Curriculum vitae: Adam G. Hansen

Current Positions

Aquatic Research Scientist IV (2016-present)

Lake and Reservoir Ecology

Colorado Parks and Wildlife

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Affiliate Faculty Member (2017-present)
Dept. of Fish, Wildlife, and Conservation Biology
Colorado State University
1474 Campus Delivery, Fort Collins, CO 80523



Education

Ph.D.—Aquatic and Fishery Sciences, University of Washington, Seattle, WA, 2014. B.S. *Magna cum laude*—Fishery Biology, Colorado State University, Fort Collins, CO, 2008.

Research Interests

Aquatic ecology; Bioenergetics modeling; Food webs; Lake and reservoir fisheries management; Population dynamics; Predator-prey interactions; Salmonid ecology and conservation;

Previous Positions

- Research Scientist Engineer III: Washington Cooperative Fish and Wildlife Research Unit, School of Aquatic and Fishery Sciences, University of Washington (Dec. 2013–Dec. 2015).
- Graduate Fellow and Research Assistant: Washington Cooperative Fish and Wildlife Research Unit, School of Aquatic and Fishery Sciences, University of Washington (June 2009–Dec. 2013).
- Research Associate I: Stream Fish Ecology and Fish Physiological Ecology Laboratories (Jan. 2009–May 2009), Department of Fish, Wildlife, and Conservation Biology, Colorado State University.

Peer-Reviewed Publications

- 31. **Hansen, A.G.**, M.W. Miller, E.T. Cristan, C.J. Farrell, P. Winkle, M.M. Brandt, K.D. Battige, and J.M. Lepak. *In press*. Gill net catchability of walleye (*Sander vitreus*): are provincial standards suitable for estimating adult density outside the region? *Fisheries Research*.
- 30. **Hansen, A.G.**, C.J. Farrell, and B.M. Johnson. *In press*. Simulated effects of imperfect sterile sport fish stocking on persistence of fertile fish in new exploited populations. *North American Journal of Fisheries Management* (**Feature Article**).
- 29. Lepak, J.M., B.A. Wolff, B.M. Johnson, M.B. Hooten, and **A.G. Hansen**. *In press*. Predicting sport fish mercury contamination in heavily managed reservoirs: implications for human and ecological health. *PLOS ONE*.

- 28. **Hansen, A.G.**, A.K. McCoy, G.P. Thiede, and D.A. Beauchamp. 2023. Pelagic food web interactions in a large invaded ecosystem: implications for reintroducing a native top predator. *Ecology of Freshwater Fish* 32:552-570.
- 27. Chao Guo, Shiqi Li, Jie Ke, Chuansong Liao, **A.G. Hansen**, E. Jeppesen, Tanglin Zhang, Wei Li, and Jiashou Liu. 2023. The feeding habits of small-bodied fishes mediate the strength of top-down effects on plankton and water quality in shallow subtropical lakes. *Water Research* 233:119705.

- 26. **Hansen, A.G.**, E.T. Cristan, M.M. Moll, M.W. Miller, E.I. Gardunio, and J.M. Lepak. 2022. Factors influencing early growth of juvenile tiger trout stocked into subalpine lakes as biocontrol and to enhance recreational angling. *Fishes* 7:342.
- 25. Chao Guo, Shiqi Li, Wei Li, Chuansong Liao, Tanglin Zhang, Jiashou Liu, Lin Li, Jiaxin Sun, Xingwei Cai, and **A.G. Hansen**. 2022. Spatial variation in the composition and diversity of fishes inhabiting an artificial water supply lake, Eastern China. *Frontiers in Ecology and Evolution* 10:921082.
- 24. Cristan, E, **A.G. Hansen**, and J.M. Lepak. 2022. Effects of ethanol preservation on larval and fingerling walleye and gizzard shad body size. *North American Journal of Fisheries Management* 42:874-881.
- 23. Farrell, C.J., B.M. Johnson, **A.G. Hansen**, C.A. Myrick, E.C. Anderson, T.A. Delomas, A.D. Schreier, and J.P. Van Enennaam. 2022. Cytological and molecular approaches for ploidy determination: results from a wild walleye population. *North American Journal of Fisheries Management* 42:849-856.
- 22. **Hansen, A.G.**, J.A. Gardner, K.A. Connelly, M. Polacek, and D.A. Beauchamp. 2022. Resource use among top-level piscivores in a temperate reservoir: implications for a threatened coldwater specialist. *Ecology of Freshwater Fish* 31:469-491.
- 21. Chao Guo, Wei Li, Shiqi Li, Zhan Mai, Tanglin Zhang, Jiashou Liu, **A.G. Hansen**, Lin Li, Xingwei Cai, and B.J. Hicks. 2022. Manipulation of fish community structure effectively restores submerged aquatic vegetation in a shallow subtropical lake. *Environmental Pollution* 292:118459.
- 20. Farrell, C.J., B.M. Johnson, **A.G. Hansen**, and C.A. Myrick. 2022. Induced triploidy reduces mercury bioaccumulation in a piscivorous fish. *Canadian Journal of Fisheries and Aquatic Sciences* 79:202-212 (**Editor's Choice Award**).
- 19. Lepak, J.M., **A.G. Hansen**, M.B. Hooten, D. Brauch, and E.M. Vigil. 2022. Rapid proliferation of the parasitic copepod *Salmincola californiensis* (Dana) on kokanee salmon, *Oncorhynchus nerka* (Walbaum), in a large Colorado reservoir. *Journal of Fish Diseases* 45:89-98 (**Cover story for journal issue**).

