Society, AK.
- Adams J, L. P. Waits (2006) Fecal DNA genotyping: a tool to manage the endangered red wolf population. Wildlife Society, AK.
- Tyler G, C. S. Goldberg, L.P. Waits (2006) Estimating the number of breeding adults and effective popultion sizes of Columbia Spotted Frogs in northern Idaho. Wildlife Society, AK.
- Wadell W, A. Beyer, L. Waits, J. Adams (2006) Red Wolf Studbook Data: Integrating captive and wild population management. Defenders of Wildlife
- Kendall K, J.B. Stetz, D.A. Roon, L. P, Waits, J. B. Boulanger, and D. Paetkau (2006) Grizzly bear population density in Glacier National Park, Montana. Carnivores 2006
- Bosque-Pérez NA, S. D. Eigenbrode, J. E. Force, L. Waits, B. Finegan, C. Harvey, J. Jones, D. Stoian, J. Boll, S. Brunsfeld, P. McDaniel, M. O' Rourke, J. D. Wulfhorst (2006) Lessons from an interdisciplinary team-based Ph.D. program in sustainable production and conservation biology at the University of Idaho and CATIE, Idaho Academy of Sciences, Moscow Idaho, March.
- Waits LP (2006) Inland Northwest Philosophy Conference Public Forum. "What Should We Do for Nature? Environmental Problems, Responsibility, and Action". Panel member and presenter Moscow Idaho.
- Goldberg C, L. P. Waits (2006) Genetic structure of Columbia Spotted Frog populations in the changing Palouse landscape of Northern Idaho. Idaho Herp Society
- Newcomb G, L. Waits, C. Anderson (2006) Center for Research on Invasive Species and Small Populations. Idaho Academy of Sciences, Moscow Idaho, March.
- Waits LP, S. Robinson, Niko Balkenhol, C. S. Goldberg, R. Dezzani, L. Vierling (2006) Interdisciplinary research in landscape genetics and applications for natural resource conservation. Idaho Academy of Sciences, Moscow Idaho, March.
- Gebhardt K, J. Doble, L. Waits (2006) Development of a molecular sex identification marker for noninvasively collected feathers. Idaho Chapter of the Wildlife Society Meeting, Boise, Idaho, March. (poster)
- Robinson S, L. Waits, R Dezzani, I. Martin (2006) Spatial analysis of black bear gene flow on the Kenai Peninsula, Alaska. Idaho Chapter of the Wildlife Society Meeting, Boise, Idaho, March.
- Balkenhol N, L. P.Waits, C. C. Cegelski, N. J. Anderson (2006) Landscape genetics of wolverines in western Montana. Idaho Chapter of the Wildlife Society Meeting, Boise, Idaho, March

- Hoisington J, L. Waits, J. Sullivan, J. Rachlow, S. Brunsfeld (2006) Population structure of the Idaho ground squirrel (Spermophilus brunneus) using mitochondrial data. Idaho Chapter of the Wildlife Society Meeting, Boise, Idaho, March
- Waits L (2006) Using new approaches for defining population boundaries. Wildlife Society, Anchorage, AK
- Robinson S, L. Waits, R. Dezzani, I Martin (2006) Spatial analysis of black bear gene flow on the Kenai Peninsula. Wildlife Society, Anchorage, AK
- Robinson, S., L. P. Waits, I. Martin (2005) Population Genetics of Black Bears on the Kenai Peninsula, Alaska, US Park Service South West Alaska Network Investigator's Symposium
- Anderson, C., L. P. Waits, and S. Brunsfeld (2005) Bridging the Gap between Scientists and Managers: Integrating research, education and outreach, and building partnerships between university scientists, government and private land management agencies. Idaho Chapter of the Wildlife Society, Boise, Idaho.
- Waits, L.P., Brunsfeld, B, and C. Anderson (2005) Integrating Research, Education And Outreach: Building Partnerships Between University Scientists, Government And Private Land Management Agencies, Society for Conservation Biology, Brasilia.
- Waits, L. P.; N. Bosque-Perez, J. Force, S. Eigenbrode, S. Brunsfeld, JD Wulfhorst, P. McDaniel, J. Boll, C. Harvey, B. Finegan, D. Stoian (2005) Launching interdisciplinary team-based PhD training in conservation biology and sustainable development at the University of Idaho and CATIE, Society for Conservation Biology, Brasilia, Brazil.
- Roon, D., J. Hinson, M. Soulen, E. Strand, L. P. Waits (2005) Student landowner collaborations in Southern Idaho: a paradigm for landscape level conservation planning. Society for Conservation Biology. Brasilia, Brazil.
- Waits, L. P., E. Bellemain, M. DeBarba, E. Randi, P. Taberlet (2005) Non-invasive Genetic Sampling and Population Estimation of Brown Bears in Europe, International Bear Association, Italy. (invited)
- De Barba, M, L. P. Waits, P. Genovesi, E. Randi (2005) Monitoring the brown bear in the Italian alps through non-invasive genetic sampling. International Bear Association, Italy.
- Kendall, K., J. Stetz, L. Waits, D. Roon (2005) Sampling Bears Using Rub Trees. International Bear Association, Italy.
- Viteri, P., F. Cuesta, L. Waits, G. Remache, A. Tapia, M. Proctor (2005) Genetic Diversity and minimum count of the Andean bear (*Tremarctos ornatus*) in Ecuador. International Bear Association, Italy.
- Keehner, J.R. D. P. Onorato, L. P. Waits (2005) Using DNA sequence analysis of hair and feces to detect and identify carnivore species in the National Parks of the southwest, Second International Symposium on Conservation Genetics, Monterey, CA.
- Viteri, P., F. Cuesta, and L. Waits (2005) Conservation Genetics of the Andean Bear in Ecuador, Second International Symposium on Conservation Genetics, Monterey, CA.
- Gebhardt, K., G. Powell, D. Brightsmith, L.P. Waits (2005) Species identification and success rates of DNA amplification for parrot feathers from claylicks. Second International Symposium on Conservation Genetics, Monterey, CA.
- Goldberg, C, L. P. Waits (2005) Quantification of bias associated with using tadpole samples to infer population genetic structure of Columbia Spotted Frogs. Second International Symposium on Conservation Genetics, Monterey, CA.
- Robinson, S., L. P. Waits, I. Martin (2005) Landscape Genetics of Black Bears on the Kenai Peninsula, Alaska: Defining the Questions Questioning the Answers, Second International Symposium on Conservation Genetics, Monterey, CA.
- Waits, L. P. and C. R. Miller (2004) Mitochondrial DNA phylogeography of historical brown bear populations in the lower 48 states. International Bear Association, San Diego
- DeBarba, M., L. P. Waits, E. Randi, P. Genovesi (2004) Monitoring the brown bear in the Italian alps through non-invasive genetics sampling. International Bear Association, San Diego.

