SARAH J. CONVERSE

USGS Washington Cooperative Fish and Wildlife Research Unit
School of Aquatic and Fishery Sciences
University of Washington, Seattle 98195

Office phone: (+1) 206-221-5791
E-mail: sconver@uw.edu
https://depts.washington.edu/qcons/

EDUCATION

Colorado State University, Fort Collins, Colorado
Ph.D. Department of Fishery and Wildlife Biology
Date of Graduation: May 2005
Dissertation title: *Small mammal responses to forest restoration and fuel reduction*
Supervisor: Gary White

University of Nebraska, Lincoln, Nebraska
M.S. School of Natural Resource Sciences
Date of Graduation: December 1999
Dissertation title: *Habitat selection and population response to commercial harvest of Nebraska ornate box turtles*
Supervisor: Julie Savidge

Michigan State University
B.S. Department of Fisheries and Wildlife
Date of Graduation: December 1996

EMPLOYMENT HISTORY

School of Aquatic and Fishery Sciences, University of Washington, Seattle
2025-present: Professor Without Tenure

School of Environmental and Forest Sciences, University of Washington, Seattle
2025-present: Professor Without Tenure

USGS Washington Cooperative Fish and Wildlife Research Unit, University of Washington, Seattle
2017-present: Unit Leader

School of Aquatic and Fishery Sciences, University of Washington, Seattle
2017-2025: Associate Professor Without Tenure

School of Environmental and Forest Sciences, University of Washington, Seattle
2017-2025: Associate Professor Without Tenure

USGS Patuxent Wildlife Research Center, Laurel, Maryland
2007-2017: Research Ecologist

Department of Fishery and Wildlife Biology, Colorado State University, Fort Collins
2005-2007: Post-Doctoral Research Associate

PUBLICATIONS

Journal Publications – In Review/Revision

Bratt AE, CD Cappello, AJ DuVall, HA Sipe, AJ Warlick, B Gardner, and **SJ Converse**. In Review. Effects of species life history and data availability on integrated population model performance. Submitted to Ecology.

DeLap JH, JM Marzluff, and **SJ Converse**. In Revision. Arrested development: successional pathways of suburban bird communities. Submitted to Ecological Applications.

DeLap JH, JM Marzluff, and **SJ Converse**. In Revision. A tale of two suburbs: influence of new residential construction varying in housing density on bird species, human tolerance guilds, and communities. Submitted to Scientific Reports.

Sipe HA, JG Ewen, S Canessa, L Adams, DF Shanahan, KC Beaven, R Selwyn, EH Parlato, and **SJ Converse**. In Review. Using constructed value of information to identify uncertainties in threatened species management programs. Submitted to Ecosphere.

Sorel MH, RW Zabel, AR Murdoch, and **SJ Converse**. In Review. Management strategy evaluation for salmon habitat restoration and hatchery supplementation. Submitted to Conservation Science and Practice.

Journal Publications – Accepted/Published

Petracca LS, B Gardner, BT Maletzke, and **SJ Converse**. Accepted. Forecasting dynamics of a recolonizing wolf population under different management strategies. Animal Conservation.

Rand ZR, TA Branch, and **SJ Converse**. Accepted. Battle of the sexes: larger rorqual whale mothers invest in female offspring to maximize lifetime reproductive success. Proceedings of the Royal Society of London, B.

Amburgey SM, A Prakash, AA Yackel Adams, SR Siers, and **SJ Converse**. 2025. Development and evaluation of the remote passive interated transponder tag reader for customizable monitoring of wildlife. The Wildlife Society Bulletin 49:e1569

Canessa S, **SJ Converse**, L Adams, DP Armstrong, T Makan, M McCready, KA Parker, EH Parlato, HA Sipe, JG Ewen. 2025. Simulating demography, monitoring and management decisions to evaluate adaptive management strategies for endangered species. Conservation Letters 18:e13905.

Canessa S, A Moehrenschlager, JG Ewen, and **SJ Converse**. 2025. Self-sustaining populations are a conservation vision, not an operational objective. Conservation Science and Practice 74:e70033.

Diallo JO, **SJ Converse**, M Chmiel, A Stites, and JD Olden. 2025. Optimizing invasive species eradication in time and space: a case study of green sunfish removal in intermittent streams. Ecological Applications 35:e70026.

Petracca LS, B Gardner, BT Maletzke, and **SJ Converse**. 2025. Response to Santiago-Ávila et al. (2024). Biological Conservation 302:110926.

Teman SJ, TC Atwood, **SJ Converse**, TL Fry, and KL Laidre. 2025. Measuring polar bear health using allostatic load. Conservation Physiology 13:coaf013.

Thompson BK, JD Olden, and **SJ Converse**. 2025. Balancing monitoring and management in the adaptive management of an invasive species. Ecology and Evolution 15:e71176.

Warlick AJ, BS Fadely, P Mahoney, SR Melin, T Gelatt, K Raum-Suryan, **SJ Converse**. 2025.

Evaluating mark-resight survey design performance using simulation: a case study of endangered Steller sea lions. Ecosphere 16:e270269.

Brusa JL, MT Farr, J Evenson, E Silverman, B Murphie, TA Cyra, H Tschaekofske, KA Spragens, and **SJ Converse**. 2024. Correcting for measurement errors in a long-term aerial survey with auxiliary photographic data. Ecosphere 15:e4961.

Gerber BD, BA Mosher, LL Bailey, E Muths, HJ Crockett, and **SJ Converse**. 2024. Just do it: optimal management decisions are robust to unknown dynamics in an amphibian metapopulation plagued by disease. Animal Conservation 27:65-77.

Petracca LS, B Gardner, BT Maletzke, and **SJ Converse**. 2024. Merging integrated population models and individual-based models to project population dynamics of a recolonizing species. Biological Conservation 289:110340.

Sorel MH, JC Jorgensen, RW Zabel, MD Scheuerell, AR Murdoch, CM Kamphaus, and **SJ Converse**. 2024. Incorporating individual heterogeneity in an integrated population model to inform viability analysis. Canadian Journal of Fisheries and Aquatic Sciences 81:535-548.

Thompson BK, JD Olden, and **SJ Converse**. 2024. Evaluating spatially explicit management alternatives for an invasive species in a riverine network. NeoBiota 96:151-172.

Warlick AJ, GK Himes Boor, TL McGuire, KEW Shelden, EK Jacobson, C Boyd, PR Wade, AE Punt, **SJ Converse**. 2024. Identifying demographic and environmental drivers of population dynamics and viability in an endangered top predator using an integrated model. Animal Conservation 27:240-252.

West L, K Rafiq, **SJ Converse**, AM Wilson, NR Jordan, KA Golabek, JW McNutt, and B Abrahms. 2024. Droughts reshape apex predator space use and intraguild overlap. Journal of Animal Ecology 93:1785-1798.

Yackel Adams AA, NJ Hostetter, WA Link, and **SJ Converse**. 2024. Identifying Pareto-efficient eradication strategies for invasive populations. Conservation Letters: e13051.

Himes Boor GK, TL McGuire, AJ Warlick, RL Taylor, **SJ Converse**, JR McClung, and AD Stephens. 2023. Estimating reproductive and juvenile survival rates when offspring ages are uncertain: a novel multievent mark-resight model with beluga whale case study. Methods in Ecology and Evolution 14:631-642.

Keating L, L Randall, R Stanton, C McCormack, M Lucid, T Seaborn, **SJ Converse**, S Canessa, and A Moehrenschlager. 2023. Using decision analysis to determine the feasibility of a conservation translocation. Decision Analysis 20:295-310.

Mendgen P, **SJ Converse**, AT Pearse, CS Teitelbaum, and T Mueller. 2023. Differential shortstopping behaviour in Whooping Cranes: habitat or social learning? Global Ecology and Conservation 41:e02365.

Sorel MH, AR Murdoch, RW Zabel, JJ Jorgensen, CM Kamphaus, and **SJ Converse**. 2023. Juvenile life history diversity is associated with lifetime individual heterogeneity in a migratory fish. Ecosphere 14:e4366.

Sorel MH, AR Murdoch, RW Zabel, CM Kamphaus, ER Buhle, MD Scheuerell, and **SJ Converse**. 2023. Effects of population density and environmental conditions on life-history expression in a migratory fish. Ecology and Evolution 13:e11087.