2021

18. Rohan, S.K., D.A. Beauchamp, T.E. Essington, and **A.G. Hansen**. 2021. Merging empirical and mechanistic approaches to modeling aquatic visual foraging using a generalizable visual reaction distance model. *Ecological Modeling* 457:109688.

- 17. **Hansen, A.G.** 2019. Size-dependent retention of pelagic-oriented kokanee in multimesh gill nets. *North American Journal of Fisheries Management* 39:921-932.
- 16. Litz, M.N.C., J.A. Miller, R.D. Brodeur, E.A. Daly, L.A. Weitkamp, **A.G. Hansen**, and A.M. Claiborne. 2019. Energy dynamics of subyearling Chinook salmon reveal the importance of piscivory to short term growth during early marine residence. *Fisheries Oceanography* 28:273-290.
- 15. **Hansen, A.G.**, J.S. Thompson, L.N. Hargis, D. Brauch, and B.M. Johnson. 2019. Predatory threat of introduced yellow perch in a salmonid dominated reservoir food web. *North American Journal of Fisheries Management* 39:172-190.

2018

- 14. **Hansen, A.G.**, J.A. Gardner, K.A. Connelly, M. Polacek, and D.A. Beauchamp. 2018. Trophic compression of lake food webs under hydrologic disturbance. *Ecosphere* 9(6):e02034.
- 13. Spanjer, A.R., P.W. Moran, K.A. Larsen, L.A. Wetzel, **A.G. Hansen**, and D.A. Beauchamp. 2018. Juvenile coho salmon growth and health in streams across an urbanization gradient. *Science of the Total Environment* 625:1003-1012.

2017

- 12. Johnson, B.M., W.M. Pate, and **A.G. Hansen**. 2017. Energy density and dry matter content in fish: new observations and an evaluation of some empirical models. *Transactions of the American Fisheries Society* 146:1262-1278.
- 11. Borin, J.M., M.L. Moser, **A.G. Hansen**, C. Donoghue, D.A. Beauchamp, C. Pruitt, S.C. Corbett, J.L. Ruesink, and B. Dumbauld. 2017. Energetic requirements of the North American green sturgeon (*Acipenser medirostris*) feeding on burrowing shrimp (*Neotrypaea californiensis*) in estuaries: importance of temperature, reproductive investment, and residence time. *Environmental Biology of Fishes* 100:1561-1573.

- 10. **Hansen, A.G.**, J.G. Gardner, D.A. Beauchamp, R. Paradis, T.P. Quinn. 2016. Recovery of sockeye salmon in the Elwha River, Washington after dam removal: dependence of smolt production on the resumption of anadromy by landlocked kokanee. *Transactions of the American Fisheries Society* 145:1303-1317.
- 9. Sorel, M.H., **A.G. Hansen**, and D.A. Beauchamp. 2016. Trophic feasibility of reintroducing anadromous salmonids in three reservoirs on the North Fork Lewis River, Washington: prey supply and consumption demand of resident fishes. *Transactions of the American Fisheries Society* 145:1331-1347.
- 8. Sorel, M.H., **A.G. Hansen**, K.A. Connelly, A.C. Wilson, E.D. Lowery, and D.A. Beauchamp. 2016. Predation by northern pikeminnow and tiger muskellunge on juvenile salmonids in a high-head reservoir: implications for anadromous fish reintroductions. *Transactions of the American Fisheries Society* 145:521-536.

- 7. Hovel, R.A., D.A. Beauchamp, **A.G. Hansen**, and M.H. Sorel. 2015. Development of a bioenergetics model for the threespine stickleback *Gasterosteus aculeatus*. *Transactions of the American Fisheries Society* 144:1311-1321.
- 6. **Hansen, A.G.**, and D.A. Beauchamp. 2015. Latitudinal and photic effects on diel foraging and predation risk in freshwater pelagic ecosystems. *Journal of Animal Ecology* 84:532-544.

2014

- 5. **Hansen, A.G.**, and D.A. Beauchamp. 2014. Effects of prey abundance, distribution, visual contrast and morphology on selection by a pelagic piscivore. *Freshwater Biology* 59:2328-2341.
- 4. Garcia, R.L., **A.G. Hansen**, M. Chan, and G.E. Sanders. 2014. Gyrodactylid Ectoparasites in a population of rainbow trout (*Oncorhynchus mykiss*). *The Journal of the American Association for Laboratory Animal Science* 53:92-97.

2013

- 3. **Hansen, A.G.**, D.A. Beauchamp, and E.R. Schoen. 2013. Visual prey detection responses of piscivorous trout and salmon: effects of light, turbidity, and prey size. *Transactions of the American Fisheries Society* 142:854-867.
- 2. **Hansen, A.G.**, D.A. Beauchamp, and C.M. Baldwin. 2013. Environmental constraints on piscivory: insights from linking ultrasonic telemetry to a visual foraging model for cutthroat trout. *Transactions of the American Fisheries Society* 142:300-316.