- Force, J., L. Waits, N. Bosque-Perez, S. Eigenbrode, S. Brunsfeld, P. McDaniel, J. D. Wulfhorst, J. Boll, B. Finegan, C. Harvey and E. Somarriba. (2004) An Integrative Model of Graduate Education in Biodiversity Conservation and Sustainable Production in Fragmented Landscapes.5th Biennial Conference on University Education in Natural Resources. Flagstaff, AZ.
- Hicks, J.F., J.L. Rachlow, O.E. Rhodes, Jr., L.P. Waits, and Christen L. Williams (2004) Microsatellite analysis of regional and local gene dynamics across elk populations in the West. The 84th Annual Meeting of the American Society of Mammalogists, Arcata, CA, USA.
- Onorato, D. P., Rich DeSimone, Lisette P. Waits (2004) Paternity assignment and relatedness in a population of cougars impacted by heavy hunting pressure. Presented at the 84th annual meeting of the American Society of Mammalogists, Arcata, California.
- Hicks, J, J. Rachlow, O. Rhodes, and L. Waits (2003) Microsatellite analysis of genetic variation and structure among source and reintroduced elk populations in the Western states, Society for Conservation Biology, Duluth, Minnesota
- Roon, D., K. Kendall, L. Waits (2003) Microsatellite genotyping error and demographic assessment: a simulation test of the effectiveness of several common error-checking protocols, Society for Conservation Biology, Duluth, Minnesota.
- Adams, J, B. Fazio and L. Waits (2003) The effect of genotyping errors on population size estimates derived from fecal sampling, Society for Conservation Biology, Duluth, Minnesota,
- Waits, L, N. Bosque-Perez, J. Force, S. Eigenbrode, S. Brunsfeld, JD Wulfhorst, P. McDaniel, J. Boll, C. Harvey, B. Finegan, and E. Somarriba (2003) An integrative model of graduate education in conservation biology and sustainable production, Society for Conservation Biology, Duluth, Minnesota
- Murphy, M., P. Zager, S. Monfort, A. Muth and L. Waits (2003)Development of a non invasive method for determining sex ratio and pregnancy rate in an idaho elk herd, Society for Conservation Biology, Duluth, Minnesota
- Viteri, P., L. Waits (2002) A non-invasive genetic sampling pilot study of the Andean bear (*Tremarctos ornatus*) in the Cayambe-Coca Ecological Reserve, Ecuador., International Conference for Bear Research and Management, Norway
- Haroldson, M, K.Gunther, C. Schwartz, L. Waits (2002) Estimates of grizzly bear numbers visiting Yellowstone Lake spawnings streams using DNA. International Conference for Bear Research and Management, Norway
- Kendall, K., L. Waits, D. Roon, J. Stetz (2002) Bear rubbing activity:implications for population monitoring. International Conference for Bear Research and Management, Norway
- Miller, C.R., P. Joyce, L. Waits (2002) Bayesed and confused: comparing allelic diversity in the face of unequal sample sizes, sampling error and other headaches, Society for Conservation Biology, Canterbury England
- Waits, L., J. Adams, C. Miller, S. Funk, B. Fazio (2002) Recovering the endangered red wolf: addressing the challenge of hybridization, Society for Conservation Biology, Canterbury England
- Roon, DA, J. Chivaro, K. Kendall, L. Waits (2002) MtDNA sequencing reveals fine scale spatial population structure for Ursus arctos in Glacier National Park, Society for Conservation Biology, Canterbury England
- Waits, L., J. Adams, C. Miller, B. Fazio (2002) Recovering the endangered red wolf: addressing the challenge of hybridization, Northwest Chapter Wildlife Society Meetings, Spokane.
- Roon, DA, J. Chivaro, K. Kendall, L. Waits (2002) MtDNA sequencing reveals fine scale spatial population structure for Ursus arctos in Glacier National Park, Northwest Chapter Wildlife Society Meetings, Spokane.
- Cegelski, C., L. Waits, N. Anderson, C. Kyle, C. Strobeck, J. Copeland (2002) An evaluation of genetic diversity and population genetic structure in Rocky Mountain Wolverines, Northwest Chapter Wildlife Society Meetings, Spokane.