Todd Zaragoza MI^, AJ DuVall, JA Howard, DM Mazurkiewicz, and **SJ Converse**. 2023. Laying sequence and oceanographic factors affect egg size in Scripps's Murrelets *Synthliboramphus scripps* at Santa Barbara Island. Marine Ornithology 51:1-9.

Warlick AJ, DS Johnson, KL Sweeney, TS Gelatt, and **SJ Converse**. 2023. Examining the effect of environmental variability on the viability of endangered Steller sea lions using an integrated population model. Endangered Species Research 52:343-361.

Converse SJ, BT McClintock, and PB Conn. 2022. Special Feature: Linking capture-recapture and movement. Ecology 103:e3770.

Doll CF, **SJ Converse**, CB Edwards, and CB Schultz. 2022. Using structured decision making to guide

habitat restoration for butterflies: a case study of Oregon silverspots. Journal of Insect Conservation 26:219-230.
Doll CF, **SJ Converse**, and CB Schultz. 2022. Non-target effects of herbicides on the Zerene silverspot butterfly, a surrogate for the Oregon silverspot butterfly. Journal of Insect Conservation 26:1-15.
Edwards HA, **SJ Converse**, KD Swan, and A Moehrenschlager. 2022. Trading off hatching success and cost in the captive breeding of Whooping Cranes. Animal Conservation 25:101-109.
Gardner B, BT McClintock, **SJ Converse**, and NJ Hostetter. 2022. Integrated animal movement and spatial capture-recapture models: simulation, implementation, and inference. Ecology 103:e3771.
Hemming V, AE Camaclang, MS Adams, M Burgman, K Carbeck, J Carwardine, I Chades, L Chalifour, **SJ Converse**, LNK Davidson, GE Garrard, R Finn, JR Fleri, J Huard, HJ Mayfield, E McDonald-Madden, I Naujokaitis-Lewis, HP Possingham, L Rumpff, MC Runge, D Stewart, VJD Tulloch, T Walshe, and TG Martin. 2022. An introduction to decision science for conservation. Conservation Biology 36:e13868.
Hostetter NJ, EV Regehr, RR Wilson, JA Royle, and **SJ Converse**. 2022. Modeling spatiotemporal abundance and movement dynamics using an integrated spatial capture-recapture movement model. Ecology 103:e3772.
McClintock BT, B Abrahms, RB Chandler, PB Conn, **SJ Converse**, RL Emmet, B Gardner, NJ Hostetter, and DS Johnson. 2022. An integrated path for spatial capture-recapture and animal movement modeling. Ecology 103:e3473.
Oppel S, BL Clark, MM Risi, C Horswill, **SJ Converse**, CW Jones, AM Osborne, K Stevens, V Perold, AL Bond, RM Wanless, R Cuthbert, J Cooper, PG Ryan. 2022. Cryptic population decrease due to invasive species predation in a long-lived seabird supports need for eradication. Journal of Applied Ecology 59:2059-2070.
Sipe HA, IN Keren, and **SJ Converse**. 2022. Integrating community science and agency-collected monitoring data to expand monitoring capacity at large spatial scales. Ecology and Evolution 13:e11087.
Warlick AJ, DS Johnson, TS Gelatt, and **SJ Converse**. 2022. Environmental drivers of demography and potential factors limiting the recovery of an endangered marine top predator. Ecosphere 13:e4325.
Abrahms B, CS Teitelbaum, T Mueller, and **SJ Converse**. 2021. Ontogenetic shifts from social to experiential learning drive avian migration timing. Nature Communications 12:7326.
Amburgey SM, AA Yackel Adams, B Gardner, NJ Hostetter, SR Siers, BT McClintock, and **SJ Converse**. 2021. Evaluation of camera trap-based abundance estimators for unmarked populations. Ecological Applications 31:e02410.
Amburgey SM, AA Yackel Adams, B Gardner, B Lardner, AJ Knox, and **SJ Converse**. 2021. Tools for increasing visual encounter probabilities for invasive species removal: a case study of brown treesnakes. Neobiota 70:107-122.
Converse SJ and HA Sipe. 2021. Commentary: Finding the win-win strategies in endangered species conservation. Animal Conservation 24:161-162.
Hostetter NJ, NJ Lunn, ES Richardson, EV Regehr, **SJ Converse**. 2021. Age-structured Jolly-Seber model expands inference and improves parameter estimation from capture-recapture data. PLoS ONE 16:e0252748.
Regehr EV, MC Runge, A Von Duyke, RR Wilson, L Polasek, KD Rode, NJ Hostetter, and **SJ Converse**. 2021. Demographic risk assessment for a harvested species threatened by climate change: polar bears in the Chukchi Sea. Ecological Applications 31:e02461.
Sorel MH, RW Zabel, DS Johnson, AM Wargo Rub, and **SJ Converse**. 2021. Estimating population-specific predation effects on Chinook salmon via data integration. Journal of Applied Ecology 58:372-381.
Thompson BK, **SJ Converse**, and JD Olden. 2021. Mechanistic invasive species management models and their application in conservation. Conservation Science and Practice 3:e533.
Thurner SD, **SJ Converse**, and TA Branch. 2021. Modeling opportunistic exploitation: increased

extinction risk when targeting more than one species. Ecological Modelling 454:109611.
Adler PH, J Barzen, E Gray, A Lacy, RP Urbanek, and **SJ Converse**. 2019. The dilemma of pest suppression in the conservation of endangered species. Conservation Biology 33:788-796.
Converse SJ and EHC Grant. 2019. A three-pipe problem: dealing with complexity to halt amphibian declines. Biological Conservation 236:107-114.
Funk WC, BR Forester, **SJ Converse**, C Darst, and S Morey. 2019. Improving conservation policy with genomics: a guide to integrating adaptive potential into U.S. Endangered Species Act decisions for conservation practitioners and geneticists. Conservation Genetics 20:115-134.
Kadin M, M Frederiksen, S Niiranen, and **SJ Converse**. 2019. Linking demographic and food-web models to understand management trade-offs. Ecology and Evolution 9:8587-8600.
Lloyd NA, NJ Hostetter, CL Jackson, **SJ Converse**, and A Moehrenschlager. 2019. Optimizing release strategies: a stepping-stone approach to reintroduction. Animal Conservation 22:105-115.
Lloyd NA, NJ Hostetter, CL Jackson, **SJ Converse**, and A Moehrenschlager. 2019. Response: future directions to escalate benefits of the stepping-stone approach for conservation translocations. Animal Conservation 22:122-123.
Teitelbaum CS, **SJ Converse**, and T Mueller. 2019. The importance of early life experience and animal cultures in reintroductions. Conservation Letters 12:e12599.
Barzen JA, **SJ Converse**, PH Adler, A Lacy, E Gray, and A Gossens. 2018. Examination of multiple working hypotheses to address reproductive failure in reintroduced Whooping Cranes. The Condor 120:632-649.
Cummings JW, **SJ Converse**, DR Smith, S Morey, and MC Runge. 2018. Implicit decision framing as an unrecognized source of confusion in endangered species classification. Conservation Biology 32:1246-1254.
Gerber BD, **SJ Converse**, E Muths, HJ Crockett, BA Mosher, and LL Bailey. 2018. Identifying species conservation strategies to reduce disease-associated declines. Conservation Letters 11:1-10.
Link WA, **SJ Converse**, AA Yackel Adams, and NJ Hostetter. 2018. Analysis of population change and movement using robust design removal data. Journal of Agricultural, Biological, and Environmental Statistics 23:463-447.
Regehr EV, NJ Hostetter, RR Wilson, KD Rode, M St. Martin, and **SJ Converse**. 2018. Integrated population modeling provides the first empirical estimates of vital rates and abundance for polar bears in the Chukchi Sea. Scientific Reports 8:16780.
Clement MJ, **SJ Converse**, and JA Royle. 2017. Accounting for imperfect detection of groups and individuals when estimating abundance. Ecology and Evolution 7:7304-7310.
Converse SJ, LL Bailey, BA Mosher, WC Funk, and E Muths. 2017. A model to inform management actions as a response to chytridiomycosis-associated decline. EcoHealth 14:S144-S155.
Teitelbaum CS, **SJ Converse**, and T Mueller. 2017. Birds choose long-term partners years before breeding. Animal Behaviour 134:147-154.
Brown ME, **SJ Converse**, JN Chandler, AL Crosier, W Lynch, DE Wildt, CL Keefer, and N Songsasen. 2016. Time within reproductive season, but not age or inbreeding coefficient, influences seminal and sperm quality in the whooping crane (*Grus americana*). Reproduction, Fertility, and Development 29:294-306.
Brown ME, **SJ Converse**, JN Chandler, C Shafer, JL Brown, CL Keefer, and N Songsasen. 2016. Female gonadal hormones and reproductive behaviors as key determinants of successful reproductive output of breeding whooping cranes (*Grus americana*). General and Comparative Endocrinology 230:158-165.
Canessa S, G Guillera-Arroita, J Lahoz-Monfort, DM Southwell, DP Armstrong, I Chadès, RC Lacy, and **SJ Converse**. 2016. Adaptive management for improving species conservation across the captive-wild spectrum. Biological Conservation 199:123-131.
Canessa S, **SJ Converse**, M West, N Clemman, G Gillespie, M McFadden, AJ Silla, KM Parris, and MA

McCarthy. 2016. Planning for ex-situ conservation in the face of uncertainty. Conservation Biology 30:599-609.