2012

1. Lepak, J.M., K.D. Kinzli, E.R. Fetherman, W.M. Pate, **A.G. Hansen**, E.I. Gardunio, C.N. Cathcart, W.L. Stacy, Z.E. Underwood, M.M. Brandt, C.M. Myrick, and B.M. Johnson. 2012. Manipulation of growth to reduce mercury concentrations in sport fish on a wholesystem scale. *Canadian Journal of Fisheries and Aquatic Sciences* 69:122-135.

Published Book Chapters

1. Beauchamp, D.A., **A.G. Hansen**, and D. Parrish. *In press*. Chapter 7: Coldwater fish in large standing waters. *In* Standard methods for sampling North American freshwater fishes (2nd edition). *Edited by* S.A. Bonar, W.A. Hubert, and D.W. Willis. American Fisheries Society, Bethesda, Maryland.

Publications in Progress

- 7. Lepak, J.M., **A.G. Hansen**, E.T. Cristan, and D. Williams. *In review*. Rainbow smelt (*Osmerus mordax*) influence on walleye (*Sander vitreus*) recruitment decline: mitochondrial DNA evidence supporting the predation hypothesis. *Journal of Fish Biology*.
- 6. Farrell, C.J., **A.G. Hansen**, M.M. Brandt, C.M. Myrick, B.M. Johnson. *In revision*. An evaluation of the relative size, condition, and survival of triploid walleye in the wild. *North American Journal of Fisheries Management*.

- 5. Farrell, C.J., B.M. Johnson, **A.G. Hansen**, C.M. Myrick, and B. Avila. *In prep.* Does reproduction cause growth deceleration? Growth comparisons between sterile and fertile walleye (*Stizostedion vitreum*, Percidae) address a long-standing debate. *Canadian Journal of Fisheries and Aquatic Sciences*.
- 4. **Hansen, A.G.**, J.M. Lepak, E.I. Gardunio, and T. Eyre. *In prep*. A pervasive invasive: can angler-incentive programs effectively suppress nuisance smallmouth bass? *Biological Invasions*.
- 3. **Hansen, A.G.**, J.M. Lepak, and T.W. Walsworth. *In prep*. Middle-out control by an introduced fish II: models and mechanisms of rainbow smelt (*Osmerus mordax*) as an ecosystem influencer. *Canadian Journal of Fisheries and Aquatic Sciences*.
- 2. Lepak, J.M., **A.G. Hansen**, B.M. Johnson, K. Battige, C.J. Farrell, W.M. Pate, K.B. Rogers, A.J. Treble, B.A. Wolff, and T.W. Walsworth. *In prep*. Middle-out control by an introduced fish I: patterns and predictions of rainbow smelt (*Osmerus mordax*) as an ecosystem influencer. *Canadian Journal of Fisheries and Aquatic Sciences*.
- 1. **Hansen, A.G.**, and D. Brauch. *In prep*. Evidence for enhanced recruitment success of a top predator following changes to water management in a montane reservoir. *Ecology of Freshwater Fish*.

Other Published Contributions, News and Interviews

- Research on long-term population dynamics of lake trout and kokanee in Blue Mesa Reservoir, Colorado highlighted in a story written by Erik Cristan. Title: *Angler incentives: Lucrative lake trout in Blue Mesa Reservoir*. Colorado Outdoors Magazine, September/October 2021, Vol. 70, No. 5.
- Research on harvest management of walleye in Colorado highlighted in a story written by Dan England. Title: *Managing Walleye: One Minor Change Can Have a Big Impact*. Colorado Outdoors Magazine, July 2020 Fishing Guide, No. 29.
- Hansen, A.G. *In review*. Rainbow Smelt (*Osmerus mordax*, Mitchell). Book chapter, *Fishes of Colorado*, Colorado Parks and Wildlife, Denver.
- **Hansen, A.G.** *In review*. Tiger Trout (*Salvelinus fontinalis* × *Salmo trutta*). Book chapter, *Fishes of Colorado*, Colorado Parks and Wildlife, Denver.
- Colorado walleye research featured on FOX 31 News, Denver: Colorado Parks and Wildlife conducts aquatic research despite single-digit temperatures, by Ashley Michels. Aired October 30th, 2019. Link: https://kdvr.com/2019/10/30/cpw-conducts-aquatic-research-despite-single-digit-temperatures/
- Colorado walleye research featured on CBS 4 News, Denver: *Wildlife scientists research Colorado walleye in sunshine or winter weather*, by Conor McCue. Aired October 30th, 2019. Link: https://denver.cbslocal.com/2019/10/30/colorado-parks-wildife-walleye-scientists/
- Interviewed by Wilbur Flachman for short story on fall turnover in high mountain lakes. Title: *True tales from the lying log*. Thirst Colorado, September/October 2019, Vol. 4, No. 6.1.
- News release highlighting Hansen et al. (2018), Ecosphere: Title: *Intensive use of lake water affects freshwater food webs*. Released through the School of Aquatic and Fishery Sciences, University of Washington. July 2, 2018.
- Interviewed by Geoff Mueller, Senior Editor, The Drake Magazine, for primer on tiger trout and tiger muskie research, management, and angling opportunities. Title: *Going on safari: a tail of two tigers*. Summer 2018, Vol. 20, Issue 2.