- Waits, L. (2001) Non-invasive genetic sampling of bear populations: promise and pitfalls. International Bear Association meetings, JacksonHole WY
- Romain, K., R. Wielgus, M. Austin, L. Waits, W. Kasworm, W. Wakkinen (2001) Efforts to detect North Cascade Grizzly Bears using non-invasive DNA hair sampling techniques, International Bear Association meetings, JacksonHole WY
- Roon, D., L. Waits, K. Kendall (2001) The effectiveness of filtering non-invasive genetic data: a case study from Glacier National Park. International Bear Association meetings, JacksonHole WY
- Murphy, M., L. Waits, K. Kendall (2001) Brown bear fecal DNA analysis: Technique optimization and application to Glacier National Park, International Bear Association meetings, JacksonHole WY
- Kendall, K, L. Waits, D. Roon, M. Murphy, J. Stetz (2001) Biases associated with sampling bears with hair traps, rub trees, and scat surveys. International Bear Association meetings, JacksonHole WY (Best paper award)
- Kendall, K., L. Waits, D. Roon, M. Murphy, J. Stetz (2001) Biases associated sampling bears with hair traps, rub trees and scat surveys. American Society of Mammalogists, Missoula, MT
- Adams, J., B. Kelly, L. Waits (2001) Monitoring for genetic introgression into an island population: the Red Wolf as a case study, Society for Conservation Biology, Hilo, HI
- Luikart, G., S. Manel, L. Waits (2001) Wildlife forensic applications of DNA typing: empirical evaluations and guidelines, Society for Conservation Biology, Hilo, HI
- Cegelski, C., L. Waits, N. Anderson (2001) Mitochondrial DNA and microsatellite DNA analysis of wolverine population structure in Montana, Society for Conservation Biology, Hilo, HI
- Adams, J. L. Waits, A. Beyer (2001) Faecal DNA sampling to detect the presence of coyotes and hybrids in the Red Wolf Recovery Zone, Canid Biology and Conservation Conference, Oxford, England
- Waits, L., J. Adams, C. Miller, W. Waddell, and A. Beyer (2001) Detecting coyote introgression into the wild Red Wolf populations, Canid Biology and Conservation Conference, Oxford, England
- Waits, L., K. Kendall, D. Roon, M. Murphy (2001) Non-Invasive Genetic Sampling of Bears at an Ecosystem Scale Using Multiple Collection Methods, Conservation Genetics Meeting, Lausanne, Switzerland
- Roon, D, L. Waits, K. Kendall (2001) Trail travails: The impact of human presence on the Noninvasive genetic sampling of brown bears (*Ursus arctos*) and black bears (*Ursus americanus*) within a protected landscape, Conservation Genetics Meeting, Lausanne, Switzerland
- Miller, C., G. Luikart, L. Waits (2001) Maintaining genetic variation in an island population: shortcomings of the one migrant rule. Conservation Genetics Meeting, Lausanne, Switzerland
- Waits, L., K. Kendall, M. Murphy, D. Roon, J. Adams (2000) Non-invasive genetic sampling: promise and pitfalls. Carnivores 2000, Denver, CO.
- Kendall, K., L. Waits, M. Murphy, D. Roon, J. Stetz (2000) Non-invasive genetic sampling of grizzly bear and black bear population status at an ecosystem scale, Carnivores 2000, Denver, CO
- Adams, J., L. Waits, B. Kelly (2000) Non-invasive genetic sampling of red wolf population on Alligator River National Wildlife Refuge, Carnivores 2000, Denver, CO.
- Roon, D., K. Kendall, L. Waits (2000) Tracking bear demography in the Greater Glacier Area of the U.S.A. through non-invasive DNA sampling, Managing for Bears in Forested Environments, Revelstoke, BC.
- Waits, L. (2000) Taxonomic placement of the giant panda based on molecular data. Panda 2000, San Diego Zoo.
- Miller, C., L. P. Waits (2000) The bear bones: a historical genetic analysis of the Yellowstone grizzly. Society for Conservation Biology. Missoula, MT
- Miller, J, J.M. Scott, C. R. Miller, L.P. Waits (2000) Endangered Species Recovery: Dollar and Sense. Society for Conservation Biology. Missoula, MT
- Kendall, K, L. Waits, D. Roon, M. Murphy, K. Peterson (2000) Grizzly bear population status in northwestern Montana. Society for Conservation Biology. Missoula, MT.

- Roon, D., L. Waits, and K. Kendall (2000) Non-invasive genetic sampling, genotyping error, and bias potential in demographic studies. Society for Conservation Biology. Missoula, MT
- Waits, L. (2000) Exploring the ESU concept using mtDNA and nDNA data sets from brown bears. Society for Conservation Biology. Missoula, MT
- Shields, G., A. Cooper, D. Paetkau, L. Waits (2000) The necessity of large, multilocus data sets in molecular conservation biology. Society for Conservation Biology. Missoula, MT
- Murphy, M., L. Waits, K. Kendall (2000). Impact of diet and field conditions on PCR amplification success for brown bear fecal DNA samples. Society for Conservation Biology. Missoula, MT
- Roon, D., L. Waits, K. Kendall (2000) Genetics of Glacier National Park Brown Bears: Demograpics and Population Structure through Non-invasive Genetic Sampling. Western Black Bear Conference. Coos Bay, Oregon
- Murphy, M., L. Waits, K. Kendall (2000) Diet and temporal impacts on PCR amplification success in brown bear fecal DNA samples, Western Black bear meeting, Coos Bay OR.
- Miller, C., L. Waits (2000) Down in the dumps? An historical genetic analysis of the Yellowstone grizzly bear population, Northwest Chapter of the Wildlife Society, Post Falls, ID
- Murphy, M., L. Waits, K. Kendall (2000) The importance of diet and time in the field for successful amplification of brown bear fecal dna samples. Northwest Chapter of the Wildlife Society, Post Falls, ID
- Kendall, K., L. Waits, D. Roon, M. Murphy, K. Peterson (2000) Use of DNA to monitor grizzly bear population status. . Northwest Chapter of the Wildlife Society, Post Falls, ID
- Waits, L., K. Kendall, M. Murphy, D. Roon (2000) Non-invasive genetic sampling of wildlife populations: Promise and Pitfalls. Northwest Chapter of the Wildlife Society, Post Falls, ID.
- Murphy, M., L. Waits, K. Kendall (1999) A Quantitative Evaluation Of Brown Bear Fecal DNA Preservation Methods, Wildlife Society Meetings, Austin, Texas.
- Roon, D., L. Waits, K. Kendall (1999) Genetics of Glacier Park Brown Bears: Abundance and population structure through Non-invasive Genetic Sampling, Ecological Society Meetings, Spokane, Washington.
- Murphy, M., L. Waits, K. Kendall (1999) A Quantitative Evaluation Of Methods For Preserving DNA In Brown Bear Fecal Samples, Ecological Society Meetings, Spokane, Washington.
- Roon, D., L. Waits, K. Kendall (1999) Northern Continental Divide Brown Bears: Minimal Abundance and Population Structure through Non-Invasive Hair Trapping. Society for Conservation Biology, College Park, Maryland.
- Murphy, M., L. Waits, K. Kendall (1999) A Quantitative Evaluation Of Methods For Preserving DNA In Brown Bear Fecal Samples, Society for Conservation Biology, College Park, Maryland.
- Waits, L. 4/98, Genetic applications for bear research and management Int. Conf. of Bear Res. and Manage., Gatlinburg, Tenn.
- Kendall, K. C., L. Waits, D. Schirokauer, S. Wolff (1999) Using DNA to monitor bear populations in Glacier National Park Int. Conf. of Bear Res. and Manage., Gatlinburg, TN
- Waits, L, K. Kendall, M. Murphy, Dave Roon (1999) Non-invasive genetic sampling: Promise and Pitfalls. Species at Risk Conference, Kamloops, Canada
- Miller, C., L. Waits (1999) An examination of historic levels and patterns of genetic diversity in the brown bear of the lower 48 states, Kamloops, Canada
- Waits, L., J. Swenson, F. Sandegren, P. Taberlet (1997) Genetic diversity and gene flow in the Scandinavian brown bear population: implications for management. Int. Conf. of Bear Res. and Manage.
- Waits, L. (1995) A comparison of genetic variability in brown bear populations from Alaska, Canada, and the lower 48 states 10th Int. Conf. for Bear Res. and Man. Fairbanks, AK.
- Waits, L. (1995) Mitochondrial DNA phylogeography of the brown bear (Ursus arctos) and implications for management. 10th Int. Conf. for Bear Res. and Man. Fairbanks, AK.
- Ward RH, L. Waits (1995) Phylogenetic hypotheses of bear evolution evaluated by multiple region mitochondrial DNA sequence data. 10th Int. Conf. for Bear Res. and Man. Fairbanks, AK.