Lyons JE, WL Kendall, JA Royle, **SJ Converse**, BA Andres, and JB Buchanan. 2016. Population size and stopover duration estimation using mark-resight data and Bayesian analysis of a superpopulation model. Biometrics 72:262-271.

Lunn NJ, S Servanty, EV Regehr, **SJ Converse**, E Richardson, and I Stirling. 2016. Demography of an apex predator at the edge of its range – impacts of changing sea ice on polar bears in Hudson Bay. Ecological Applications 26:1302-1320.

Teitelbaum CS, **SJ Converse**, WF Fagan, K Böhning-Gaese, RB O'Hara, AE Lacy, and T Mueller. 2016. Experience drives innovation of new migration patterns in response to global change. Nature Communications 7:12793.

Canessa S, G Guillera-Arroita, J Lahoz-Monfort, DM Southwell, DP Armstrong, I Chadès, RC Lacy, and **SJ Converse**. 2015. When do we need further research? A primer on calculating the value of information for applied ecology. Methods in Ecology and Evolution 6:1219-1228.

Klimstra RL, CE Moorman, **SJ Converse**, JA Royle, and CA Harper. 2015. Small mammal use of hayed native warm-season and non-native cool-season forage fields. Wildlife Society Bulletin 39:49-55.

Brown ME, RC Doyle, JN Chandler, GH Olsen, JB French Jr., DE Wildt, **SJ Converse**, CL Keefer, and N Songsasen. 2014. Chromic and iron oxides as fecal markers to identify individual whooping cranes. Proceedings of the North American Crane Workshop 9:68-72.

Krause A, D Golovin, and **SJ Converse**. 2014. Sequential decision making in computational sustainability via adaptive submodularity. Artificial Intelligence Magazine 35:8-18.

Royle JA and **SJ Converse**. 2014. Hierarchical spatial capture-recapture models: modeling population density from replicated capture-recapture experiments. Methods in Ecology and Evolution 5:37-43.

Servanty S, **SJ Converse**, and LL Bailey. 2014. Demography of a reintroduced population: moving toward management models for an endangered species, the whooping crane. Ecological Applications 24:927-937.

Converse SJ, CT Moore, and DP Armstrong. 2013. Demographics of reintroduced populations: estimation, modeling, and decision analysis. Journal of Wildlife Management 77:1081-1093.

Converse SJ, CT Moore, MJ Folk, and MC Runge. 2013. A matter of tradeoffs: reintroduction as a multiple objective decision. Journal of Wildlife Management 77:1145-1156.

Converse SJ, JA Royle, PH Adler, RP Urbanek, and JA Barzen. 2013. A hierarchical nest survival model integrating incomplete temporally varying covariates. Ecology and Evolution 3:4439-4447.

Mueller T, RB O'Hara, **SJ Converse**, RP Urbanek, and WF Fagan. 2013. Social learning of migratory performance. Science 341:999-1002.

Campbell EW III, AA Yackel Adams, **SJ Converse**, TH Fritts, and GH Rodda. 2012. Do predators control prey species abundance? An experimental test with brown treesnakes on Guam. Ecology 93:1194-1203.

Smith DHV, A Moehrenschlager, N Christensen, D Knapik, K Gibson, and **SJ Converse**. 2012. Archive eggs: a research and management tool for avian conservation breeding. Wildlife Society Bulletin 36:342-349.

Converse SJ, JA Royle, and RP Urbanek. 2012. Bayesian analysis of multi-state data with individual covariates for estimating genetic effects on demography. Journal of Ornithology 152:S561-S572.

Moore CT, **SJ Converse**, MJ Folk, MC Runge, and SA Nesbitt. 2012. Evaluating release alternatives for a long-lived bird species under uncertainty about long-term demographic rates. Journal of Ornithology 152:S330-S353.

Converse SJ, KJ Shelley, S Morey, J Chan, A LaTier, C Scafidi, DT Crouse, and MC Runge. 2011. A decision-analytic approach to the optimal allocation of resources for endangered species consultation. Biological Conservation 144:319-329.

Golovin D, A Krause, B Gardner, **SJ Converse**, and S Morey. 2011. Dynamic resource allocation in

conservation planning. Proceedings of the AAAI Conference on Artificial Intelligence 25:1331-1336.

Runge MC, **SJ Converse**, and JE Lyons. 2011. Which uncertainty? Using expert elicitation and expected value of information to design an adaptive program. Biological Conservation 144:1214-1223.

Smith DHV, **SJ Converse**, KW Gibson, A Moehrenschlager, WA Link, GH Olsen, and K Maguire. 2011. Decision analysis for conservation breeding: maximizing production for reintroduction of whooping cranes. Journal of Wildlife Management 75:501-508.

Tyre AJ, JT Peterson, **SJ Converse**, T Bogich, D Miller, M Post van der Burg, C Thomas, R Thompson, J Wood, DC Brewer, and MC Runge. 2011. Adaptive management of bull trout populations in the Lemhi Basin. Journal of Fish and Wildlife Management 2:262-281.

Bailey LL, **SJ Converse**, and WL Kendall. 2010. Bias, precision, and parameter redundancy in complex multi-state models with unobservable states. Ecology 91:1598-1604.

Converse SJ, JN Chandler, GH Olsen, and CC Shafer. 2010. Evaluating propagation method performance over time with Bayesian updating: an application to incubator testing at USGS Patuxent Wildlife Research Center. Proceedings of the North American Crane Workshop 11:110-117.

Farris KL, **SJ Converse**, S Zack, WD Robinson, AJ Amacher, T Contreras, WL Gaines, ES Kilpatrick, JD Lanham, D Miles, G Rompré, KE Sieving, and JC Pierson. 2010. Short-term effects of fire and fire-surrogate treatments on avian nest survival: a national-scale analysis. Open Environmental Sciences 4:61-70.

Martin J, AF O'Connell Jr, WL Kendall, MC Runge, TR Simons, AH Waldstein, SA Schulte, **SJ Converse**, GW Smith, T Pinion, M Rikard, and EF Zipkin. 2010. Optimal control of native predators. Biological Conservation 143:1751-1758.

Converse SJ, WL Kendall, PF Doherty Jr, and PG Ryan. 2009. Multistate models for estimation of survival and reproduction in grey-headed albatross. The Auk 126:77-88.

Kendall WL, **SJ Converse**, PF Doherty Jr, MB Naughton, JE Hines, A Anders, and E Flint. 2009. Design considerations in demographic studies of animal populations: a case of colonial seabirds. Ecological Applications 19:55-68.

Mazerolle MJ, LL Bailey, WL Kendall, JA Royle, **SJ Converse**, and JD Nichols. 2007. Making great leaps forward in herpetology: accounting for detectability in field studies. Journal of Herpetology 41:672-689.

Converse SJ, WM Block, and GC White. 2006. Small mammal population and habitat responses to forest thinning and prescribed fire. Forest Ecology and Management 228:263-273.

Converse SJ, GC White, and WM Block. 2006. Small mammal responses to thinning and wildfire in ponderosa pine-dominated forests of the southwestern United States. Journal of Wildlife Management 70:1711-1722.

Converse SJ, GC White, KL Farris, and S Zack. 2006. Small mammal responses to forest fuel reduction: national-scale results from the fire and fire surrogate project. Ecological Applications 16:1717-1729.

Iverson JB, **SJ Converse**, GR Smith, and JM Valiulis. 2006. Long-term trends in the demography of the Allen Cays rock iguana (*Cyclura cychlura inornata*): human disturbance and density-dependent effects. Biological Conservation 132:300-310.