- Research pertaining to biological effectiveness of harvest incentives for controlling invasive smallmouth bass highlighted in a story written by Dan England. Title: *Bucket Biology*. Colorado Outdoors Magazine, May/June 2018, Vol. 67, No. 3.
- Sorel, M.H., D.A. Beauchamp, and **A.G. Hansen**. 2015. Reintroducing native salmon above formally impassable dams on the Lewis River. Washington State Lake Protection Agency. WATERLINE, June 2015 issue.

Technical Reports

- 17. Farrell, C.J., B.M. Johnson, C.A. Myrick, and **A.G. Hansen**. 2023. Triploid walleye: a new frontier for nonnative predator management in the west. Colorado State University, Department of Fish, Wildlife, and Conservation Biology. Final Report to Colorado Parks and Wildlife. January 5th, 2023. 169 pages.
- 16. **Hansen**, **A.G.**, J.M. Lepak, E.T. Cristan, W.M. Pate, and C.J. Farrell. Coldwater lake and reservoir research projects. 2022. Annual summary report. Colorado Parks and Wildlife, Aquatic Research Section, Fort Collins, CO. 42 pages.
- 15. **Hansen**, **A.G.**, J.M. Lepak, E.T. Cristan, W.M. Pate, and C.J. Farrell. Coldwater lake and reservoir research projects. 2021. Annual summary report. Colorado Parks and Wildlife, Aquatic Research Section, Fort Collins, CO. 151 pages.
- 14. Silver, D.B., B.M. Johnson, W.M. Pate, **A.G. Hansen**, and K. Christianson. 2021. History and outcomes of opossum shrimp (*Mysis diluviana*) introductions in Colorado. Colorado Parks and Wildlife, Technical Publication Number 58. 39 pages plus appendices and data.
- 13. **Hansen**, **A.G.** Coldwater lake and reservoir research projects. 2020. Annual summary report. Colorado Parks and Wildlife, Aquatic Research Section, Fort Collins, CO. 75 pages.
- 12. **Hansen, A.G.** Coldwater lake and reservoir research projects. 2018. Annual summary report. Colorado Parks and Wildlife, Aquatic Research Section, Fort Collins, CO. 85 pages.
- 11. **Hansen, A.G.**, M. Polacek, K.A. Connelly, J.R. Gardner, and D.A. Beauchamp. 2017. Food web interactions in Kachess and Keechelus Reservoirs, Washington: implications for threatened adfluvial bull trout and management of water storage. Final Report to Washington Department of Ecology. 67 pages.
- 10. Clark, C.P., S. Ball, S. Burgess, **A.G. Hansen**, and D.A. Beauchamp. 2017. Growth, distribution, and abundance of pelagic fishes in Lake Washington: March and October 2016. Final report to Seattle Public Utilities. Washington Cooperative Fish and Wildlife Research Unit. Report # WACFWRU-17-01. 39 pages.
- 9. **Hansen, A.G.**, J.R. Gardner, and D.A. Beauchamp. 2015. Growth, distribution, and abundance of pelagic fishes in Lake Washington: March and October 2015. Final report to Seattle Public Utilities. Washington Cooperative Fish and Wildlife Research Unit. Report # WACFWRU-16-01. 30 pages.
- 8. **Hansen, A.G.**, K.A. Connelly, and D.A. Beauchamp. 2015. Growth, distribution, and abundance of pelagic fishes in Lake Washington: March and October 2014. Final report to Seattle Public Utilities. Washington Cooperative Fish and Wildlife Research Unit. Report # WACFWRU-15-01. 29 pages.
- 7. **Hansen, A.G.**, and D.A. Beauchamp. 2015. Evaluation of factors affecting bull trout and kokanee production in Kachess and Keechelus Reservoirs, Yakima River Basin, Washington. Final Report to Washington Department of Ecology. 43 pages.