- Waits, L. (1993) An Ursid phylogeny estimated from multiple regions of mtDNA. Int. Con. of Genet. Birmingham, England.
- Waits, L. (1993) Identification of endangered bear species by taxon-specific sequences (TSSs). Soc. for Cons. Biol. Tempe, AZ.
- Wooding, S., L. Waits, T. Thier, C. Servheen, R.H. Ward. (1993) MtDNA sequences indicate different population origins of grizzly bears and black bears in Montana. Soc. for Cons. Biol. Tempe, AZ
- Waits, L. (1992) Haplotypes at the low density lipoprotein receptor influence lipid levels in females. American Society of Human Genetics. San Francisco, CA.
- Morre, D.J., N. Minnifield, M. Paulik, S. Dunkle, L. Waits, D.M. Morre (1989) Temperature dependence of transition vesicle formation and membrane transfer from endoplasmic reticulum to golgi apparatus in a cell-free system from rat liver. Soc. for Cell. Biol., Boston, MA.

Grants and Contracts Awarded:

Competitive Grants

- 2020 2021 Demographic and genetic monitoring of the endangered Sonoran pronghorn in Organ Pipe Cactus National Monument, Mexico, and surrounding areas using fecal DNA sampling, National Park Service, \$49,693
- 2019-2021 Alaska Wolverine Landscape Genetics, Wildlife Conservation Society, \$39,351
- 2019 2023 Blue Mountain Undergraduate Internships, Wa Dept Fish and Game, 2 undergraduate summer internships per year, for 4 years, \$48,000
- 2019-2024 Mexican wolf genetic monitoring, USFWS, \$100,000
- 2019 Central American Youth Ambassadors. Georgetown University, \$55,000 (Co-PI)
- 2019 Fulbright Orientation Program, Institute of International Education, \$86,460 (Co-PI)
- 2019 2020 Genetic monitoring of the endangered Columbia Basin Pygmy Rabbit, USFWS Recovery Challenge, \$66,270
- 2019-2024 LSAMP Bridge to Doctorate University of Idaho All Nations NSF-Louis Stokes Alliances for Minorities Participation, \$1.0 million (Senior personnel and on leadership team but not coPI)
- 2018 2023 NSF-EPSCoR. RII Track-1: Linking Genome to Phenome to Predict Adaptive Responses of Organisms to Changing Landscapes. (\$24,000,000 total). P.I.: J. Nelson; Co-P.I.'s: C. Baxter, J. Forbey, R. Hardy; Senior Personnel: J. Abatzoglou, S. Benner, J. Brandt, S. Buerki, M. Burnham, C. Caudill, T. Caughlin, M. Davis, D. Delparte, S. Eigenbrode, J. Foster, J. Freemuth, N. Glenn, J. Heath, V. Hillis, P. Hohenlohe, E. Keeley, A. Kliskey, D. Llewellyn, J. Loxterman, C. Miller, S. Novak, J. Rachlow, K. Reinhardt, K. Rodnick, K. Running, L. Sheneman, B. Small, J. Sullivan, L. Waits, H. Wichman
- 2018-2019 Genetic monitoring of the endangered Columbia Basin Pygmy Rabbit, American Association of Zoos and Aquariums, \$18,100
- 2018-2019 Sibship reconstruction of gray wolves in Idaho, Idaho Fish and Game, \$20,792
- 2018 2019 Genetic Monitoring of the Columbia Basin Pygmy Rabbit, Oregon Zoo \$4935
- 2018-2019 Implementing a fecal DNA sampling method for obtaining demographic and genetic monitoring data for the endangered Sonoran pronghorn and bighorn sheep in Organ Pipe Cactus National Monument, Mexico, and surrounding areas, Southwest Border Resource Protection Program, National Park Service \$39,524
- 2017-2019 Genetic identification of shrews, Nevada Division of Wildlife, \$29,000
- 2017-2018 Central American Youth Ambassadors Georgetown University, \$28,030
- 2017 2020 Cougar Population Monitoring and Graduate Student Training with the Lower Elwha Klallam Tribe subcontract from Lower Elwha Klallam Tribe on US Dept Health and Human Services grant, \$106,174

