PAUL B. CONN

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Google Scholar metrics: Citations: 2190   h-index: 27   i10-index: 36

EDUCATION

2007   **Ph.D. in Wildlife Biology** Colorado State University, Fort Collins, CO
Advisor: Dr. Gary C. White
Dissertation: Bayesian analysis of age-at-harvest data, with focus on wildlife monitoring programs
2001   **Master of Biomathematics** North Carolina State University, Raleigh, NC
Advisor: Dr. Kenneth H. Pollock
1998   **B. A., Mathematics** Grinnell College, Grinnell, IA

RESEARCH EXPERIENCE

2011-present   **Research Mathematical Statistician**
Marine Mammal Laboratory, NOAA/NMFS Alaska Fisheries Science Center, Seattle, WA
Starting pay band ZPIII-3 (GS12 equiv); current pay band ZPIV-3 (GS-14 equiv)
2017-present   **Affiliate Associate Professor**
School of Environmental and Forest Sciences, University of Washington, Seattle, WA
2007-2011   **Research Mathematical Statistician**
NOAA/NMFS Southeast Fisheries Science Center, Beaufort, NC
Starting pay band ZPIII-1 (GS11 equiv); ending pay band ZPIII-3 (GS-12 equiv)
2007   **Postdoctoral Associate**
Laboratory of Ornithology, Cornell University, Ithaca, NY
2003-2007   **Doctoral Research Assistant**
Department of Fish, Wildlife & Conservation Biology, Colorado State University, Fort Collins, CO
2001-2002   **Research Associate**
Department of Statistics, North Carolina State University, Raleigh, NC
Stationed at USGS Patuxent Wildlife Research Center, Laurel, MD
2000   **Mathematician**
USGS Patuxent Wildlife Research Center, Laurel, MD

CONSULTING EXPERIENCE

2015-2016   **Founding partner and statistical consultant**
Martingale analytics LLC, Bothell, WA
Statistical consulting services for the natural resources

PEER-REVIEWED RESEARCH PUBLICATIONS

48. Christman, C. L., J. M. London, **P. B. Conn**, et al. Accepted. Evaluating thermal imagery from aerial surveys for counts of harbor seals in the Aleutian Islands of Alaska. Mammalian Biology.

47. McClintock, B.T., B. Abrams, R. Chandler, **P.B. Conn**, et al. 2021. An integrated path for spatial capture-recapture and animal movement modeling. Ecology https://doi.org/10.1002/ecy.3473

46. Lindsay, J. M., K. Laidre, **P.B. Conn**, P. Boveng. 2021. Quantifying ringed seal (Phoca hispida) habitat and emergence timing in the Bering and Chukchi Seas. Endangered Species Research 46: 1-17.

45. **Conn, P.B.**, V.I. Chernook, E. E. Moreland, I. S. Trukhanova, E. V. Regehr, A. N. Vasiliev, R. R. Wilson, S. E. Belikov, and P. L. Boveng. 2021. Aerial survey estimates of polar bears and their tracks in the Chukchi Sea. PLOS ONE 16: e0251130.

44. **Conn, P.B.**, M. Bravington, S. Baylis, and J.M. Ver Hoef. 2020. Robustness of close-kin mark-recapture estimators to dispersal limitation and spatially varying sampling probabilities. Ecology and Evolution 10:5558-5569,

43. Sigourney, D.B., S. Chavez-Rosales, **P.B. Conn**, L. Garrison, E. Josephson, and D. Palka. 2020. Development of a species distribution model for fin whales (Balaenoptera physalus) within a Bayesian Hierarchical Framework: Implications for uncertainty. PeerJ 7:e8226

42. Alisauskas, R. and **P.B. Conn**. 2019. Effects of distance on detectability of Arctic waterfowl using double-observer sampling during helicopter surveys. Ecology and Evolution 10.1002/ece3.4824

41. Trukhanova, I.S., **P.B. Conn**, and P.L. Boveng. 2018. Taxonomy-based hierarchical analysis of natural mortality: polar and sub-polar phocid seals. Ecology and Evolution 8: 10530:10541.

40. **Conn, P.B.**, D.S. Johnson, P. Williams, S. Melin, and M. Hooten. 2018. A guide to Bayesian model checking for ecologists. Ecological Monographs 88:526-542.

39. **Conn, P.B.** and R. Alisauskas. 2018. Simultaneous modelling of movement, measurement error, and observer dependence in double observer distance sampling surveys. Annals of Applied Statistics 12: 96-122.

38. **Conn, P.B.**, D.S. Johnson, J.T. Thorson. 2017. Confronting preferential sampling when analyzing population distributions: diagnosis and model-based triage. Methods in Ecology and Evolution 8: 1535-1546.

37. **Conn, P. B.**, E.E. Moreland, E. Regehr, E.L. Richmond, M.F. Cameron, and P. L. Boveng. 2016. Using simulation to evaluate wildlife survey designs: polar bears and seals in the Chukchi Sea. Royal Society Open Science 3:150561.

36. **Conn, P. B.**, D. S. Johnson, and P. L. Boveng. 2015. On extrapolating past the range of observed data when making statistical predictions in ecology. *PLoS ONE* 10:e0141416.