Monroe ME and **SJ Converse**. 2006. The effects of early season and late season prescribed fires on small mammals in a Sierra Nevada mixed conifer forest. Forest Ecology and Management 236:229-240.

Converse SJ, JB Iverson, and JA Savidge. 2005. Demographics of an ornate box turtle population experiencing minimal human-induced disturbances. Ecological Applications 15:2171-2179.

Converse SJ and JA Savidge. 2003. Ambient temperature, activity, and microhabitat use by ornate box turtles (*Terrapene ornata ornata*). Journal of Herpetology 37:665-670.

Converse SJ, JB Iverson, and JA Savidge. 2002. Activity, reproduction and overwintering behavior of

ornate box turtles (*Terrapene ornata ornata*) in the Nebraska Sandhills. American Midland Naturalist 148:416-422.

Edited Books

Runge MC, **SJ Converse**, JE Lyons, and DR Smith, editors. 2020. Structured decision making: case studies in natural resource management. Johns Hopkins University Press, Baltimore, Maryland, USA.

French JB Jr, **SJ Converse**, and JE Austin, editors. 2018. Whooping Cranes: biology and conservation. Biodiversity of the world: conservation from genes to landscapes. Academic Press, San Diego, California, USA.

Book Chapters

Ewen JG, S Canessa, **SJ Converse**, and KA Parker. 2023. Decision making in animal translocations: biological considerations and beyond. Pages 108-148 *in* Gaywood M, Ewen JG, Hollingsworth P, and A Moehrenschlager. Conservation Translocations. Cambridge University Press, Cambridge, United Kingdom.

Converse SJ, B Gardner, and S Morey. 2020. Reserve network design for prairie-dependent taxa in South Puget Sound. Pages 124-134 *in* MC Runge, SJ Converse, JE Lyons, and DR Smith. Structured decision making: case studies in natural resource management. Johns Hopkins University Press, Baltimore, Maryland, USA.

Converse SJ. 2020. Introduction to multi-criteria decision analysis. Pages 51-61 *in* MC Runge, SJ Converse, JE Lyons, and DR Smith. Structured decision making: case studies in natural resource management. Johns Hopkins University Press, Baltimore, Maryland, USA.

Converse SJ. 2020. Prioritizing uncertainties to improve management of a reintroduction program. Pages 214-224 *in* MC Runge, SJ Converse, JE Lyons, and DR Smith. Structured decision making: case studies in natural resource management. Johns Hopkins University Press, Baltimore, Maryland, USA.

Runge MC and **SJ Converse**. 2020. Introduction to risk analysis. Pages 149-155 *in* MC Runge, SJ Converse, JE Lyons, and DR Smith. Structured decision making: case studies in natural resource management. Johns Hopkins University Press, Baltimore, Maryland, USA.

Royle JA and **SJ Converse**. 2020. Estimating abundance from capture-recapture data. Pages 103-122 *in* D Murray and B Sandercock, editors. Population ecology in practice: underused, misused, and abused methods. Wiley-Blackwell, Hoboken, USA.

Converse SJ, JB French Jr, and JE Austin. 2019. Future of Whooping Crane conservation and science. Pages 505-516 *in* JB French Jr, SJ Converse, and JE Austin, editors. Whooping Cranes: biology and conservation. Biodiversity of the world: conservation from genes to landscapes. Academic Press, San Diego, California, USA.

Converse SJ, S Servanty, CT Moore, and MC Runge. 2019. Population dynamics of reintroduced Whooping Cranes. Pages 139-160 *in* JB French Jr, SJ Converse, and JE Austin, editors. Whooping Cranes: biology and conservation. Biodiversity of the world: conservation from genes to landscapes. Academic Press, San Diego, California, USA.

Converse SJ, BN Strobel, and JA Barzen. 2019. Reproductive failure in the eastern migratory population: the interaction of research and management. Pages 161-178 *in* JB French Jr, SJ Converse, and JE Austin, editors. Whooping Cranes: biology and conservation. Biodiversity of the world: conservation from genes to landscapes. Academic Press, San Diego, California, USA.

French JB Jr, **SJ Converse**, and JE Austin. 2019. Whooping cranes past and present. Pages 3-16 *in* JB

French Jr, SJ Converse, and JE Austin, editors. Whooping Cranes: biology and conservation. Biodiversity of the world: conservation from genes to landscapes. Academic Press, San Diego, California, USA.

Songsasen N, **SJ Converse**, and ME Brown. 2019. Reproduction and reproductive technologies relevant to management of whooping cranes *ex situ.* Pages 373-387 *in* JB French Jr, SJ Converse, and JE Austin, editors. Whooping Cranes: biology and conservation. Biodiversity of the world: conservation from genes to landscapes. Academic Press, San Diego, California, USA.

Teiteilbaum CS, **SJ Converse**, WF Fagan, and T Mueller. 2019. Movement ecology of reintroduced migratory whooping cranes. Pages 217-238 *in* JB French Jr, SJ Converse, and JE Austin, editors. Whooping Cranes: biology and conservation. Biodiversity of the world: conservation from genes to landscapes. Academic Press, San Diego, California, USA.

Garrard GE, L Rumpff, MC Runge, and **SJ Converse.** 2017. Rapid prototyping for decision structuring: an efficient approach to conservation decision analysis. Pages 46-64 *in* N Bunnefeld, E Nicholson, and EJ Milner-Gulland, editors. Decision-making in conservation and natural resource management: models for interdisciplinary approaches. Cambridge University Press, Cambridge, United Kingdom.

Converse SJ and DP Armstrong. 2016. Demographic modeling for reintroduction decision-making. Pages 123-146 *in* DS Jachowski, JJ Millspaugh, PL Angermeier, and R Slotow, editors. Reintroduction of fish and wildlife populations. University of California Press, Oakland, California, USA.

Converse SJ and JA Royle. 2012. Dealing with incomplete and variable detectability in multi-year, multi-site monitoring of ecological populations. Pages 426-442 *in* RA Gitzen, JJ Millspaugh, AB Cooper and DS Licht, editors. Design and analysis of long-term ecological monitoring studies. Cambridge University Press, Cambridge, United Kingdom.

Converse SJ, WL Kendall, PF Doherty Jr, MB Naughton, and JE Hines. 2009. A traditional and a less-invasive robust design: choices in optimizing effort allocation for seabird population studies. Pages 727-744 *in* DL Thomson, EG Cooch and MC Conroy, editors. Modeling demographic processes in marked populations. Springer, New York, New York, USA.

Converse SJ, BG Dickson, GC White, and WM Block. 2004. Estimating small mammal abundance on fuels treatment units in southwestern ponderosa pine forests. Pages 113-120 *in* C van Riper III and KL Cole, editors. The Colorado Plateau: cultural, biological, and physical research. University of Arizona Press, Tucson, Arizona, USA.

Peer-Reviewed Government Reports

Cummings JW, **SJ Converse**, CT Moore, DR Smith, CT Nichols, NL Allan, and CM O'Meilia. 2017. A projection of lesser prairie-chicken (*Tympanuchus pallidicinctus*) populations range-wide. USGS Open File Report 2017-1071.

Lunn NJ, EV Regehr, S Servanty, **SJ Converse**, E Richardson, and I Stirling. 2014. Demography and population assessment of polar bears in Western Hudson Bay, Canada. Environment Canada Research Report.

Converse SJ. 2011. Appendix C. Structured decision making for energy exploration and development decisions on the Arctic Outer Continental Shelf. Pages 243-249 *in* L Holland-Bartels and B Pierce, editors. An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska. US Geological Survey Circular 1370.