- 2017- 2018 Developing a noninvasive method for obtaining demographic and genetic monitoring data for the endangered Sonoran pronghorn and bighorn sheep in Organ Pipe Cactus National Monument, Mexico, and surrounding areas, Southwest Border Resource Protection Program, National Park Service, \$49,306
- 2017 Long-term Genetic Consequences of Red Wolf-Coyote Hybridization/Demographics of a Large Canid in Southwest Louisiana, Louisiana Dept Wildlife and Fisheries, \$27,996
- 2016 2018 Columbia Basin Pygmy Rabbit Genetic Monitoring, USFWS (coPI J Rachlow, P Hohenlohe), \$80,978
- 2016 2017 Examining the Taxonomy and Genetic Distinctiveness of the Red Wolf, USFWS, (CoPIs Adams, Andrews, Hohelohe) \$23,585
- 2016 2020 BEARWATCH: Monitoring Impacts of Arctic Climate Change using Polar Bears, Genomics and Traditional Ecological Knowledge – Genome Canada grant to Queens University, Total funding: \$9.5 million, UI subcontract \$300,000
- 2016 2017 Characterizing the importance of local populations to the persistence of Northern and Southern Idaho Ground Squirrels through genome-wide DNA sequencing, USFWS with Conway, Tank, Andrews, \$20,000
- 2015 2018 An International, Interdisciplinary Student Research Program in a Biological Hotspot of Southern Ecuador National Science Foundation-IRES panel, with Roon, Bosque-Perez, Wilhelm, \$245,305
- 2013 2014 Preliminary evaluation of environmental DNA for monitoring amphibians in Yellowstone National Park. National Park Service, Cooperative Ecosystems Study Unit, with C. Goldberg, \$8813
- 2013 2014 Population genetics of the pygmy rabbit in northern Utah. Utah Department of Natural Resources, \$28,317
- 2013 2014 A Proposal to Evaluate the Effectiveness of Environmental DNA Methodology for Surveying Amphibians on the Lower Colorado River Drainage, Arizona Fish and Game, with C. Goldberg, \$9500
- 2013 2014 Noninvasive Genetic Sampling Pilot Studies on Green Diamond Forestry Lands, Green Diamond Forestry, with C. Goldberg, \$26,556
- 2013 2014 Noninvasive genetic evaluation of predators of caribou, Newfoundland Government, \$42,401
- 2013-2018 Mexican wolf genetics, USFWS, \$150,000
- 2013-2014 Molecular Genetic Equipment for Improved Inventory and Monitoring of Species of Conservation Concern on Department of Defense Lands, Department of Defense, with C. Goldberg, \$169,514
- 2013 2015 Quantifying linkages among land-use policies, agricultural intensification, habitat fragmentation, and social-ecological systems in a tropical biological corridor, National Science Foundation, Coupled Natural Human Ecosystems, with N Bosque-Perez, L Vierling, L. Hormel, \$183,423
- 2012 2015 Monitoring species of concern using noninvasive genetic sampling and capturerecapture methods: demonstration and validation with kit fox and Sonoran pronghorn, L Waits, J Horne, DOD, \$607,518
- 2012 2015 Environmental DNA as a Tool for Inventory and Monitoring of Aquatic Vertebrates, A Fremier, K Strickler, C Goldberg (I was co-contributor but not co-PI because it was not possible to be PI on two DOD grants), DOD, \$650,000
- 2011 2012 Detecting amphibian species using environmental DNA from water samples, USGS Amphibian Research, Monitoring and Inventory, David Pilliod (USGS), L Waits, C Goldberg, R Arkle (USGS) - \$48,769, (subcontract to UI \$20,790)
- 2011 2012 Developing a test for early detection of New Zealand mudsnails using environmental DNA. Adam Sepulveda (USGS), Andrew Ray (USGS), L Waits. USFWS \$25,635

- 2010 2013 An Interdisciplinary Team-Based International Research Experience in Biodiversity Conservation and Sustainable Community Development in the Ecuadorian Andes, Waits, L, S. Pinel, S. Mulkey, D. Tank, J. Rachlow, D. Roon National Science Foundation, \$146,945
- 2009 2014 Evaluating resilience of ecological and social systems in changing landscapes: a doctoral research and education program in Idaho and Costa Rica with Bosque-Perez, N., S Eigenbrode, P Morgan, JD Wulfhorst, JE Force, NSF IGERT Grant, \$3.2 million
- 2007 2010 Behavioral Responses to a Population Bottleneck in Pronghorn, with J Byers, National Science Foundation, \$575,000
- 2007 2008 Landscapes without borders: Towards an interdisciplinary teaching and research program to analyze landscapes for ecology and conservation, with R. Dezzani, L. Vierling, University of Idaho Interdisciplinary Grants Program, \$14,600.
- 2008 NSF Dissertation Improvement Grant with PhD student Stacey Dunn, \$10,000.
- 2005 2006 Systematics and landscape genetics of Idaho ground squirrels, with J. Sullivan, J. Rachlow, S. Brunsfeld, UI Center for Research on Invasive Species and Small Populations, \$24,900
- 2005 2008 Temporal and spatial patterns of genetic variation in small populations of plants and animals found in one of Idaho's major biodiversity hotspots, postdoctoral project with S. Brunsfeld, J. Sullivan UI Center for Research on Invasive Species and Small Populations, \$107,2000.
- 2005 2007 Systematics and landscape genetics of Idaho ground squirrels with J. Sullivan, J. Rachlow, S. Brunsfeld, Idaho State Wildlife Grants Program \$26,262.
- 2005 2007 Building Protected Area Management Capacity Globally Consolidated Proposal from the University of Idaho with Bill McLaughlin, Consortium of Protected Area Managers. \$63,250
- 2004 2007 Evaluation of genetic structure among black bear (*Ursus americanus*) on the Kenai Pennisula, with Ian Martin, National Park Service, Inventory and Monitoring of National Park Service \$58,500
- 2004 2007 Research center for applied biotechnology and natural resource management, Co-PIs Steve Brunsfeld and Cort Anderson, State of Idaho Center Grant, \$979,134
- 2004 2007, Modeling trends in forest management, exurban development, and biodiversity conservation under alternative policy portfolios in northern Idaho, Co-Pis, Penny Morgan and JoEllen Force, McIntire-Stennis, \$74,000
- 2004 2006, Evaluating population size, genetic diversity and genetic structure in Croatian brown bears, with Djuro Huber, Ana Galov, and Ivana Tomaskovic (Croatia), Croatian Ministry of Science and the US State Department, \$10,000
- 2003 2004 U of Idaho EPSCoR/NSF request for Genetics Laboratory Instrumentation Improvements, Co-PIs Cort Anderson, Steve Brunsfeld, \$29,500
- 2001 2006, Ecosystem management in tropical and temperate regions: integrating education in sustainable production and biodiversity conservation, National Science Foundation, Co-PI – Nilsa Bosque-Perez, Sanford Eigenbrode, and Paul McDaniel Plant, Soil & Entomological Sciences, Steve Brunsfeld and JoEllen Force, Forest Resources, \$2.6 Million
- 2001 2004 An integrative statistical framework for assessing and minimizing errors in ancient, non-invasive and forensic genetic studies, National Science Foundation, Co-PI Paul Joyce, Mathematics, \$166,000
- 2000 2005 Environmental Surveillance, Education Research on Idaho National Engineering and Environmental Laboratory, US Department of Energy, Multidisciplinary Proposal Stoller Corporation (Idaho Falls, Idaho) with University of Idaho subcontract thru R. Crawford, \$10M to Stoller