35. MacIntyre, K., K. M. Stafford, **P.B. Conn**, and P. L. Boveng. 2015. The relationship between sea ice concentration and the spatio-temporal distribution of vocalizing bearded seals (Erignathus barbatus) in the Bering, Chukchi, and Beaufort Seas from 2008-2011. *Progress in Oceanography* 136:241-249.

34. **Conn, P.B.**, D.S. Johnson, J. M. Ver Hoef, M.B. Hooten, J.L. London, and P.L. Boveng. 2015. Using spatio-temporal statistical models to estimate animal abundance and infer ecological dynamics from survey counts. *Ecological Monographs* 85: 235-252.

33. **Conn, P.B.**, D.S. Johnson, L. Fritz, and B. Fadely. 2014. Examining the utility of survey data to detect prey removal effects on Steller sea lions (Eumetopias jubatus). *Canadian Journal of Fisheries and Aquatic Sciences* 71:1229-1242.

32. Fieberg, J. R. and **Conn, P.B.** 2014. Using telemetry and a hidden Markov model to identify mixed migration strategies while accounting for sample selection bias. *Ecology and Evolution* 4: 1903-1912.

31. **Conn, P.B.**, J. M. Ver Hoef, B.T. McClintock, E.E. Moreland, J.L. London, M.F. Cameron, S. Dahle, and P.L. Boveng. 2014. Estimating multi-species abundance using automated detection systems: ice-associated seals in the eastern Bering Sea. *Methods in Ecology and Evolution* 5: 1280-1293.

30. Schobernd, Z., N. Bacheler, and **P.B. Conn**. 2014. Evaluating the utility of alternative video monitoring metrics for indexing reef fish abundance. *Canadian Journal of Fisheries and Aquatic Sciences* 71: 464-471.

29. Goodman, M. A., J. Braun-McNeill , **P.B. Conn** , E. Davenport, and A.A. Hohn. 2013. Seasonal co-occurrence of sea turtles, bottlenose dolphins, and commercial gill net occurrence in southern Pamlico and northern Core Sounds and adjacent coastal waters of North Carolina, USA. *Endangered Species Research* 22:235-249.

28. **Conn, P.B.**, B.T. McClintock, M.F. Cameron, D.S. Johnson, E.E. Moreland, and P.L. Boveng. 2013. Accommodating species identification errors in transect surveys. *Ecology* 94:2607-2618.

27. Laake J.L., D.S. Johnson, and **P.B. Conn**. 2013. `marked`: An R package for maximum-likelihood and MCMC analysis of capture-recapture data. *Methods in Ecology and Evolution* 4:885-890.

26. McClintock, B.T., **P.B. Conn**, R.S. Alonso, and K.R. Crooks. 2013. Integrated modeling of bilateral photo-identification data in mark-recapture analyses. *Ecology* 94:1464-1471.

25. Meixell, B.W., M.S. Lindberg, **P.B. Conn**, C.P. Dau, J.E. Sarvis, and K.M. Sowl. 2013. Age-specific survival of tundra swans on the lower Alaska Peninsula. *Condor* 115:280-289.

24. Johnson, D.S., **P.B. Conn**, M. Hooten, J. Ray, and B. Pond. 2013. Spatial occupancy models for large data sets. *Ecology* 94: 801-808.

23. **Conn, P.B.** and Silber GK. 2013. Vessel speed restrictions reduce risk of collision-related mortality for North Atlantic right whales. *Ecosphere* 4: Article 43 (open access)

22. **Conn, P.B.**, D.S. Johnson, J.M. London, and P.L. Boveng. 2012. Accounting for missing data when assessing availability in animal population surveys: an application to ice-associated seals in the Bering Sea. *Methods in Ecology and Evolution* 3:1039-1046.

21. **Conn, P.B.**, J.L. Laake, and D.S. Johnson. 2012. A hierarchical modeling framework for multiple observer transect surveys. *PLoS ONE* 7:e42294.

20. Rudershausen, P. J., J. A. Buckel, G. E. Bolten, R. Gregory, T. W. Averett, and **P.B. Conn**. 2012. A comparison between circle hook and J hook performance in the dolphinfish, yellowfin tuna, and wahoo bluewater troll fishery off North Carolina. *Fisheries Bulletin* 110:1156-175.

19. Shertzer, K.W. and **P.B. Conn**. 2012. Spawner-recruit relationships of demersal marine fishes: prior distribution of steepness. *Bulletin of Marine Science*, 88:29-50.

18. **Conn, P.B.**, A.M. Gorgone, A.R. Jugovich, B.L. Byrd, and L.J. Hansen. 2011. Accounting for transients when estimating abundance: a case study of bottlenose dolphins in Choctawhatchee Bay, Florida. *Journal of Wildlife Management* 75:569-579.

17. Goodman, M. A., **P. B. Conn**, and E. Fitzpatrick. 2011. Seasonal occurrence of cownose rays (*Rhinoptera bonasus*) in North Carolina's estuarine and coastal waters. *Estuaries and Coasts* 34:640-651.