Other Publications

Runge MC, KE Jenni, SJ Converse, DR Smith, MR Price, AF Isham, eds. 2021. Decision Analysis:

Tools, 2021 edition. U.S. Fish and Wildlife Service, National Conservation Training Center, Shepherdstown, West Virginia, USA.
Royle JA, SJ Converse, and WA Link. 2012. Data augmentation for hierarchical capture-recapture models. arXiv 1211.5706.
Runge MC, JF Cochrane, SJ Converse, JA Szymanski, DR Smith, JE Lyons, MJ Eaton, A Matz, P Barrett, JD Nichols, and MJ Parkin. 2011. An overview of structured decision making: a two-day course for managers of natural resources, Revised Edition. National Conservation Training Center, Shepherdstown, West Virginia.
Converse SJ. 2009. Book review: cranes: a natural history of a bird in crisis, by Janice M. Hughes. Wilson Journal of Ornithology 121:219-221.
Runge MC, JF Cochrane, SJ Converse, JA Szymanski, DR Smith, JE Lyons, MJ Eaton, A Matz, P Barrett, JD Nichols, MJ Parkin, K Motivans, and DC Brewer. 2009. Introduction to structured decision making, 5th edition. National Conservation Training Center, Shepherdstown, West Virginia.
Shelley K, D Crouse, J Chan, SJ Converse, A LaTier, S Morey, and C Scafidi. 2009. Using Section 7 as a recovery tool. USFWS Endangered Species Bulletin 34:54-55.
Converse SJ. 2005. Small mammal responses to forest restoration and fuel reduction. PhD Dissertation. Colorado State University, Fort Collins, Colorado.
Converse SJ and DS Baker. 2000. Geographic distribution, *Lampropeltis triangulum multistrata*. Herpetological Review 31:186.
Converse SJ. 1999. Habitat selection and population response to commercial harvest of Nebraska ornate box turtles. MS Thesis. University of Nebraska, Lincoln, Nebraska.

PRESENTATIONS

Selected Invited Seminars

Converse SJ. 2024. Applying integrated population models to address conservation challenges. Department of Fish and Wildlife Sciences, University of Idaho, Moscow, Idaho, USA. 22 March.
Converse SJ. 2022. Modeling the recolonizing gray wolf population in Washington State: challenges and outcomes. NOAA Northwest Fisheries Science Center, online. 28 April.
Converse SJ. 2022. Modeling the recolonizing gray wolf population in Washington State: challenges and outcomes (Otis Seminar Speaker). Department of Fish, Wildlife, and Conservation Biology, Colorado State University, Fort Collins, Colorado, USA. 15 April.
Converse SJ. 2022. Structured decision making and invasive species management. USGS Invasive Species Community of Practice, online. 21 January.
Converse SJ. 2021. Decision analysis for promoting conservation action. Road to Recovery Network, Georgetown University, Washington, DC, USA. 27 July.
Converse SJ. 2021. Synchrony in seabird survival: drivers at multiple spatial scales. School of Aquatic and Fishery Sciences, University of Washington, Seattle, Washington, USA. 5 March.
Converse SJ. 2018. Reintroduction biology: directions in science and conservation management. Ecology, Evolution, and Behavior Program, Michigan State University, East Lansing, Michigan, USA. 18 October.
Converse SJ. 2018. Monitoring and modeling threatened populations makes for better management. Washington State University, Vancouver, Washington, USA. 12 February.
Converse SJ. 2017. Tough choices: making better decisions for greater conservation success. Zoological Society of London, London, United Kingdom. 28 November.
Converse SJ. 2017. Modeling threatened populations: a decision-analytic approach. Washington State University, Pullman, Washington, USA. 2 October.

Converse SJ. 2017. Uncertainty and the analysis of reintroduction decisions. University of Georgia, Athens, Georgia, USA.

Converse SJ. Managing threatened populations: the complementary roles of quantitative ecology and decision analysis. Migratory Bird Center, Smithsonian National Zoo, Washington, DC, USA; 13 May 2016.

Converse SJ. Decision analysis for reintroductions: shaping a restoration program for endangered whooping cranes. Plant Biology and Conservation Program, Northwestern University and Chicago Botanic Garden, Glencoe, Illinois, USA; 1 May 2014.

Converse SJ. Population ecology and management of reintroduced whooping cranes. Pennsylvania State University, State College, Pennsylvania, USA; 8 November 2013.

Converse SJ. Decision-analytic applications in the management of endangered species. Colorado State University, Fort Collins, Colorado, USA; 1 October 2010.

Converse SJ. Decision-analytic applications in management of a captive breeding and release program. University of Melbourne, Melbourne, Australia; 4 May 2010.

Converse SJ. Decision-analytic applications in management of a captive breeding and release program. University of Queensland, Brisbane, Australia; 28 April 2010.

Converse SJ. Climate change adaptation: how structured decision-making can contribute. Defenders of Wildlife, Washington, DC, USA; 18 December 2009.

Converse SJ. Whooping crane restoration: science and management in the face of uncertainty. Migratory Bird Center, Smithsonian National Zoo, Washington, DC, USA; 13 February 2009.

Invited Conference Presentations

Converse SJ, AE Bratt, HA Sipe, SF Pearson, I Keren, and GL Slater. 2025. Decision-inspired modeling: pairing integrated population models with expert judgments to identify optimal reintroduction strategies for a threatened grassland bird. Ecological Society of America Conference, Baltimore, Maryland, USA. 10-15 August.

Sipe HA, GL Slater, AE Bratt, SF Pearson, and **SJ Converse**. 2025. Streaked horned lark reintroduction strategy development and evaluation. Cascadia Prairie-Oak Partnership Conference, Tacoma, Washington, USA. 14-17 April.

Converse SJ. 2024. Conference Plenary: Advancing decision-inspired science to inform seabird conservation. Pacific Seabird Group Annual Meeting, Seattle, Washington, USA. 20-23 February.

Converse SJ. 2024. Conference Plenary: Advancing decision-inspired science to inform seabird conservation. Pacific Seabird Group Annual Meeting, Seattle, Washington, USA. 20-23 February.

Gerber BD, BA Mosher, LL Bailey, E Muths, HJ Crockett, and **SJ Converse**. 2023. Optimal management decisions are robust to unknown dynamics in an amphibian metapopulation plagued by disease. The Wildlife Society Annual Conference, Louisville, Kentucky, USA. 5-9 November.

Hostetter NJ, JH Vashon, M O'Neal, AK Fuller, **SJ Converse**. 2023. An integrated age-at-harvest model linking harvest and research data to estimate black bear abundance and demographics. 13th International Mammalogical Congress. Anchorage, Alaska, USA. 14-20 July.

Gardner B, LS Petracca, BT Maletzke, and **SJ Converse**. 2023. Forecasting recolonization dynamics of wolves through an integrated population model with individual-based movement. 13th International Mammalogical Congress, Anchorage, Alaska, USA. 14-20 July.

Amburgey SA, AA Yackel Adams, SR Siers, B Gardner, and **SJ Converse**. 2022. Optimizing monitoring of invasive brown treesnakes. Brown Treesnake Technical Working Group Annual Meeting, Guam, USA. 14-18 November.

Converse SJ. 2022. Thinking like a decision analyst: how to make your science most useful to managers of conservation translocations. The Wildlife Society Conference, Spokane, Washington, USA. 6-10 November.

Sipe HA, EH Paxton, AA Yackel Adams, and **SJ Converse**. 2022. The role of expert judgement in avian

reintroduction planning on the island of Guam. The Wildlife Society Conference, Spokane, Washington, USA. 6-10 November.

Miller MA, B Daykin, NJ Hostetter, AA Yackel Adams, **SJ Converse**, and FJ Mazzotti. 2022 Assessment of Invasive Species Control. Everglades Cooperative Invasive Species Management Area (ECISMA) Everglades Invasive Species Summit, Davie, Florida, USA. 19 July.

Gardner B, BT McClintock, **SJ Converse**, and NJ Hostetter. 2021. Integrating animal movement processes into spatial capture-recapture models. International Conference on Advances in Interdisciplinary Statistics And Combinatorics, Greensboro, North Carolina, USA. 8-10 October.

Sorel MH, RW Zabel, DS Johnson, AM Wargo Rub and **SJ Converse**. 2021. Association between pinniped abundance and survival for individual populations of adult spring/summer Chinook salmon in the lower Columbia River. American Fisheries Society Idaho Chapter Annual Meeting, Online. 1-5 March.

Converse SJ, NJ Hostetter, WA Link, SM Amburgey, AA Yackel Adams. 2020. Decision analysis for early detection and rapid response: modeling to advance identification of optimal management. World Congress of Herpetology, Dunedin, New Zealand. 5-10 January.

Amburgey SM, AA Yackel-Adams, B Gardner, **SJ Converse**. 2020. Camera traps for early detection and rapid response and management of an invasive reptile. World Congress of Herpetology, Dunedin, New Zealand. 5-10 January.

Hostetter NJ, AA Yackel-Adams, SM Amburgey, WA Link, and **SJ Converse**. 2020. Optimizing eradication strategies for an incipient population of brown treesnakes on Cocos Island. Brown Treesnake Technical Working Group, Online. 9-18 November.