- 6. Beauchamp, D.A., A. McCoy, and **A.G. Hansen**. 2014. Quantifying pelagic food web interactions in Lake Tahoe: a road map for re-introduction of Lahontan cutthroat trout. Final report (2012-2013) to the U.S. Fish and Wildlife Service.
- 5. Beauchamp, D.A., A. McCoy, and **A.G. Hansen**. 2014. Baseline data collection in preparation for a localized mysid reduction experiment in Lake Tahoe. Final report (2012-2013) to the U.S. Fish and Wildlife Service.
- 4. **Hansen, A.G.**, D.A. Beauchamp, and E. Lowery. 2014. Growth, distribution, and abundance of pelagic fishes in Lake Washington: March and October 2013. Final report to Seattle Public Utilities. Washington Cooperative Fish and Wildlife Research Unit. Report # WACFWRU-14-01.
- 3. **Hansen, A.G.**, D.A. Beauchamp, and E. Lowery. 2013. Growth, distribution, and abundance of pelagic fishes in Lake Washington: March-April and October 2012. Final report to Seattle Public Utilities. Washington Cooperative Fish and Wildlife Research Unit. Report # WACFWRU-13-01.
- 2. Johnson, B.M., J. Butteris, C.M. Clapp, S.D. Cossey, C.C. Deguelle, M.J. Dodrill, R.E. Dritz, D.A. Falconi, R.T. Fortier, T.L. Goodin, **A.G. Hansen**, and 15 others. 2009. Effects of an anticipated illegal introduction of walleye into Blue Mesa Reservoir, Colorado. Final report to Colorado Parks and Wildlife. Colorado State University, Fort Collins, CO.
- 1. **Hansen, A.G.**, and K.T. Bentley. 2008. Inventory of fishes inhabiting Spottlewood, Graves, and Sand Creeks on Meadow Springs Ranch and Soapstone Prairie Natural Area, Larimer County, CO. Final report to the City of Fort Collins (Natural Resources Department), and Colorado Parks and Wildlife. Colorado State University, Fort Collins, CO.

Professional Presentations

2023

51. Lepak, J.M., D. Winkelman, **A.G. Hansen**, J. Ewert, and T. Eyre. Sterile tiger muskellunge (*Esox lucius x E. masquinongy*) as undesirable fish species control agents. Colorado State University Cooperative Fish and Wildlife Research Unit annual review. May 3, 2023. Fort Collins, CO.

- 50. Farrell, C.J., B.M. Johnson, **A.G. Hansen**, B.W. Avila, and C.A. Myrick. Does reproduction limit lifetime growth? Evidence from a population of mixed-ploidy walleye. PERCIS V. September 22, 2022. České Budějovice, Czechia.
- 49. Farrell, C.J., B.M. Johnson, **A.G. Hansen**, B.W. Avila, and C.A. Myrick. Does reproduction limit lifetime growth? 152nd Meeting of the American Fisheries Society. August 25, 2022. Spokane, WA.
- 48. **Hansen, A.G.**, and D. Brauch. Achieving coexistence: a case history of Colorado's premier kokanee-lake trout fishery. 152nd Meeting of the American Fisheries Society. August 25, 2022. Spokane, WA.
- 47. Beauchamp, D.A., R. Johnson, B. Jensen, and **A.G. Hansen**. Environmental and ecological constraints on smolt production for salmonids introduced above dams. 152nd Meeting of the American Fisheries Society. August 23, 2022. Spokane, WA.

- 46. **Hansen, A.G.**, and C.J. Farrell. Are walleye a boost or bane to Colorado fisheries? A continental division. 152nd Meeting of the American Fisheries Society. August 22, 2022. Spokane, WA.
- 45. Jackson, K.N., C.J. Farrell, B.M. Johnson, C.A. Myrick, **A.G. Hansen**, and Y. Kanno. Prey selection of diploid and triploid walleye in a prey-limited system. Colorado State University Celebrate Undergraduate Research and Creativity Showcase. April 21, 2022. Fort Collins, CO.
- 44. Jackson, K., C.J. Farrell, B.M. Johnson, C.M. Myrick, and **A.G. Hansen**. Prey selection of diploid and triploid walleye in a prey-limited system. Colorado/Wyoming Chapter of the American Fisheries Society Annual Meeting, March 3rd, 2022.
- 43. Farrell, C.J., B.M. Johnson, **A.G. Hansen**, and C.M. Myrick. Triploid walleye: some considerations for mangers. Colorado/Wyoming Chapter of the American Fisheries Society Annual Meeting, March 3rd, 2022.

42. **Hansen, A.G.**, and D. Brauch. Population dynamics of lake trout in Blue Mesa Reservoir, Colorado: new insights from linking a simple population model to long-term survey data. American Fisheries Society, Western Division Virtual Meeting hosted by Utah Chapter. Symposium: *Advancements in the Ecology and Management of Nonnative Lake Trout*. May 14th, 2021.

2020

- 41. **Hansen, A.G.**, C.J. Farrell, and B.M. Johnson. Simulated effects of triploid walleye induction rate on diploid persistence in a newly stocked population. Biology Committee Webinar, Upper Colorado River Endangered Fish Recovery Program. September 3rd, 2020.
- 40. Farrell, C.J., **A.G. Hansen**, B.M. Johnson, and C.M. Myrick. Does ploidy affect mercury bioaccumulation in walleye? American Fisheries Society, Virtual Annual Meeting. September 2020.
- 39. **Hansen, A.G.** How low can we go? Simulated effects of triploid walleye induction rate on the probability of diploid persistence in a newly stocked population. Virtual meeting among representatives of CO, UT, and the USFWS. March 23rd, 2020.
- 38. Farrell, C., B.M. Johnson, C.M. Myrick, **A.G. Hansen**, M. Brandt, and J. White. A preliminary assessment of adult diploid and triploid walleye in Narraguinnep Reservoir, Colorado. Annual meeting of CO-WY Chapter of the American Fisheries Society. Laramie, WY. February 25th, 2020 (**voted best student paper**).
- 37. **Hansen, A.G.**, E.I. Gardunio, and T. Eyre. Population dynamics of smallmouth bass in two upper Colorado River basin reservoirs: short-term responses to an angler harvest incentive program. Upper Colorado River Basin Endangered Fish Recovery Program Annual Researcher's Meeting. Durango, Colorado. January 14th, 2020.