16. **Conn, P.B.,** E.G. Cooch, and P. Caley. 2011. Accounting for detection probability when estimating force-of-infection from animal encounter data. *Journal of Ornithology* 152:511-520.

15. Cooch, E.G., **P.B. Conn**, S.P. Ellner, A. Dobson, and K.H. Pollock. 2011. Disease dynamics in wild populations: modeling and estimation (a review). *Journal of Ornithology* 152: 485-509.

14. **Conn, P.B.** 2010. Hierarchical analysis of multiple noisy abundance indices. *Canadian Journal of Fisheries and Aquatic Sciences* 67: 108-120*.*

13. **Conn, P.B.**, K.W. Shertzer, and E.H. Williams. 2010. When can we reliably estimate the productivity of fish stocks? *Canadian Journal of Fisheries and Aquatic Sciences* 67:511-523.

12. Fieberg, J.R., K.W. Shertzer, **P.B. Conn**., K. Noyce, and D. Garshelis. 2010. Integrated population modeling of black bears in Minnesota: Implications for monitoring and management. *PLoS-ONE* 5(8):e12114. doi:10.1371/journal.pone.0012114

11. **Conn, P.B.** and E.G. Cooch. 2009. Multistate capture-recapture analysis under imperfect state observation: an application to disease models. *Journal of Applied Ecology* 46: 486-492.

10. **Conn, P.B.**, J.L. Laake, and G.C. White. 2009. Simulation performance of Bayesian estimators of abundance employing age-at-harvest and mark-recovery data. Pages 965-986 in "Modeling Demographic Processes in Marked Populations", *Environmental and Ecological Statistics Series: Volume 3,* D. L. Thomson, E. G. Cooch, and M. J. Conroy (Eds). Springer, New York.

9. Thorup, K. and **P. B. Conn**. 2009. Estimating the seasonal distribution of migrant bird species: Can standard ringing data be used? Pages 1107-1118 in "Modeling Demographic Processes in Marked Populations", *Environmental and Ecological Statistics Series: Volume 3,* D. L. Thomson, E. G. Cooch, and M. J. Conroy (Eds). Springer, New York.

8. Nichols, J.D., L. Thomas, and **P.B. Conn**. 2009. Inferences about landbird abundance from count data: recent advances and future directions. 2009. Pages 201-236 in "Modeling Demographic Processes in Marked Populations", *Environmental and Ecological Statistics Series: Volume 3,* D. L. Thomson, E. G. Cooch, and M. J. Conroy (Eds). Springer, New York.

7. **Conn, P.B.**, D.R. Diefenbach, J.L. Laake, M.A. Ternent, and G.C. White. 2008. Bayesian analysis of wildlife age-at-harvest data. *Biometrics* 64: 1170-1177.

6. **Conn, P.B**. and D.R. Diefenbach. 2007. Adjusting age and stage distributions for misclassification errors. *Ecology* 88: 1977-1983.

5. **Conn, P.B.**, A.D. Arthur, L.L. Bailey, and G.R. Singleton. 2006. Estimating the abundance of mouse populations of known size: promises and pitfalls of new methods. *Ecological Applications* 16:829-837.

4. Kendall, W.L, **P.B. Conn**, and J.E. Hines. 2006. Combining multi-state capture-recapture data with tag recoveries to estimate demographic parameters. *Ecology* 87: 169-177.

3. **Conn, P.B.**, P.F. Doherty Jr., and J.D. Nichols. 2005. Comparative demography of new world populations of thrushes (Turdus spp.): Comment. *Ecology* 86:2536-2541.

2. **Conn, P.B.**, and W.L. Kendall. 2004. Evaluating mallard adaptive management models with time series. *Journal of Wildlife Management* 68:1065-1081.

1. **Conn, P.B**., W.L. Kendall, and M.D. Samuel. 2004. A general model for the analysis of mark-resight, mark-recapture, and band recovery data under tag loss. *Biometrics* 60: 900-909*.*

TECHNICAL REPORTS, BOOK CHAPTERS, THESES

Trukhanova I.S., **Conn P.B.**, Moreland E.E., Burkanov V.N., Regehr E.V., Wilson R. R., Chernook V.I., Vasiliev A.N., Belikov S.E., and Boveng P.L. 2021. Distribution and Abundance of Polar Bears and Ice-Associated Seals from a U.S. - Russia Multispecies, Instrument-Based Aerial Survey in the Chukchi Sea. NPRB Project 1813-90. Final report. 23 pp.

Boveng, P. L., M. F. Cameron, **P. B. Conn**, and E. E. Moreland. Abundance Estimates of Ice-Associated Seals: Bering Sea Populations that Inhabit the Chukchi Sea During the Open-Water Period. 2016. Final Report to U.S. Bureau of Ocean Energy Management, 52pp. Available at http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Alaska-Region/Index.aspx.

McCandless, C.T., **P.B. Conn**, P. Cooper, E. Cortes, S.W. Laporte, and M. Nammack. 2014. Status Review Report: Northwest Atlantic Dusky Shark (*Carcharhinus obscurus*), Report to National Marine Fisheries Service, Office of Protected Resources. August 2014.