- 2000 2002 An evaluation of fecal DNA amplification success rates in ungulates. University of Idaho Seed Grant, \$7943
- 2000 2001 Using non-invasive genetic sampling in research and conservation of endangered wildlife, NATO Expert Visit program, \$2,635
- 1999 2001, Minimum population estimate and limiting factors for the North Cascades Grizzly Bear, Seattle City Light, through WSU with Co PI - Robert Wieglus and Charlie Robbins, Department of Natural Resource Sciences, Washington State University, \$187,000
- 1998 2001 Evaluation of historical levels of genetic diversity in brown bears of the lower forty eight states, National Science Foundation -EPSCoR, Co-PI – grant was administrated by Dr. Shreeve and included proposals from 10 faculty. \$180,000
- 1998 2000 Research Experience for Undergraduates, NSF-EPSCoR, \$10,800,
- 1998 2002 Acquisition of equipment for a molecular genetics core facility for research and research training in conservation genetics and molecular ecology, National Science Foundation, Co PI - Steve Brunsfeld, Forest Resources, Ernest Brannon, Aquaculture, \$271,615
- 1998 1999 An examination of the effects of highways on genetic diversity and gene flow in *Peromyscus maniculatus,* University of Idaho Seed Grant, \$5,865

Grants Funded and Written in Partnership with other Institutions

(\$ did not come to UI but supported my research and teaching activities)

- 2011- 2012 Distributed graduate course in landscape genetics: Interdisciplinary, international, experiential graduate education, Melanie Murphy, Helene Wagner, Lisette Waits, American Genetics Association \$20,000
- 2011 2012 CIEE Graduate Mini-Course in Landscape Genetics: Training in Interdisciplinary International Research Collaboration. H. Wagner, L. Waits, M. Murphy, N. Keyghobadi, National Science and Engineering Research Council of Canada, \$19,800
- 2011 2013 Nepal Tiger Genome Project Building Wildlife Genetics Capacity for Tiger Conservation in Nepal. Dibesh Karmacharya (CMD-Nepal), Kanchan Thapa (CMD-Nepal), Marcella Kelly (VT), L Waits. USAID, \$282,865.
- 2008 2010 Distributed Graduate Seminar in Landscape Genetics. National Center for Ecological Analysis and Synthesis (NCEAS) with H. Wagner (U of Toronto) \$40,000

Contracts

- 2016 Genetic analysis of Idaho wolves, Idaho Fish and Game, \$5,664
- 2016 DNA analysis of wolves, Oregon Fish and Game, \$7,780
- 2016 DNA analysis of bighorn sheep, Wa Fish and Game, \$17,510
- 2016 Genetic analysis of shrews, Nevada Dept Fish and Wildlife, \$1980
- 2016 Genetic analysis of red wolves, US Fish and Wildlife Service, \$1260
- 2016 Individual ID of bear hair samples, Univ Washington, \$10,120
- 2016 Species and individual ID of canid samples, NC Fish and Wildlife \$950
- 2016 Pronghorn individual ID of fecal pellets, NPS- DoD, \$7,500
- 2016 Sex ID of Bobcat tissues, South Dakota Fish and Game, \$5,500
- 2016 Individual ID of bear hair samples, Washington St Univ, \$25,389
- 2016 Species ID of carnivore scats, New Mexico State University, \$6300
- 2016 Individual ID of bear samples, Ohio Fish and Wildlife, \$310

2016, Fecal DNA analysis of polar bears, Queens Univ, \$3800 2016, DNA analysis of wolves, Spokane Tribe, \$510 2016, DNA analysis of wolves, Utah Dept Fish and Wildlife, \$365 2015 Individual ID of wolf scats, Montana Coop Unit, \$1850 2015 Species and individual ID of predator scats, Utah State, \$3800 2015 Genetic analysis of Idaho wolves, Idaho Fish and Game, \$81,000 2015 Genetic analysis of bighorn sheep, Idaho Fish and Game, \$30,000 2015 Individual ID and paternity analysis of horse fecal samples, NPS \$4500 2015 DNA analysis of bighorn sheep, Oregon Fish and Game, \$15,000 2015 DNA analysis of bighorn sheep, Wa Fish and Game, \$5,700 2015 Genetic analysis of red wolves, US Fish and Wildlife Service, \$950 2015 Individual ID of bear hair samples, Univ Washington, \$6,120 2015 Species and Individual ID of carnivore scats, Auburn Univ, \$13,500 2015 Pronghorn individual ID of fecal pellets, NPS- DoD, \$7500 2015 Species ID of carnivore scats, South Dakota Fish and Game, \$1400 2015 Individual ID of bear hair samples, Washington St Univ, \$13,200 2014 Individual ID of wolf scats, Montana Coop Unit, \$39,000 2014 Species and individual ID of predator scats, Alaska F&G, \$950 2014 Species and individual ID of predator scats, Yellowstone Park, \$2500 2014 Genetic analysis of Idaho wolves, Idaho Fish and Game, \$33,500 2014 Species and individual ID of carnivore scats, Colville Tribe, \$3875 2014 Species and individual ID of carnivore scats, Spokane tribe, \$845 2014 DNA analysis of polar bear scats, Queens University, \$4000 2014 DNA analysis of bears and wolves, Oregon Fish and Game, \$5550 2014 Genetic analysis of red wolves, US Fish and Wildlife Service, \$4658 2014 Individual ID of bear hair samples, Univ Washington, \$10,160 2014 Genetic analysis of bear hear samples, Auburn Univ, \$5336 2014 DNA analysis of bears and cougars, \$63,000 2013 eDNA analysis of amphibians, \$2683, North Carolina Zoological Park 2013 Individual ID of wolf scats, \$30,350, Montana Coop Unit 2013 Genetic analysis of Idaho wolves, \$48,000, Idaho Fish and Game 2013 Fecal DNA analysis of felid scats, \$20,770, Oregon Fish and Game 2013 Species and individual ID of carnivore scats, \$965, Colville Tribe 2013 Species and individual ID of carnivore scats, \$858, Courdelane Tribe 2013 Species and individual ID of carnivore scats \$922, Spokane tribe 2013 Legal deposition work, \$636, Southern Environmental Law Center 2013 DNA analysis of polar bear scats, \$2500, Queens University 2013 Fecal DNA analysis of wolf scats, \$1625, Oregon Fish and Game 2013 Genetic analysis of red wolves, \$4741, US Fish and Wildlife Service 2013 Genetic analysis of kill site samples, \$563, South Dakota Game and Fish 2013 Paternity analysis of wild horses, \$2170, National Park Service 2013 Individual ID of bear hair samples, \$1845, Univ Washington 2013 Genetic analysis of fecal samples, \$2184, Notre Dame 2013 Genetic analysis of fecal samples, \$18,200, Virginia Tech 2013 Genetic analysis of bear hear samples, \$6321, Auburn Univ 2012 Oregon Cougar Fecal DNA sampling project, Oregon Fish and Game - \$30,000 2012 Oregon Wolf Monitoring project, Oregon Fish and Game – \$2,265 2012 Oregon Cattleman's Association Predator Monitoring - \$675