2019

36. **Hansen, A.G.**, and D.A. Beauchamp. Pelagic food web interactions in Lake Tahoe: considerations for the reintroduction of Lahontan cutthroat trout. Joint AFS-TWS Annual Meeting, Reno, NV. October 3rd, 2019.

35. Farrell, C., B.M. Johnson, C.M. Myrick, **A.G. Hansen**, M. Brandt, and J. White. Induced triploidy for managing invasive walleye: study overview and preliminary findings. Annual meeting of CO-WY Chapter of the American Fisheries Society. Fort Collins, CO. February 28th, 2019.

2018

- 34. M. Miller, E. Cristan, K. Paik, A. Smith, J. Wyer, K. Hall, C.A. Myrick, and **A.G. Hansen**. What is limiting the growth of northern pike *Esox lucius* in College Lake? A bioenergetics approach. Poster submission for Colorado-Wyoming Chapter of the America Fisheries Society Annual Meeting, Laramie, Wyoming. February 2018.
- 33. Brauch, D, and **A.G. Hansen**. Riding a salmon "high": factors contributing to a rebound of Colorado's premier kokanee salmon fishery. Colorado-Wyoming Chapter of the American Fisheries Society Annual Meeting, Laramie, Wyoming. February 2018.
- 32. **Hansen, A.G.**, E. I. Gardunio, and T. Eyre. Biological effectiveness of incentive-based harvest tournaments for controlling nonnative piscivores in fluctuating coldwater reservoirs. Upper Colorado River Basin Endangered Fish Recovery Program Annual Researcher's Meeting. Vernal, Utah. January 2018.

2017

- 31. **Hansen, A.G.** How will altered or more demanding water use regimes affect reservoir food webs and fisheries? North American Lake Management Society Conference, Westminster, Colorado. November 2017.
- 30. **Hansen, A.G.** Harvest tournaments: collaborating with anglers to reconcile native fish conservation and warm water sport fishing in western Colorado. Invited speaker at the Colorado State University student subunit of the American Fisheries Society. Fort Collins, Colorado. October 2017.
- 29. **Hansen, A.G.**, J.A. Gardner, K.A. Connelly, and M. Polacek, and D.A. Beauchamp. A bioenergetics-based food web evaluation of factors affecting bull trout and kokanee production in Kachess and Keechelus Reservoirs. Yakima Basin Science and Management Conference. June 2017.
- 28. Litz, M.N.C, J.A. Miller, R.D. Brodeur, E.A. Daly, L.A. Weitkamp, and **A.G. Hansen**. Energy dynamics and growth of juvenile Chinook salmon reveal the importance of piscivory during early marine residence. 3rd PICES/ICES Early Career Scientist Conference. Busan, Korea. May 2017.

- 27. **Hansen, A.G.** Environmental and behavioral controls on predator-prey interactions in large lakes. Invited speaker at the Colorado State University student subunit of the American Fisheries Society. Fort Collins, Colorado. October 2016.
- 26. **Hansen, A.G.**, J.A. Gardner, K.A. Connelly, M. Polacek, and Beauchamp, D.A. Baseline food web interactions in Lake Kachess: seasonal predation by northern pikeminnow and burbot on prey important for bull trout. Yakima Basin Science and Management Conference. June 2016.

- 25. **Hansen, A.G.**, and D.A. Beauchamp. Reservoirs, irrigation demand, drought, and threatened adfluvial bull trout in the Yakima River Basin, Washington. *Salvelinus confluentus* Curiosity Society annual meeting. September 2015.
- 24. **Hansen, A.G.**, and D.A. Beauchamp. Reservoirs, irrigation demand, drought, and threatened adfluvial bull trout in the Yakima River Basin, Washington. American Fisheries Society Annual Meeting. August 2015.
- 23. **Hansen, A.G.**, D.A. Beauchamp, and M. Polacek. Food web structure of Kachess and Keechelus Reservoirs: identifying and quantifying important interactions for bull trout. Yakima Basin Science and Management Conference. June 2015.
- 22. **Hansen, A.G.**, and D.A. Beauchamp. Reservoirs, irrigation demand, drought, and threatened adfluvial bull trout in the Yakima River Basin, Washington. Annual Washington Cooperative Fisheries and Wildlife Research Unit meeting. April 2015.
- 21. Sorel, M.H., D.A. Beauchamp, and **A.G. Hansen**. Evaluating predation risk for reintroduced anadromous salmonids in Merwin Reservoir on the Lewis River, Washington. Annual Washington Cooperative Fisheries and Wildlife Research Unit meeting. April 2015.
- 20. **Hansen, A.G.**, and D.A. Beauchamp. Evaluation of factors limiting bull trout and kokanee production in Kachess and Keechelus Reservoirs, Yakima River Basin, Washington. Presentation to Yakima River Basin Integrated Water Management Plan working group. March 2015.
- 19. **Hansen, A.G.**, and D.A. Beauchamp. Reservoirs, irrigation demand, drought, and threatened adfluvial bull trout in the Yakima River Basin, Washington. Eco-Lunch Seminar, Post-Doc Symposium, School of Aquatic and Fishery Sciences, University of Washington. Feb. 2015.