Conn, P.B. 2013. Power Analysis, in *Encyclopedia of Environmetrics*, A.-H. El-Shaarawi and W. Piegorsch (eds), John Wiley & Sons Ltd: Chichester, UK. DOI:10.1002/9780470057339.vnn167. Published online 1/15/2013.

Conn, P. B. 2011. An evaluation and power analysis of fishery independent reef fish sampling in the Gulf of Mexico and U.S. south Atlantic. *NOAA Technical Memorandum* NMFS-SEFSC-610, 38 pp.

Rosel, P. E., K.D. Mullin, L. Garrison, J. Adams, B. Balmer, **P. B. Conn**, et al. 2011. Photo-identification Capture-Mark-Recapture Techniques for Estimating Abundance of Bay, Sound and Estuary Populations of Bottlenose Dolphins along the U.S. East Coast and Gulf of Mexico: A Workshop Report. *NOAA Technical Memorandum* NMFS-SEFSC-621.

Conn, P.B. 2007. Bayesian analysis of age-at-harvest data, with focus on wildlife monitoring programs. PhD Dissertation, Colorado State University.

Conn, P.B., L.L. Bailey, and J.R. Sauer. 2004. Indexes as surrogates of abundance for low-abundance species. In W. L. Thompson, editor. Sampling rare or elusive species. Island Press, Covelo, California and Washington, D.C.

PRESENTATIONS

2021 **Conn, P.B.** Estimating Arctic seal abundance from aerial surveys employing infrared and color imagery. National Centre for Statistical Ecology (UK) virtual meeting. **Contributed oral presentation** (online)

2021 **Conn, P.B.**, Vladimir I. Chernook, Erin E. Moreland, Irina S. Trukhanova, Eric V. Regehr, Alexander N. Vasiliev, Ryan R. Wilson, Stanislav E. Belikov, Peter L. Boveng. 3/3/2021. Modeling Chukchi Sea polar bear abundance from joint U.S.-Russia aerial surveys. Holarctic conference, **Contributed oral presentation** (online).

2021 **Conn, P. B**. Aerial surveys of Chukchi Sea polar bears. Alaska Nanuut Co-Management Council meeting, **Invited oral presentation**.

2020 **Conn, P.B.**, Peter L. Boveng, Erin E. Moreland, et al. Abundance of bearded and ringed seals in the Chukchi Sea, April-May 2016. Alaska Marine Science Symposium, Anchorage, Alaska. **Contributed poster presentation**.

2020 **Conn, P.B**. Close-kin mark-recapture (CKMR): estimating abundance and vital rates from

frequencies of genetically related individuals. AFSC seminar series, Seattle, WA. **Invited oral presentation**.

2019 **Conn, P.B**. Close-kin mark-recapture (CKMR): estimating abundance and vital rates from frequencies of genetically related individuals. SEFS Fish and Wildlife Ecology Seminar, University of Washington, Seattle, WA. **Invited oral presentation**.

2019 **Conn, P.B.** 2019. Close-kin mark-recapture in dispersal limited populations. Close-kin mark-recapture in dispersal limited populations. Wildlife Society / American Fisheries Society combined annual meeting, Reno, NV. **Invited oral presentation**.

2019 **Conn, P.B.** 2019. Close-kin mark-recapture in dispersal limited populations. WNAR Conference, Portland, OR.

2019 **Conn, P.B.** 2019. Confronting preferential sampling in species distribution models. NOAA Protected Resources Assessment Workshop, La Jolla, CA. Contributed oral presentation.

2018 **Conn, P. B.** Modeling the distribution and abundance of ice-associated seals in the Alaskan Arctic. September 4, 2018. CSIRO seminar, Hobart, Tasmania. **Invited oral presentation**.

2018 **Conn, P. B.** Aerial survey estimates of polar bears and their tracks in the eastern Chukchi Sea. July 3, 2018. International Statistical Ecology Conference, St. Andrews, Scotland. **Contributed oral presentation**.

2018 **Conn, P. B.** Spatio-temporal models for Arctic seal abundance: successes and computational challenges. March 1, 2018. CAPAM workshop on spatio-temporal modeling, San Diego, CA. **Contributed oral presentation**.

2017 **Conn, P.B.** Modeling the distribution and abundance of ice-associated seals in the Arctic. November 2, 2017. SAFS Departmental Seminar, University of Washington. **Invited Oral Presentation**.

2016 **Conn, P.B.**, E. E. Moreland, E. V. Regehr, E. L. Richmond, M. F. Cameron, and P. L. Boveng. November 1, 2016. Designing a large-scale aerial survey for polar bears and ice-associated seals in the Chukchi Sea. Marine Mammals of the Holarctic Conference, Astrakhan, Russia. **Plenary Presentation**.

2016 **Conn, P.B.**, J.T. Thorson, and D.S. Johnson. June 27, 2016. Confronting preferential sampling in wildlife surveys. International Statistical Ecology Conference, Seattle, WA. **Contributed Oral Presentation**.

2015 **Conn, P.B.** and Moreland, E.E. Aug 11, 2015. Using automated aerial imaging to estimate Arctic seal abundance: the devil is in the details. ESA Annual Meeting, Baltimore, MD. **Invited Oral Presentation** (Ignite session).