Converse SJ and WC Funk. 2019. Focusing on values: decision analysis as a conceptual framework for integration of genetic and demographic considerations in conservation translocations. American Fisheries Society & The Wildlife Society Joint Conference, Reno, Nevada, USA. 29 September - 3 October.

Doll CF, **SJ Converse**, and CB Schultz. 2019. Evaluating non-target effects of herbicides on Zerene fritillary (*Speyeria zerene zerene*), a surrogate for Oregon silverspot (*Speyeria zerene hippolyta*). Entomological Society of America Annual Meeting, St Louis, Missouri, USA. 17-20 November.

Converse SJ. 2018. Reintroductions and uncertainty: avoiding paralysis. International Wildlife Reintroduction Conference. Chicago, Illinois, USA. 14-16 November.

Converse SJ, CS Teitelbaum, P Mendgen, AT Pearse, B Abrahms, and T Mueller. 2018. Culture shapes movements in a reintroduced migratory bird. Symposium on Reintroducing Migratory Birds. Chicago, Illinois, USA. 17 November.

Hostetter NJ, **SJ Converse**, EV Regehr, JA Royle, and RR Wilson. 2018. Integrating spatial capture-recapture and telemetry data to jointly estimate abundance and movement. The Wildlife Society Annual Conference, Cleveland, Ohio, USA. 7-11 October.

Converse SJ and M Schaub. 2017. Making it count: advancing integrated population modeling for decision-making. EURING Analytical Meeting and Workshop, Barcelona, Spain. 2-7 July.

Yackel-Adams AA, **SJ Converse**, WA Link, B Lardner, and RN Reed. 2017. Improving early detection and rapid response for cryptic species: current analytical tools and future directions. Natural Areas Conference, Fort Collins, Colorado, USA. 10-12 October.

Cummings JW, **SJ Converse**, DR Smith, S Morey, and MC Runge. 2017. We have been talking past each other: an analysis of decision framings for endangered species classification. The Wildlife Society 24th Annual Conference, Albuquerque, New Mexico, USA. 23-27 September.

Funk WC, **SJ Converse**, C Darst, BR Forrester, and SR Morey. 2017. Incorporating information on adaptive potential into conservation policy: integrating genomics into Endangered Species Act decisions. Symposium on Conservation of Adaptive Potential and Functional Diversity, Durham, United Kingdom. 14-15 September.

Hostetter NJ, **SJ Converse**, and EV Regehr. 2017. Study design considerations for integrated population

models: improving conservation and management of polar bears. Ecological Society of America Annual Meeting, Portland, Oregon, USA. 6-11 August.

Converse SJ. 2016. Applications of decision analysis in wildlife population reintroduction. The Wildlife Society 23rd Annual Conference, 15-19 October; Raleigh, North Carolina, USA.

Gerber BD, LL Bailey, **SJ Converse**, and E Muths. 2016. Conservation decision making via spatially explicit meta-population dynamics of an amphibian-pathogen system. The Wildlife Society 23rd Annual Conference, 15-19 October; Raleigh, North Carolina, USA.

Converse SJ, C Horswill, RJ Cuthbert, S Oppel, AL Bond, J Cooper, and PG Ryan. 2016. Integrated population modeling for species with complex life histories: application to Atlantic Yellow-nosed Albatross. North American Ornithological Conference, 16-20 August; Washington, DC, USA.

Converse SJ. 2016. Decision analysis and endangered species management: challenges and opportunities. Ecological Society of America Annual Meeting, 7-12 August; Fort Lauderdale, Florida, USA.

Converse SJ, J Cooper, RJ Cuthbert, AL Bond, S Oppel, and PG Ryan. 2015. Modelling survival, breeding, and recruitment from long-term data to parameterize a Bayesian population viability analysis for an endangered albatross. 2nd World Seabird Conference, 26-30 October; Cape Town, South Africa.

Converse SJ and JA Royle. 2015. Modeling density in stratified populations using hierarchical spatial capture-recapture. Ecological Society of America Annual Meeting, 9-14 August; Baltimore, Maryland, USA.

Converse SJ, LL Bailey, B Mosher, E Muths, and WC Funk. 2015. Decision analysis and expert judgment: implications for disease risk analysis in reintroductions. Zoological Society of London Symposium on Health and Disease in Translocated Wild Animals, 14-15 May; London, United Kingdom.

Barzen JA, **SJ Converse**, PH Adler, E Gray, AE Lacy, E Szyszkoski, and A Gossens. 2014. Influences on nest success in a reintroduced population of whooping cranes. The 13th North American Crane Workshop, 14-18 April; Lafayette, Louisiana, USA.

Converse SJ, S Servanty, PJ Heglund, and MC Runge. 2014. Predicting outcomes of reintroduction strategies in a decision-analytic setting. The 13th North American Crane Workshop, 14-18 April; Lafayette, Louisiana, USA.

Mueller T, **SJ Converse**, RB O'Hara, RP Urbanek, and WF Fagan. 2014. Social learning of migratory performance. The 13th North American Crane Workshop, 14-18 April; Lafayette, Louisiana, USA.

Olsen GH and **SJ Converse**. 2014. Parent-rearing and releasing whooping cranes in Wisconsin. The 13th North American Crane Workshop, 14-18 April; Lafayette, Louisiana, USA.

Converse SJ and JA Royle. 2012. Modeling population density based on replicated capture-recapture experiments. The Wildlife Society 19th Annual Conference, 13-18 October; Portland, Oregon, USA.

Converse SJ. 2011. Decision analysis for resource management via Landscape Conservation Cooperatives. The Wildlife Society 18th Annual Conference, 5-10 November; Waikoloa, Hawaii, USA.

Converse SJ, CT Moore, MJ Folk, and MC Runge. 2011. A matter of tradeoffs: reintroduction as a multi-criteria decision. The Wildlife Society 18th Annual Conference, 5-10 November; Waikoloa, Hawaii, USA.

Servanty S, **SJ Converse**, and LL Bailey. 2011. Population modeling for a migratory whooping crane reintroduction effort: can we hope for success? The Wildlife Society 18th Annual Conference, 5-10 November; Waikoloa, Hawaii, USA.

Converse SJ, J Cooper, RJ Cuthbert, and PG Ryan. 2010. Bayesian multi-state modeling of Atlantic yellow-nosed albatross demography. 1st World Seabird Conference, 7-11 September; Victoria, Canada.

Contributed Conference Presentations

>100 contributed presentations from 2002-present as author or coauthor and >10 contributed posters from 2002-present as author or coauthor; full list available upon request

GRANTS

- Research Grant (PI). Washington Department of Fish and Wildlife. Multiple monitoring strategies for sea duck management through population monitoring via aerial surveys and individual monitoring via Motus tags, 2025. $293,717
- Research Grant (PI). Washington Department of Fish and Wildlife. Washington pygmy rabbit conservation planning process, 2024. $75,621
- Research Grant (PI). Washington Department of Fish and Wildlife. Assessing movements and habitat selection of Northwestern pond turtles, 2024. $114,460
- Research Grant (PI). US Geological Survey. Modeling brown treesnake management strategies, 2024. $62,498.
- Research Grant (PI). US Geological Survey. Assessing threats to critical seabird foraging habitat in the Salish Sea, 2024. $66,011
- Research Grant (co-PI). Washington Sea Grant. Integrating community science data with long-term aerial surveys to understand seasonal, 2024. $279,478
- Research Grant (co-PI). Northwest Climate Adaptation Science Center. Evaluating climate-related threats and conservation strategies for the Cascade red fox in Washington, 2024. $284,935
- Research Grant (PI). Washington Department of Fish and Wildlife. Cascade red fox threat assessment: Phase II, 2024. $37,360
- Research Grant (PI). SeaDoc Society. Assessing threats to critical seabird foraging habitat in the Salish Sea, 2023. $49,982
- Research Grant (PI). Washington Department of Fish and Wildlife. Assessing threats to Cascade red fox, 2023. $59,806
- Research Grant (PI). American Wildlife Conservation Foundation. Evaluating status and threats to foraging habitat for Rhinoceros Auklets in the Salish Sea, 2022; $5,200
- Research Grant (PI). US Fish and Wildlife Service. Assessing threats to critical seabird foraging habitat in the Salish Sea, 2022; $9,434
- Research Grant (co-PI). US Geological Survey. Assessing anthropogenic threats and predation/competition from coyotes on Cascade red fox combining spatial capture-recapture methods and historical Indigenous knowledge, 2022; $74,175
- Research Grant (co-PI). US Fish and Wildlife Service. Monitoring Tufted Puffins in the United States, 2021. $121,333
- Research Grant (co-PI). US Geological Survey. Improving our tools for combating invasive species, 2021. $124,653
- Research Grant (PI). US Navy Commander Joint Region Marianas. Developing a framework for coordinated management of vertebrate restoration and brown treesnake control on Guam: Phase II, 2021; $110,260
- Research Grant (PI). US Navy Commander Joint Region Marianas. Dynamic monitoring and management of brown treesnakes, 2021; $214,201
- Research Grant (PI). Washington Department of Fish and Wildlife. Evaluating sea duck detectability in the Puget Sound winter ambient monitoring program, 2021. $206,470