2014

- 18. **Hansen, A.G.**, and D.A. Beauchamp. Environmental and behavioral controls on pelagic predator-prey interactions: implications for the growth and survival of sockeye salmon in Lake Washington. WDFW Brown Bag Lunch Seminar Series, Olympia, WA. Dec. 2014.
- 17. **Hansen, A.G.**, and D.A. Beauchamp. Effects of prey abundance, distribution, visual contrast, and morphology on selection by a pelagic piscivore. Eco-Lunch Seminar, School of Aquatic and Fishery Sciences, University of Washington. Nov. 2014.
- 16. Beauchamp, D.A., **A.G. Hansen**, and E.R. Schoen. How the visual foraging environment affects pelagic food webs. Invited seminar at the University of Vermont. Oct. 2014.
- 15. **Hansen, A.G.**, and D.A. Beauchamp. Effects of prey abundance, distribution, visual contrast, and morphology on apparent selection by cutthroat trout in Lake Washington. Annual Washington Cooperative Fisheries and Wildlife Research Unit meeting. April 2014 (awarded the "Pauley Award," a \$1,000 travel grant, for best talk).

2013

14. **Hansen, A.G.** Persisting in the pelagic: environmental and behavioral controls on predator-prey interactions. Ph.D. defense seminar. School of Aquatic and Fishery Sciences, University of Washington. December 2013.

- 13. Schoen, E.R., D.A. Beauchamp, and **A.G. Hansen**. How do turbidity and fine-scale prey density affect the foraging and capture success of Chinook salmon? Alaska Chapter of the American Fisheries Society Annual Meeting. October 2012.
- 12. Rogers, K.B., **A.G. Hansen**, C. Kennedy, and B. Rosenlund. Using horizontal acoustic beaming to evaluate cutthroat trout population size in backcountry lakes. Western Division of the American Fisheries Society Annual Meeting. March 2012.

2011

- 11. **Hansen, A.G.**, and D.A. Beauchamp. Effects of a temperature-oxygen squeeze on piscivory: insights from linking a visual foraging model with ultrasonic telemetry of cutthroat trout. Graduate Student Symposium, School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA. November 2011.
- 10. **Hansen, A.G.**, D.A. Beauchamp, and C.M. Baldwin. Foraging of piscivorous cutthroat trout tracked with ultrasonic telemetry in relation to seasonal shifts in reservoir stratification. American Fisheries Society Annual Meeting. Invited symposium: *Cognitive, Sensory, and Behavioral Frontiers Exploring Fish Movement and Habitat Use*. Seattle, WA. September 2011.
- 9. Beauchamp, D.A., **A.G. Hansen**, and E.R. Schoen. Developing visual foraging models as a framework for predicting pelagic predation risk, foraging success and distribution. American Fisheries Society National Meeting. Invited symposium: *Cognitive, Sensory, and Behavioral Frontiers Exploring Fish Movement and Habitat Use*. Seattle, WA. September 2011.
- 8. **Hansen, A.G.**, D.A. Beauchamp, and C.M. Baldwin. Foraging of piscivorous cutthroat trout tracked with ultrasonic telemetry in relation to seasonal shifts in reservoir stratification. Society for Northwestern Vertebrate Biology and the Washington Chapter of the Wildlife Society joint Annual Meeting. Special session for the Washington Cooperative Fish and Wildlife Research Unit (School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA). Gig Harbor, WA. March 2011.

- 7. Stacy, W., J. Lepak, K. Kinzli, E. Fetherman, W. Pate, A.G. Hansen, E. Gardunio, C. Cathcart, and Z. Underwood. Manipulation of sport fish growth to reduce mercury bioaccumulation on a whole-lake scale. Western Division American Fisheries Society Student Colloquium. Moscow, ID. December 2010.
- 6. **Hansen, A.G.**, and D.A. Beauchamp. Light mediated reaction distance of Chinook salmon to fish prey. Graduate Student Symposium, School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA. November 2010.
- 5. Rogers, K.B, **A.G. Hansen**, C. Kennedy, and B. Rosenlund. Using hydroacoustics to evaluate cutthroat trout population size in remote backcountry lakes. High Mountain Lakes Symposium, Shepherdstown, West Virginia [via webcast]. October 28, 2010.
- 4. Lepak, J.M., W.M. Pate, C.N. Cathcart, E.R. Fetherman, K.D. Kinzli, M.M. Brandt, W.L. Stacy, Z.E. Underwood, E.I. Gardunio, and **A.G. Hansen**. Manipulation of sport fish growth to reduce mercury bioaccumulation on a whole-lake scale. CO-WY American Fisheries Society Annual Meeting. Laramie, WY. April 2010.