2015 **Conn, P.B.**, D.S. Johnson, J. M. Ver Hoef, M.B. Hooten, J.L. London, and P.L. Boveng. Aug 10, 2015. Spatiotemporal models for aerial survey counts: An application to ice-associated seals in the Bering Sea. ESA Annual Meeting, Baltimore, MD. **Invited Oral Presentation**.

2015 **Conn, P.B.**, D.S. Johnson, J.M. London, B.T. McClintock. Statistical model for marine mammal biologging data. Presented at the Peter Wall International Research Roundtable, "Building a bioanalytical theory for analysis of marine mammal movements." University of Brtitish Columbia, Vancouver, Canada. **Invited Oral Presentation**.

2014 **Conn, P. B.** Using spatio-temporal statistical models to estimate animal abundance from transect counts. International Statistical Ecology Conference, Montpelier, France. **Contributed Oral Presentation**.

2013 **Conn, P. B.** Estimating animal abundance using an automated detection system: Ice-associated seals in the Bering Sea. Quantitative Seminar, School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA. **Invited Oral Presentation**.

2013 **Conn, P.B**. Incorporating spatial ICAR effects into ecological models. Euring 2013 Technical Conference, Athens, GA. **Invited Oral Presentation (substitute plenary)**.

2013 **Conn, P.B.**, J. Ver Hoef, B. McClintock, E. Moreland, M. Cameron, and P. Boveng. Model-based methods for monitoring Arctic seal populations. Euring 2013 Technical Conference, Athens, GA. **Contributed Oral Presentation**.

2012 **Conn, P.B.** Hierarchical models for wildlife transect surveys. Wildlife Society Annual Meeting, Portland, OR. **Invited Oral Presentation**.

2012 **Conn, P.B.** Abundance estimation plan for Bering-Okhotsk Seal Surveys (BOSS). Russian-American meeting on the development of coordinated instrumental survey of ice-breeding seals in Northern Pacific in 2012-2013. Moscow, Russia.

2012 **Conn, P.B.** Hierarchical models for multiple observer animal transect surveys. International Statistical Ecology Conference, Sundvolden, Norway. **Contributed Oral Presentation**.

2012 **Conn, P.B.** Hierarchical models for multiple observer animal transect surveys. Quantitative Seminar, School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA. **Invited Oral Presentation**.

2011 **Conn, P. B.** Accounting for transients when estimating abundance of dolphins in Choctawhatchee Bay, FL. Wildlife Society annual meeting, Kona, HI. **Contributed Oral Presentation**.

2011 Brady, M., **P. B. Conn**, et al. Why Did the Eel Cross the Creek: Understanding American Eel Behavior in an Estuarine Setting. American Fisheries Society annual meeting, Seattle, WA. **Contributed oral presentation**.

2011 **Conn, P. B.** Accounting for transients when estimating abundance of dolphins in Choctawhatchee Bay, FL. NMFS Workshop on Estimating Abundance of Bottlenose Dolphins in Bays and Estuaries, Atlanta, GA. **Invited Oral Presentation**.

2010 **Conn, P. B.** Using fisheries models to assess harvested populations: a review of models, data, and assumptions. Wildlife Society annual meeting, Snowbird, UT. **Invited Oral Presentation**.

2010 **Conn, P. B.** Coping with transients and bilateral photographs in marine mammal mark-recapture studies. NMFS National Marine Mammal Laboratory, Seattle, WA. **Invited Oral Presentation**.

2009 **Conn, P.B.**, E.G. Cooch, and P. Caley. Accounting for detection probability in force-of-infection models. Euring 2009 Technical Conference, Pescara, Italy. **Contributed oral presentation**.

2009 **Conn, P.B.**, E.H. Williams, and K.W. Shertzer. When can we reliably estimate the productivity of fish stocks? NMFS Northeast Fisheries Science Center, Woods Hole, MA. **Invited Oral Presentation**.

2009 **Conn, P.B.**, E.H. Williams, and K.W. Shertzer. When can we estimate steepness? Southeast Stock Assessment Workshop, Miami, FL. **Contributed oral presentation**.

2009 **Conn, P.B.** Population dynamics under the hood: hidden process models for animal encounter data. Biomathematics Seminar, NC State University, Raleigh NC. **Invited Oral Presentation**.

2008 **Conn, P.B.,** D. Vaughan, and J. Hoenig. Tagging and its use in stock assessments. American Fisheries Society Annual Conference, Ottawa, Canada. **Invited oral Presentation**.

2008   **Conn, P.B.**   Population dynamics under the hood: hidden process models for animal encounter data. Center for Marine Sciences and Technology, North Carolina State University, Morehead City, NC. **Invited Oral Presentation**.

2008   **Conn, P. B.**   Principles of adaptive management. USFWS Workshop, Parker River NWR, 1/9/08-1/10/08. **Invited Oral Presentation**.