- Research Grant (co-PI). Washington Department of Fish and Wildlife. Maximizing the value of Salish Sea aerial surveys for sea duck management, 2021. $206,470
- Research Grant (PI). US Fish and Wildlife Service. Evaluating sea duck detectability in the Puget Sound winter ambient monitoring program, 2020. $80,000
- Research Grant (PI). US Geological Survey. Long-term seabird monitoring data analysis to update Channel Islands National Park seabird inventory and monitoring program and inform management and conservation, 2020. $194,791
- Research Grant (PI). US Navy Commander Joint Region Marianas. Optimizing monitoring of brown treesnakes, 2020. $227,445
- Research Grant (PI). Washington Department of Fish and Wildlife. Constructing a modeling tool for wolf status review in Washington, 2020; $121,799
- Research Grant (co-PI). Maine Department of Inland Fisheries and Wildlife. Population model for black bears in Maine, 2019; $174,596
- Research Grant (PI). National Park Service. Long-term seabird monitoring data analysis to update Channel Islands National Park seabird inventory and monitoring program and inform management and conservation, 2019. $60,000
- Research Grant (co-PI). US Geological Survey. Assessing the precision of estimates of population vital rates for polar bears in Alaska, 2019. $78,128
- Research Grant (PI). US Navy Commander Joint Region Marianas. Developing a framework for coordinated management of vertebrate restoration and brown treesnake control on Guam, 2019; $142,959
- Research Grant (PI). Washington Department of Fish and Wildlife. Assessing the fish community in the Chehalis River with occupancy models, 2019; $20,000
- Research Grant (PI). NOAA National Marine Fisheries Service. Integrating data sources to characterize demographic responses of Columbia River salmon and steelhead to threats and management actions, 2018; $136,447
- Research Grant (PI). North Pacific Research Board. Integrated abundance and movement models for marine mammals, 2018; $283,781
- Research Grant (co-PI). US Geological Survey. Early detection and rapid response quantitative model development and evaluation, 2018. $34,000
- Research Grant (PI). US Geological Survey. Restoration tools for Oregon silverspot butterfly, 2018. $97,720
- Research Grant (PI). US Navy Commander Joint Region Marianas. Evaluating statistical methods for estimating density of invasive brown treesnakes from camera trapping data, 2018; $186,385
- Research Grant (PI). Washington Department of Fish and Wildlife. Understanding Common Loon distribution and abundance in Washington, 2018. $43,630
- Research Grant (co-PI). Private donors to the University of Washington. Seabird ecology and conservation at Tetiaroa, French Polynesia, 2017. $278,957
- Research Grant (PI). US Geological Survey. Understanding Common Loon distribution and abundance in Washington, 2017. $9,545
- Research Grant (PI). US Fish and Wildlife Service. Improved design and analysis of polar bear population studies, 2016. $20,000
- Research Grant (PI). US Fish and Wildlife Service. Model development for Chukchi Sea polar bears, 2016. $61,371
- Research Grant (PI). US Fish and Wildlife Service. Population modeling for the lesser prairie-chicken, 2016. $37,296
- Research Grant (PI). US Geological Survey Science Support Program. Improved design and analysis of polar bear population studies, 2016. $173,467

- Research Grant (PI). US Fish and Wildlife Service. Landscape level population modeling as a decision support tool for the lesser prairie-chicken, 2015. $200,000
- Technical Assistance Grant (co-PI). US Geological Survey. Structured decision making for determining status of sage grouse under the Endangered Species Act, 2014. $309,175
- Technical Assistance Grant (co-PI). US Geological Survey Amphibian and Reptile Monitoring Initiative. Structured decision making and boreal toad conservation planning, 2014. $43,455
- Research Grant (PI). US Geological Survey Science Support Program. Investigating the influence of captive environment on whooping crane reproduction, 2012. $138,465
- Research Grant (PI). US Fish and Wildlife Service. Demography of polar bears in Western Hudson Bay and design considerations for capture-recapture studies, 2011. $65,000
- Research Grant (PI). US Fish and Wildlife Service. Modeling and decision support for management of the eastern migratory population of whooping cranes, 2011. $20,000
- Technical Assistance Grant (PI). US Fish and Wildlife Service, Structured decision making curriculum support, 2011. $44,006
- Research Grant (PI). US Geological Survey Science Support Program, Modeling and decision support for management of the eastern migratory population of whooping cranes, 2011. $98,036
- Research Grant (co-PI). US Geological Survey Science Support Program, Increasing the effectiveness of structured decision making within the US Fish and Wildlife Service, 2010. $173,000
- Research Grant (PI). US Fish and Wildlife Service, Whooping crane reintroduction – evaluation and decision-making, 2009. $57,239
- Research Grant (PI). National Fish and Wildlife Foundation, Whooping crane reintroduction – evaluation and decision-making, 2008. $107,180
- Research Grant (PI), US Fish and Wildlife Service, Optimal reserve design in the south Puget Sound prairie ecosystem, 2008. $53,140
- Research Grant (PI), US Geological Survey Quick Response Program, Adaptive management of impoundments and whooping crane habitat at Necedah National Wildlife Refuge, 2008. $15,040

AWARDS

- Biometrics Working Group Appreciation Award, The Wildlife Society; Recognizes a long-term or life-time achievement, or an exemplary short-term contribution by a Biometrics Working Group member on behalf of the Biometrics Working Group, 2024
- Excellence in Science Award, USGS Cooperative Research Units; In recognition of excellence in scientific contributions, 2024
- Excellence in Science Award, USGS Cooperative Research Units; In recognition of excellence in scientific contributions, 2023
- Special Thanks for Achieving Results Award, USGS Cooperative Research Units, In recognition of exceptional leadership during the WACFWRU Assistant Unit Leader Search, 2022
- Outstanding Diversity Commitment Award, College of the Environment; In recognition of outstanding commitment to advancing diversity, equity, inclusion, justice, and accessibility within the College, 2022
- Director's Award for Faculty Service, School of Environmental and Forest Sciences; In recognition of exemplary service to the School, 2020
- US Department of Interior Distinguished Service Award; In recognition of outstanding contribution to science, outstanding skill or ability in the performance of duty, outstanding contribution made during an eminent career in the Department, or any other exceptional contribution to the public service (Highest honorary recognition of employees within the Department of the Interior), 2019

- US Fish and Wildlife Service Special Award, In appreciation of outstanding contributions to the National Conservation Training Center's decision analysis training curriculum, 2017
- US Fish and Wildlife Service Special Award, In Appreciation of Outstanding Contributions to the National Conservation Training Center's Decision Analysis Training Curriculum, 2016
- Conference Best Paper Award, Proceedings of the AAAI Conference on Artificial Intelligence, 2011
- Department of Interior STAR (Special Thanks for Achieving Results) Award, for work with Beaufort and Chukchi Seas outer continental shelf energy development science evaluation team, 2011
- Department of Interior STAR (Special Thanks for Achieving Results) Award, for work with Whooping Crane Eastern Partnership, 2009
- Department of Interior STAR (Special Thanks for Achieving Results) Award, for work with Washington Fish and Wildlife Office, 2009
- Department of Interior STAR (Special Thanks for Achieving Results) Award, for work with Northeast Region Fisheries Program, 2008

TEACHING AND TRAINING

University Courses

QERM 514, Analysis of Ecological and Environmental Data, University of Washington

FISH-SEFS 577, Demographic Estimation and Modeling, University of Washington

FISH 507-SOE 592, Introduction to Structured Decision Making, University of Washington/Washington State University