- 3. **Hansen, A.G.**, and D.A. Beauchamp. Visual foraging models: measuring the effects of light, turbidity, and prey density on piscivory by coastal cutthroat trout. Graduate Student Symposium, School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA. November 2009.
- 2. Rogers, K.B, **A.G. Hansen**, C. Kennedy, and B. Rosenlund. Using hydroacoustics to evaluate cutthroat trout population size in remote backcountry lakes. HTI Hydroacoustic Idea Exchange. Bear Lake, Utah. June 2009.

2007

1. **Hansen, A.G.** Past and present population characteristics of a diverse sport fish community in a small Colorado impoundment. Western Division American Fisheries Society Student Colloquium. Bozeman, MT. October 2007.

Awards

- Pauley Award, \$1,000 travel grant from Washington Cooperative Fish and Wildlife Research Unit, School of Aquatic and Fishery Sciences, University of Washington (2014).
- Claire L. and Evelyn S. Egtvedt Fellowship, Gerald J. Paulik Memorial Fund, Fisheries Graduate Fund, and H. Mason Keeler Fellowship granted by University of Washington, School of Aquatic and Fishery Sciences (2009–2012).

Teaching and Student Advising

- Graduate student committee member: Collin Farrell. Advised by Dr. Brett Johnson and Dr. Chris Myrick, Dept. of Fish, Wildlife, and Conservation Biology, Colorado State University. PhD project title: *Triploid walleye: a new frontier for managing coolwater predators in the west*.
- Co-instructor: FW 496, Independent Study in Fishery Biology, Colorado State University (CSU; spring 2017, fall 2017, spring 2018). Undergraduate course focused on field application and interpretation of fisheries science principles through research on a long-term study lake. Undergraduate research conducted during this course resulted in numerous oral (4 total) and poster (4 total) presentations at CSU's student subunit of the American Fisheries Society, Celebrate Undergraduate Research and Creativity Symposium, Multicultural Undergraduate Research, Art and Leadership Symposium, and at the Colorado-Wyoming Chapter of the American Fisheries Society Annual Meeting.
- Guest-instructor: sampling field trip to College Lake for FW 204 students, *Introduction to Fishery Biology*, Colorado State University (fall 2017).
- Advised and assisted with project development for Amy Duarte (Humboldt State University; 2014) and Haila Schultz (University of Puget Sound; 2015), two summer undergraduate interns supported through the Joint Institute for the Study of the Atmosphere and Ocean (JISAO) program at the University of Washington, Seattle.
- Guest lecture: *Implementing Bioenergetics Models in R.* University of Washington, FISH 530, spring 2013 and 2015: *Application of Bioenergetics Models to Aquatic Food Webs.* Graduate course taught by David A. Beauchamp.

• Undergraduate teaching assistant: FW 301, *Ichthyology Laboratory*, Colorado State University (fall 2006, spring 2007, spring 2008).

Professional Service and Activities

- Symposium organizer: *Advancements in the Ecology and Management of Nonnative Lake Trout.* Western Division AFS Annual Meeting. May 14th, 2020.
- Associate Editor (April 2019-August 2021): North American Journal of Fisheries Management.
- Co-editor (2016-2020): "The Angler", newsletter for the Colorado-Wyoming Chapter of the American Fisheries Society (3 issues per year).
- Anonymous reviewer (Journals = 20; Manuscripts = 45): Ecological Applications (1 ms); Ecology and Evolution (2 ms); Ecology of Freshwater Fish (4 ms); Environmental Biology of Fishes (3 ms); Environmental Pollution (1 ms); Fish and Fisheries (4 ms); Fisheries (3 ms); Fisheries Oceanography (1 ms); Journal of Fish Biology (3 ms); Lake and Reservoir Management (2 ms); Limnology and Oceanography (2 ms); Movement Ecology (2 ms) NeoBiota (1 ms); North American Journal of Fisheries Management (4 ms); Northwest Science (2 ms); PLOS ONE (1 ms); Scientific Reports, Nature Research Group (1 ms); The Journal of the American Association for Laboratory Animal Science (2 ms); The Open Fish Science Journal (1 ms); Transactions of the American Fisheries Society (4 ms);
- Past Treasurer, Vice President, and President (2007-2008) for Colorado State University student subunit of the American Fisheries Society.

Project Collaborations and Funding

- Colorado Species Conservation Trust Fund: \$361,000. Evaluating tiger muskellunge as a multi-purpose management tool: protecting native fish species from multiple conservation threats. Collaboration with Dr. Jesse Lepak, Department of Fish, Wildlife, and Conservation Biology, Colorado State University.
- Colorado Species Conservation Trust Fund: \$182,000. Project extension: *Triploid walleye: a new frontier for managing cool water predators in the west*. Collaboration with Dr. Brett Johnson, Department of Fish, Wildlife, and Conservation Biology, Colorado State University.
- Colorado Species Conservation Trust Fund: \$182,000. *Triploid walleye: a new frontier for managing cool water predators in the west*. Collaboration with Dr. Brett Johnson, Department of Fish, Wildlife, and Conservation Biology, Colorado State University.
- Washington State Department of Ecology: \$78,334. Effects of pumping dead storage on food web interactions and adfluvial bull trout in Kachess and Keechelus Reservoirs, Yakima River Basin, Washington.