2007   **Conn, P.B.**, D.R. Diefenbach, J.L. Laake, M.A. Ternent, and G.C. White. Using age-at-harvest and mark-recovery data to quantify black bear population dynamics in Pennsylvania. The Wildlife Society annual conference, Tucson, AZ. **Contributed oral Presentation**.

2007   **Conn, P.B.** Bayesian analysis of wildlife age-at-harvest data. NOAA Center for Coastal Fisheries and Habitat Research, Beaufort, NC. **Invited Oral presentation.**

2007   **Conn, P.B.**, D.R. Diefenbach, and E.G. Cooch. Adjusting age- and stage-distributions for misclassification errors. Ecology and Evolution of Infectious Disease Conference, Cornell University, Ithaca, NY. **Poster Presentation**.

2007   **Conn, P.B.** Bayesian analysis of wildlife age-at-harvest data. National Centre for Statistical Ecology seminar series, Universities of Kent and St. Andrews, U. K. **Invited oral presentation.**

2007   **Conn, P.B.** Bayesian analysis of age-at-harvest data with focus on wildlife monitoring programs. Department of Fish, Wildlife and Conservation Biology seminar, Colorado State University. **Oral Presentation**.

2007   **Conn, P.B.**, D.R. Diefenbach, J.L. Laake, G.C. White, and M.A. Ternent. Demographic analysis of a black bear population using mark-recovery and age-at-harvest data. EURING Technical Meeting, Dunedin, New Zealand. **Poster Presentation.**

2006   **Conn, P.B.**, J.L. Laake, G.C. White, D.R. Diefenbach, and M.A. Ternent. Combining mark-recovery and age-at-harvest data to estimate demographic parameters. Colorado Chapter of the Wildlife Society Annual Meeting, Fort Collins, CO. **Oral Presentation.**

2005   **Conn, P.B.**, J.L. Laake, G.C. White, D.R. Diefenbach, and M.A. Ternent. Joint analysis of marking and age-at-harvest data with focus on carnivore monitoring programs. Annual Meeting of the Wildlife Society, Madison, Wisconsin. **Oral Presentation.**

2005   **Conn, P.B.**, J.L. Laake, G.C. White, D.R. Diefenbach, and M.A. Ternent. Combining mark-recovery and age-at-harvest data to estimate demographic parameters. International Biometrics Society WNAR Conference, Fairbanks, Alaska. **Oral Presentation.**

2004   **Conn, P.B.,** W.L. Kendall, and M.D. Samuel. A general model for the analysis of mark-resight, mark-recapture, and band recovery data under tag loss. International Arctic Goose Conference, Reno, Nevada. **Oral Presentation.**

2004   **Conn, P.B.,** W.L. Kendall, and M.D. Samuel. A general model for the analysis of mark-resight, mark-recapture, and band recovery data under tag loss. Annual Meeting of The Wildlife Society, Calgary, Alberta. **Oral Presentation.**

2002   **Conn, P.B.,** W.L. Kendall, and M.D. Samuel. A general model for the analysis of mark-resight, mark-recapture, and band recovery data under tag loss. Exit Seminar, Patuxent Wildlife Research Center, Laurel, Maryland. **Oral Presentation.**

2002   **Conn**, **P.B.,** and W.L. Kendall. Evaluating mallard adaptive management models with time series. Adaptive Management Meeting, Patuxent Wildlife Research Center, Laurel, Maryland. **Oral Presentation.**

2002   **Conn**, **P.B.,** and W.L. Kendall. Evaluating mallard adaptive management models with time series. Biomathematics Seminar, North Carolina State University, Raleigh, N. C. **Oral Presentation.**

SOFTWARE

Conn, P.B., D.S. Johnson, and P.J. Williams. 2018. HierarchicalGOF 1.0.1. Zenodo. http://doi.org/10.5281/zenodo.1231501 (accompanies 2018 Ecological Monographs paper). Latest release at https://github.com/pconn/HierarchicalGOF/releases

Conn, P.B., Thorson, J.T, & Johnson, D.S. 2017. PrefSampling v0.3. Zenodo. http://doi.org/10.5281/zenodo.569035. (accompanies 2017 MEE paper).

Conn, P.B. 2015. ChukchiPower. fig**share.** http://dx.doi.org/10.6084/m9.figshare.1619963 (accompanies Conn et al. 2016 Royal Society Open Science paper). Latest release at https://github.com/pconn/ChukchiPower/releases

Conn, P.B. 2015. SpatPred. fig**share**. http://dx.doi.org/10.6084/m9.figshare.1381915 (accompanies Conn et al. 2015 PloS One paper). Latest release at https://github.com/pconn/SpatPred/releases

Conn P.B. 2014. STabundance: An R package for spatio-temporal abundance estimation. fig**share**. http://dx.doi.org/10.6084/m9.figshare.1209622. (accompanies Conn et al. Ecological Monographs paper). Latest release at https://github.com/pconn/STabundance/releases

Conn, P.B. 2013. SSLfish: An R package for conducting simulation experiments for assessing validity of methods for analyzing Steller sea lion/fisheries interactions (accompanies Steller sea lion CJFAS paper). Publically available at http://nmml.github.io/SSLfish/.