Professional Training Workshops

Co-instructor, Decision Analysis: Tools (1-week training workshop, in collaboration with the US Fish and Wildlife Service National Conservation Training Center)

Co-instructor, Applying the Guidelines for Reintroductions and Other Conservation Translocations (1-week training workshop, in collaboration with the IUCN Conservation Translocation Specialist Group)

Co-instructor, Bayesian Integrated Population Modeling using BUGS and JAGS (1-week training workshop, in collaboration with Swiss Ornithological Institute)

Co-instructor, Program MARK Workshop (1-week training workshop, in collaboration with Colorado State University)

Co-instructor, An Overview of Structured Decision Making (2-day training workshop, in collaboration with the US Fish and Wildlife Service National Conservation Training Center)

Co-instructor, Decision Analysis: Elicitation and Facilitation (1-week training workshop, in collaboration with the US Fish and Wildlife Service National Conservation Training Center)

Co-instructor, Introduction to Structured Decision Making (1-week training workshop, in collaboration with the US Fish and Wildlife Service National Conservation Training Center)

Co-leader, Structured Decision Making and Rapid Prototyping (1-week practicum, in collaboration with the US Fish and Wildlife Service National Conservation Training Center)

GRADUATE STUDENT AND POST-DOCTORAL ADVISING

Graduate Students – Current

- Caroline Cappello. Ph.D. Student, University of Washington (Supervisor). Expected Completion: 2029.
- Timothy Chen. Ph.D. Student, University of Washington (Supervisor). Expected Completion: 2027.
- Nathan Redon. M.S. Student, University of Washington (Supervisor). Expected Completion: 2026.

Graduate Students – Completed

- Amelia DuVall. Population ecology and decision analysis to inform seabird conservation. Ph.D. Dissertation, University of Washington, Seattle, Washington, USA (Supervisor). Completed: 2025.
- Eve Hallock. Impacts of invasive species on tropical seabird populations on Tetiaroa Atoll, French Polynesia. Master's Thesis, University of Washington, Seattle, Washington, USA (co-Supervisor). Completed: 2025.
- Liam Pendleton. Interactions of Pigeon Guillemots and Rhinoceros Auklets with the marine environment. Master's Thesis, University of Washington, Seattle, Washington, USA (Supervisor). Completed: 2024.
- Brielle Thompson. Quantitative modeling tools for invasive species management decisions. Ph.D. Dissertation, University of Washington, Seattle, Washington, USA (Supervisor). Completed: 2024.
- Hannah Sipe. Exploring complexity, uncertainty, and risk in avian reintroduction decisions through structured decision making. Ph.D. Dissertation, University of Washington, Seattle, Washington, USA (Supervisor). Completed: 2023.
- Abby Bratt. From mark-resight to management: Bayesian hierarchical models for endangered bird populations. Ph.D. Dissertation, University of Washington, Seattle, Washington, USA (Supervisor). Completed: 2023.
- Mark Sorel. Informing salmon conservation with population models that account for individual heterogeneity. Ph.D. Dissertation, University of Washington, Seattle, Washington, USA (Supervisor). Completed: 2022.
- Amanda Warlick. Understanding the effects of environmental variability on demography in species with complex life histories through integrated population modeling. Ph.D. Dissertation, University of Washingotn, Seattle, Washington, USA (Supervisor). Completed: 2022.
- Hannah Sipe. Occupancy modeling and study design for common loons in Washington. M.S. Thesis, University of Washington, Seattle, Washington, USA (Supervisor). Completed: 2019.
- Megan E. Brown. Biology and management of reproduction in captive cranes. Ph.D. Dissertation, University of Maryland, College Park, Maryland, USA (Co-supervisor). Completed: 2017.
- Stefano Canessa. Decision analysis for threatened species management across the captive-wild spectrum. Ph.D. Dissertation, University of Melbourne, Melbourne, Australia (Co-supervisor). Completed: 2015.
- Megan E. Brown. Multidisciplinary approach to understanding the poor reproduction in the whooping crane (*Grus americana*). M.S. Thesis, University of Maryland, College Park, Maryland, USA (Co-supervisor). Completed: 2013.

Post-Doctoral Associates

- Amelia DuVall, Ph.D. 2025-present.
- Matthew Farr, Ph.D. 2021-present.
- Amanda Warlick, Ph.D. 2022-2022.
- Lisanne Petracca, Ph.D. 2020-2022.
- Staci Amburgey, Ph.D. 2019-2022.
- Martina Kadin, Ph.D. 2017-2020.
- Nathan Hostetter, Ph.D. 2016-2020.
- Jonathan Cummings, Ph.D. 2014-2017.
- Sabrina Servanty, Ph.D. 2009-2013.

ACADEMIC SERVICE

University of Washington

- 2019 – 2025: School of Aquatic and Fishery Sciences, Graduation Committee; Member
- 2018 – 2025: School of Aquatic and Fishery Sciences, School Council; Member
- 2024: Washington Sea Grant, Director Search Committee; Member
- 2024: Center for Quantitative Sciences, Director Search Committee; Chair
- 2022 – 2024: Center for Quantitative Sciences, Diversity, Equity, and Inclusion Committee; Member
- 2023: School of Aquatic and Fishery Sciences, All-Hands Meeting Planning Committee; Member
- 2022: College of the Environment, Graduate Student Panel Discussion on Navigating Collaborative Research; Panel Moderator
- 2021: College of the Environment, Graduate Student Orientation; Panel Moderator
- 2020 – 2021: Center for Quantitative Sciences, Advisory Council; Member
- 2020 – 2021: School of Environmental and Forest Sciences, WACFWRU Assistant Unit Leader Faculty Search Committee; Co-chair
- 2019 – 2021: School of Environmental and Forest Sciences, Diversity, Equity, and Inclusion Committee; Co-chair
- 2020: College of the Environment, Online Hiring: Getting a Government Job on Zoom; Co-organizer and Panel Member
- 2020: School of Aquatic and Fishery Sciences, Covid-19 Safety for Field Work Committee; Chair
- 2019 – 2020: Department of Biology Boersma Chair Faculty Search Committee; Member
- 2018 – 2019: School of Aquatic and Fishery Sciences, Top Predator Ecology Faculty Search Committee; Member
- 2018 – 2019: School of Aquatic and Fishery Sciences, WACFWRU Assistant Unit Leader Faculty Search Committee; Co-Chair
- 2017 – 2019: School of Environmental and Forest Sciences, Research Committee; Member
- 2017: School of Aquatic and Fishery Sciences, Autumn Seminar Committee; Member

PROFESSIONAL SERVICE

Conference Steering Committees

2022: International Statistical Ecology Conference, Scientific Steering Committee Member
2021: EURING Technical Meeting, Session Chair

Editorships

2021 – 2025: Conservation Letters, Editorial Board
2020 – 2021: Ecology, Special Feature Editor
2016 – 2019: Animal Conservation, Editorial Board
2011 – 2015: Journal of Wildlife Management, Editorial Board

Manuscript Reviews

African Journal of Marine Science, Amphibia-Reptilia, Animal Conservation, Auk, Biological Conservation, Biology Letters, Canadian Journal of Fisheries and Aquatic Sciences, Canadian Journal of Zoology, Condor, Conservation Biology, Conservation Letters, Conservation Science and Practice, EcoHealth, Ecological Applications, Ecology, Ecology and Evolution, Forest Ecology and Management, Frontiers in Ecology and Evolution, Functional Ecology, Journal of Animal Ecology, Journal of Applied Ecology, Journal of Field Ornithology, Journal of Herpetology, Journal of Ornithology, Journal of Wildlife Management, Marine Ecology Progress Series, Methods in Ecology and Evolution, PLOS One, Population Ecology, Proceedings of the North American Crane Workshop, Restoration Ecology, The Southwestern Naturalist, Western North American Naturalist, Wildlife Society Bulletin

International and National Service

2018 – present: IUCN Conservation Translocations Specialist Group, Member
2023: USGS Research Grade Evaluation Panel, Member
2017: USGS Research Grade Evaluation Panel, Member

State and Local Service

2023 – present: Puget Sound Bird Observatory Advisory Group, Member
2023: Washington Department of Fish and Wildlife Senior Scientist Hiring Committee, Member
2017 – 2022: Seattle Audubon Science Advisory Board, Member
2021: Washington Department of Fish and Wildlife Science Program Chief Hiring Committee, Member