- 2012 Spokane Tribe Carnivore Fecal DNA analysis \$1,070
- 2012 Colville Tribe Carnivore Fecal DNA analysis \$1,500
- 2012 USFWS Wolf Fecal DNA Monitoring Project \$22,500
- 2012 YE Wolf Fecal DNA Monitoring Project, YNP \$5,000
- 2012 Wolf Fecal DNA Monitoring USGS Montana Coop Unit \$7,000
- 2012 Amphibian Disease Monitoring, IDFG \$1924
- 2012 Pygmy Rabbit Monitoring, IDFG \$6950
- 2012 Pygmy Rabbit Monitoring, Colorado Natural Heritage, \$600
- 2012 Genetic analysis of West Virgina Coyotes, VDFG, \$5,500
- 2012 Fecal DNA analysis of Virginia Canids, Virginia Tech, \$23,600
- 2011 Genetic analysis of golden eagles \$6428, Aquilla Environmental
- 2011 Genetic assessment of W. Virginia coyotes, \$1450, USDA
- 2011 Sage Grouse Pellet Individual ID \$630, Environmental Consulting CA
- 2011 2012 Cougar and bobcat fecal DNA analysis, Oregon Fish and Wildlife \$12,000
- 2011 Species and Individual ID of carnivore hair samples, Alaska Fish and Game, \$830
- 2011 Genetic analysis of wolves, Oregon Department of Fish and Game, \$1150
- 2011 Fecal DNA monitoring of pygmy rabbits, Idaho Fish and Game Pocatello \$4400
- 2010 Genetic analysis of water samples to detect amphibians, \$1270, USGS Boise
- 2010 2011 Beaver sex identification \$2940, Forest Service
- 2010 2012 Predator prey dynamics in Newfoundland, Newfoundland Government \$46,700
- 2010 2011 Bighorn sheep population genetics \$15,000, Idaho Fish and Game
- 2010 Genetic analysis of gray wolf feces, \$8522, Idaho Fish And Game
- 2010 Genetic analysis of Idaho Giant Salamander \$1700, Idaho Fish and Game
- 2010 Genetic analysis of New Mexico Black bears, \$3000, Virginia Tech
- 2010 2011 Paternity Analysis of Shackleford Island Horses, National Park Service \$8650
- 2009 2011 Chytrid fungus monitoring and landscape genetics of Idaho Giant Salamanders in the Clearwater National Forest, US Forest Service, \$44,000
- 2009 2012 Predator monitoring in Newfoundland, Safari Club, \$165,000
- 2009 2011 Fecal DNA analysis of felids of Belize, Virginia Tech, \$23,000 (\$8,000 2011)
- 2009 2011 Idaho Tiger Beetle systematics, Idaho Fish and Game, \$20,000
- 2009 2011 Chytrid fungus monitoring and landscape genetics of Idaho Giant Salamanders in the Clearwater National Forest, US Forest Service, \$44,000
- 2008 2011 Red wolf genetic analysis \$165,500
- 2007 2011 Pygmy Rabbit Fecal DNA Identification project, Idaho Fish and Game, \$45,000
- 2007 2011 Fecal DNA Monitoring of Idaho Gray Wolves, Nez Perce Tribe and IDFG \$70,600
- 2007 Coyote genetic analysis, Utah State-USGS \$5700
- 2006 2008 Conservation genetics of red wolves, USFWS, \$97,260
- 2006 2007 Species and Individual ID of snow leopard scats, Snow Leopard Trust \$13,500
- 2005 2006 Mongolian Gazelle and Grey Wolf Genetics WCS \$12,000
- 2005 2006 Wildlife Conservation Society carnivore detection project \$10,000
- 2003 2009 Non-invasive genetic sampling Italian brown bears \$70,500
- 2002 2005 Non-invasive Sampling and genetics of Red wolf, USFWS, \$135,000

- 2002 2004 Paternity study Montana Cougars, Montana Fish and Game \$20,000
- 2002, 2005 Black Bear and cougar Individual ID from Hair and feces, IDFG, \$45,000
- 2001 2002 Paternity study of Alaska brown bears, LGL environmental consulting \$6,000
- 2001 2004, Non-invasive genetic sampling in the Grand Canyon, US Park Service, \$7,000
- 2001 2002 Species ID of bear scats from Montana, Montana Fish and Game, \$5000
- 2001 2002, DNA analysis of bear hair samples, Gerry Wright, Univ. Idaho, \$28,000
- 2001 2002 Gene flow in Montana Wolverines, Montana Fish and Wildlife \$10,500
- 1999 2001, Red wolf genetics, US Fish and Wildlife Service, \$79,000
- 1999 2000, Genetic analysis bear hair samples British Columbia, LGL, \$15,000
- 1999 2000 Population estimation of Minnesota black bears, Univ. of Minnesota, \$20,000
- 1999 2000 Genetic identification Montana black bears, Montana Fish and Game \$4000
- 1999 2000 Individual ID and gene flow of brown bears in the Gobi desert, WCS, \$3000
- 1999 Identifying Carnivore species at Moose Kill Sites, Alaska Fish and Game, \$2000
- 1998 2002 Genetic ID hair samples, Yellowstone Grizzly Foundation/Interagency Grizzly Bear Study Team, \$60,000
- 1998 2002 Using DNA to monitor grizzly bear population trends in Glacier Park with US Geological Survey/Biological Research Division, \$386,000
- 1998, Forensic individual identification of bear scat and hair samples from a human predation event in Glacier National Park, Glacier National Park, \$2,000

Consulting

2013 Prepared a legal declaration on coyote hunting filed by Southern Environmental Law Firm over concerns on possible impacts to red wolves

2010 Prepared a legal declaration on Great Lakes Wolf Delisting – retained by BIRCH, HORTON, BITTNER AND CHEROT paid by the U.S. Sportsmen's Alliance Foundation ("USSAF") and Wisconsin Bear Hunters Association

Honors and Awards:

2001 Best Paper/Oral Presentation International Bear Association Meeting (with 3 co-authors) 2002 Best Poster – International Bear Association Meeting (with 3 co-authors) 2003 Outstanding Research Award, College of Natural Resources 2004 Outstanding Research Award, College of Natural Resources 2005 Teaching Excellence Award, University of Idaho 2005 Publication of the year for USGS National Wildlife Research Center (with 3 coauthors) 2005 Best Oral Presentation International Bear Association Meeting, Italy 2006 Alumni Award for Excellence in Mentoring, University of Idaho 2006 Research Excellence Award, University of Idaho 2006 Publication of the year for USGS National Wildlife Research Center (with 3 coauthors). 2007 Environmental Science Faculty Excellence Award 2009 Best professional presentation, Idaho Chapter of the Wildlife Society 2009 Alumni Award for Excellence in Mentoring, University of Idaho 2010 Donald Crawford, Graduate Mentoring Award, University of Idaho 2010 Alumni Award for Excellence in Mentoring, University of Idaho 2011 Excellence in Interdisciplinary Research Team Award, University of Idaho 2012 Mid Career Excellence Award, University of Idaho 2014 Alumni Award for Excellence in Mentoring, University of Idaho

2015 Distinguished Professor, University of Idaho

2015 Arthur S. Einarsen award outstanding professional service, NW Chapter of Wildlife Society

- 2015 Alumni Award for Excellence in Mentoring, University of Idaho
- 2017 Alumni Award for Excellent in Mentoring (2 students), University of Idaho
- 2017 Elected Fellow of The Wildlife Society

2017 Elected Fellow of AAAS

2017 Jeanne Shreeve NSF EPSCoR Research Excellence Award

2018 Alumni Award for Excellence in Mentoring, University of Idaho

2019 Excellence in Postdoctoral Mentoring Award, University of Idaho

2020 Alumni Award for Excellence in Mentoring, University of Idaho

SERVICE:

Major Committee Assignments:

University level

2016 VP for Research Search Committee

2013 Research/technology building faculty review team

2013 Don Crawford Mentoring Award Committee

2013 Interdisciplinary Research Award Committee

2011-2013 Selection Committee for UI Distinguished University Professor

2011 Athena Scholarship Committee

2009 – 2011 Research Council

2009 - 2010 Search Committee for Dean of College of Natural Resources

2008 Facilitated UI leadership retreat organized by the Provost

2006 - 2007 UI Strategic Implementation Team for Research

2006 - 2007 Search Committee VP for Research

2005 - 2006 President's Blue Ribbon Panel

2002 - present, NSF-IGERT program steering committee

2000 – 2003 International Affairs

2000 - 2004 Graduate Council

1998 - 2001 Animal Care and Use Committee

College Level

2007 - 2013 Ecology and Conservation Biology Petitions Committee

2007 - 2009 Chair PhD Assessment and Outcomes Committee

2000 - 2005 Curriculum Committee

2000 Department Head Review Committee

1998 – 1999 Conservation Biology Undergraduate Curriculum Development Committee

1999 – 2001 Co-Led Undergraduate Program in Natural Resources Ecology and Conservation Biology

1998 CNR Lab Space Committee

Departmental

2013-2014 Department Head search committee chair

2013 Tenure and promotion committee

2013 Population Ecology Search Committee

2011 Chair of 3rd Year Review Committee

2008 Third year review committee

2007 Tenure and promotion committee

2006 Tenure and Promotion committee

2004 Department Head selection committee

2004 Tenure and Promotion Committee

2004 Third Year Review Committee 2001 – 2003 NRECB club advisor 1999 Departmental Tenure Review Committee 1998 – 1999 Third Year Review Committee

Professional and Scholarly Organizations

President National Association of Fish and Wildlife Programs 2020- current President-Elect National Association of Fish and Wildlife Programs 2018- 2019 Society of Molecular Biology and Evolution 1999 – 2003 American Genetic Society 2011 – present American Association for the Advancement of Science 2012 - present Sigma Xi 2011 - present Society of Conservation Biology 1996 - present International Association for Bear Research and Management 1995 – present The Wildlife Society – 1999 – present International and US Association of Landscape Ecologists 2007 - present

Outreach Service:

2013 Organized and led Palouse Prairie School field trip on "amazing research with poop"

2010 Friends of Clearwater Talk on Wolverines

2008 Guest speaker for primary school Roots and Shoots environmental club

2007 Organized and led science day at Moscow Charter School

2007 Participated in women in science seminar at Moscow High School

2003 Hosted 2 Legislator visits to my lab thru the EPSCOR program

2002 Hosted 1 legislator in my lab thru the EPSCOR program

2001 Interview was recorded and used by National Public Radio as part of NSF DNA files series

1999 Women in Natural Resources workshop for junior high girls

Appointed Professional Service

2014- current, Associate editor Bioscience

2009-2011 NCEAS working group on Landscape Genetics

2010 Outside thesis opponent Stockholm University

2007 Global Environmental Change Associate Professor External Search Committee Member, Uppsala University, Sweden

2007 NSF review panel Evolutionary Biology

2006 Outside thesis opponent Uppsala University

2005 - 2006, Associate Editor, Journal of Wildlife Management

2004 - 2011, Associate Editor Wildlife Biology

2004 Outside thesis opponent Norway

2003 - current, Associate Editor Molecular Ecology

2003 – 2006, Mexican Wolf Recovery Team

2001 – 2004, Washington Pygmy Rabbit Scientific Advisory Board

2001 NSF review panel for Doctoral Dissertation Improvement Grants

2000 - 2009, Wildlife Society Working Group on Ecosystem Management

1999 NSF review panel for Major Research Instrumentation Grants

1999 – 2001 International Union for Conservation of Nature (IUCN) bear specialist group

1999 - present, Red Wolf Recovery Implementation Team for USFWS

Professional Reviews for grants and manuscripts

Animal Conservation, Australian Journal of Zoology, Conservation Biology, Conservation Genetics, Evolution, Journal of Applied Ecology, Journal of Heredity, Journal of Mammalogy, Journal of Wildlife Management, Journal of Zoology, Landscape Ecology, Molecular Biology and Evolution, Molecular Ecology, Molecular Phylogenetics and Evolution, Nature, Northwest Science, NSF Ecology Panel, NSF Population Biology Panel, Proceedings of the Royal Society London, Proceedings of National Academy of Sciences, Science, Ursus, Wildlife Research

PROFESSIONAL DEVELOPMENT:

Teaching and Advising:

2013 Workshop on science and the media
2002 Workshop on Teaching Conservation Biology, Canterbury England
2000 Natural Resources in Education Conference, Columbia
1999 Advising Workshop, U of I
1998, 1999 Writing Across the Curriculum, U of I
1998 Natural Resources Education Conference, Logan, Utah
1998 Attended University of Idaho Teaching Course