Conn, P.B. 2012. hierarchicalDS: An R package for conducting hierarchical analysis of multiple-observer transect data (accompanies PLoS One paper). Publicly available on CRAN (http://cran.r-project.org/).

Conn, P.B. 2012. TempOcc: An R package for conducting temporal occupancy modeling of availability/haul-out probabilities. Publicly available as an online supplement for ME&E paper.

London, J. and **Conn, P.B.** 2012. BASS: An R package for B̲ering-A̲rctic S̲eal S̲urveys. Available from the authors.

Conn, P.B. 2007. Program AGEHARV and user's manual (C++ source and executable accompanying 2008 Biometrics paper). Available from the author.

Conn, P.B. 2005. TLSURVIV and user's manual (FORTRAN source and executable accompanies 2004 Biometrics paper). Available from the author.

Hines, J.E. and **P.B. Conn**. 2002. MSSRVRCV User's Manual (FORTRAN source and executable accompanying 2006 Ecology paper; http://www.mbr-pwrc.usgs.gov/software/)

TEACHING EXPERIENCE

Teaching Assistant, Program MARK workshops 6/2004, 6/2005, 6/2006, 6/2007

Guest Lecturer (3 classes) Spring 2006
Department of Fishery and Wildlife Biology, Colorado State University, Fort Collins, CO

Teaching Assistant, FW663, Spring 2006
Department of Fishery and Wildlife Biology, Colorado State University, Fort Collins, CO

Masters Graduate Teaching Assistant 1999-2000
Department of Statistics, North Carolina State University, Raleigh, NC

STUDENT SUPERVISION

GRADUATE COMMITEES

Emily Susko, MS Fisheries and Wildlife, Virginia Tech   Defended 2012
Thesis topic: "Using simulation models to evaluate the effects of probability-based control rules on stocks of different life history strategies." (Supported by NMFS RTR Program).

Marissa Brady, MS Fisheries, Delaware State University   Defended 2011
Thesis topic: "Environmental parameters affecting American eel (Anguilla rostrata) behavior and habitat use in the St. Jones River, DE" (Supported by NOAA Living Marine Resources grant)

EXTERNAL EXAMINATIONS
Robert Rankin, PhD Statistics, Murdoch University   Defended 2017
Audrey Béliveau, PhD Statistics, Simon Fraser University   Defended 2015

UNDERGRADUATE EXTERNS
Carolyn Lorch, Grinnell College   March, 2016

EXTERNAL FUNDING

2021   Co-PI, NMFS Office of Science and Technology, National Protected Species Toolbox Initiative FY21-23, $300,000
"Integrating diverse data sets to understand the seasonal distribution and densities of marine mammals"
2018   Co-investigator, North Pacific Research Board grant, $207,579
Distribution and abundance of polar bears and ice-associated seals from a U.S.-Russia multispecies, instrument-based survey in the Chukchi Sea
2009   Co-PI, NOAA Living Resources Cooperative Science Center, $42,650
Estimation of survival, emigration, and fishing mortality rates for American eel through a combined use of acoustic telemetry and mark-recapture (Year 2).
2007   Co-PI, NOAA Living Resources Cooperative Science Center, $47,974
Estimation of survival, emigration, and fishing mortality rates for American eel through a combined use of acoustic telemetry and mark-recapture.
2003-2004 PRIMES / NSF-IGERT Graduate Traineeship, $22,000

AWARDS

2018   NOAA Alaska Fisheries Science Ctr. Special Recognition Award, $500
2014   U.S. Department of Commerce Bronze Medal Award "*For designing and conducting the first comprehensive surveys for the abundance and distribution of ice seals in the Bering Sea and Sea of Okhotsk.*"
2008   NOAA Southeast Fisheries Science Ctr. Special Recognition Award, $5,000
2005   Student Travel Grant, International Biometric Society WNAR Conference
2004   Student Travel Grant, International Arctic Goose Conference
2004   Student Travel Grant, TWS Conference, Biometrics Working Group
2003-2004 Oscar and Isabelle Anderson Graduate Scholarship, $3,000

1995-1998 Grinnell College Trustee Honor Grant $4,800 / year

PAST & PRESENT PROFESSIONAL AFFILIATIONS (*=Current)

American Fisheries Society
Ecological Society of America
International Biometric Society
UK Centre for Statistical Ecology (International Member)*
The Wildlife Society (Biometrics Working Group)

SERVICE

2016-2022	Subject Matter Editor, *Ecology*
2020-2021	International Whaling Commission blue whale review panel
2021	Session chair, speed talk session, vNCSE conference
2019	Co-chair, "Close-kin mark-recapture" symposium at the joint AFS/TWS annual conference, Reno, NV.
2018	Session chair, multi-species modelling & fisheries research paper session, International Statistical Ecology Conference, St. Andrews, Scotland.
2015-2016	Local organizing committee, 2016 International Statistical Ecology Conference, Seattle, WA
2014	Session chair, abundance estimation paper session, International Statistical Ecology Conference, Montpelier, France
2013	Guest subject matter editor, *Ecological Applications*
2012-2013	Past Chair (advisory), Wildlife Society's Biometrics Working Group
2012	Co-chair, "Hierarchical models for wildlife surveys over time and space" symposium, The Wildlife Society annual conference, Portland, OR
2012	Session chair, Spatial modeling section, International Statistical Ecology Conference, Sundvolden, Norway.
2011-2012	Chair, The Wildlife Society's Biometrics Working Group
2010-2011	Chair-Elect, The Wildlife Society's Biometrics Working Group (newsletter editor)
2008-2009	Coordinator, NOAA Beaufort lab seminar series
2008	Facilitator, USFWS adaptive management workshop, Parker River NWR
2008	Co-chair, "Tagging and Stock Assessments" symposium, American Fisheries Society annual conference, Ottawa, Canada.
2007	Co-chair, abundance estimation paper session, EURING technical conference, Dunedin, New Zealand
2006-2007	Board member, The Wildlife Society, Biometrics Working Group
2005-2006	Webmaster, Colloquium in the Life Sciences, Colorado State University
2004-2005	President, Colloquium in the Life Sciences, CSU
2003-2004	Student-Faculty Representative, CSU Dept of Fishery and Wildlife Biology
2000-2001	Vice President, NCSU Statistics and Biomathematics Graduate Student Assoc
1997-1998	Chair, Grinnell College Concerts Committee

Additionally, I have performed scientific peer reviews for the following 58 journals:
- Acta Theriologica
- Arctic

- AstA Advances in Statistical Analysis
- Animal Conservation
- Annals of Applied Statistics
- Aquatic Living Resources
- The Auk
- Australian & New Zealand Journal of Statistics
- Avian Conservation and Ecology
- Biological Conservation
- Biology Letters
- Biometrical Journal
- Biometrics
- Bulletin of Marine Science
- Canadian Journal of Fisheries and Aquatic Sciences
- Communications in Statistics – Theory and Methods
- Conservation Biology
- Ecological Applications
- Ecological Modelling
- Ecology
- Ecology and Evolution
- Ecology Letters
- Ecosphere
- Endangered Species Research
- Environmetrics
- Environmental and Ecological Statistics
- Evolutionary Applications
- Fish and Fisheries
- Fisheries Research
- General and Comparative Endocrinology
- Global Ecology and Biogeography
- Israel Journal of Ecology & Evolution
- Journal of Agricultural, Biological, and Environmental Statistics
- Journal of Animal Ecology
- Journal of Applied Ecology
- Journal of Fish & Wildlife Management
- Journal of Mammalogy
- Journal of Theoretical Biology
- Journal of Wildlife Management
- Marine Ecology Progress Series
- Marine Environmental Research
- Marine Mammal Science
- Methods in Ecology and Evolution
- Nature
- North American Journal of Fisheries Management
- Oikos
- Pacific Conservation Biology
- PLoS ONE

- Polar Biology
- Population Ecology
- Proceedings of the National Academy of Sciences
- Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences
- R Journal
- Rangeland Ecology and Management
- Remote Sensing in Ecology and Conservation
- Science
- Thalassas
- Transactions of the American Fisheries Society
- Ursus
- Wildlife Biology

NMFS FISHERIES STOCK ASSESSMENT ACTIVITIES

2015-2017	Member, NMFS Management Strategy Evaluation Working Group
2013-2014	Member, Dusky shark SRT team
2013	Reviewer, TRAC benchmark model review, Eastern Georges Bank cod
2010-2011	Lead programmer, SEDAR 21 HMS Dusky shark assessment
2009-2010	Supporting analyst, SEDAR 19 Red & black grouper assessment
2008-2009	Lead analyst, SEDAR 17 Spanish mackerel assessment
2007	Supporting analyst, SEDAR 15 Red snapper assessment

NMFS FISHERIES STOCK ASSESSMENT WORKING PAPERS*

2010	SEDAR21-AW-02	Computer code for the SEDAR 21 age-structured catch-free model for dusky sharks
2010	SEDAR21-AW-01	Hierarchical analysis of blacknose, sandbar, and dusky shark CPUE indices
2009	SEDAR19-AW-07	A statistical catch-age model for red grouper: model structure and simulation testing
2009	SEDAR19-AW-01	Hierarchical analysis of south Atlantic red grouper indices
2009	SEDAR19-DW-04	Construction of a headboat index for south Atlantic and Gulf black grouper (U.S.)
2009	SEDAR19-DW-03	Construction of a headboat index for south Atlantic red grouper (U.S.)
2008	SEDAR17-AW-12	AD Model Builder code to implement catch-age assessment model of Spanish mackerel
2008	SEDAR17-AW-08	Methods for combining multiple indices into one, with application to south Atlantic (U.S.) Spanish mackerel
2008	SEDAR17-AW-07	Extrapolation of Spanish mackerel bycatch by shrimp trawl fisheries
2008	SEDAR17-AW-06	A Bayesian approach to stochastic stock reduction analysis with application to south Atlantic Spanish mackerel
2007	SEDAR15-AW-2	Surplus production models for south Atlantic red snapper
2007	SEDAR15-AW-1	Stock assessment model for south Atlantic red snapper

*available at http://www.sefsc.noaa.gov/sedar/Index.jsp