

CPW Aquatic Research Publications, Reports and Presentations 2015-2016

Publications

- Broms, K. M., M. B. Hooten, and **R. M. Fitzpatrick**. 2015. Accounting for imperfect detection in Hill numbers for biodiversity studies. *Methods in Ecology and Evolution* 6:99-108.
- Dawson, H., **Treble, A.J.**, Almeida, P.R., and Quintella, B. 2015. The ecology of larval and metamorphosing lampreys *in* Lampreys: Biology, Conservation and Control. Springer Publishing, New York, NY
- **Fetherman, E. R.**, D. L. Winkelman, L. L. Bailey, **G. J. Schisler**, and K. Davies. 2015. Brown trout removal effects on short-term survival and movement of *Myxobolus cerebralis*-resistant rainbow trout. *Transactions of the American Fisheries Society* 144:610-626. DOI:10.1080/00028487.2015.1007166.
- **Fetherman, E. R.**, **J. M. Lepak**, B. L. Brown, and D. J. Harris. 2015. Optimizing time of initiation for triploid walleye production using pressure shock treatment. *North American Journal of Aquaculture* 77:471-477. DOI:10.1080/15222055.2015.1040568.
- Fox, B. D., B. P. Bledsoe, E. Kolden, **M. C. Kondratieff**, and C. A. Myrick. 2016. Eco-hydraulic evaluation of whitewater parks as a fish passage barrier. *Journal of the American Water Resources Association*. DOI: 10.1111/1752-1688.12397.
- Hodge, B. W., R. Henderson, **K. B. Rogers**, and K. Battige. 2015. Tracking movement of Colorado River Cutthroat Trout in a small stream using portable PIT detectors. *North American Journal of Fisheries Management*.
- Kolden, E., B. D. Fox, B. P. Bledsoe, and **M. C. Kondratieff**. 2016. Modelling whitewater park hydraulics and fish habitat in Colorado. *River Research and Applications*. DOI: 10.1002/rra.2931.
- Kopack, C. J., E. D. Broder, **J. M. Lepak**, **E. R. Fetherman**, and L. M. Angeloni. 2015. Behavioral responses of a highly domesticated, predator naïve rainbow trout to chemical cues of predation. *Fisheries Research* 169:1-7. DOI:10.1016/j.fishres.2015.04.005.
- **Rogers, K. B.**, K. R. Bestgen, and J. Epp. 2015. Using genetic diversity to inform conservation efforts for native Cutthroat Trout of the southern Rocky Mountains. *Proceedings of the Wild Trout Symposium, West Yellowstone, Montana*.
- Stephens, T. A., B. P. Bledsoe, B. D. Fox, E. Kolden, and **M. C. Kondratieff**. 2016. Effects of whitewater parks on fish passage: a spatially explicit hydraulic analysis. *Ecological Engineering*. 83 (2015) 305–318.

- Stout, J. B., **B. W. Avila**, and **E. R. Fetherman**. 2016. Efficacy of commercially available quaternary ammonium compounds for controlling New Zealand mudsnails, *Potamopyrgus antipodarum*. North American Journal of Fisheries Management 36:277-284. DOI:10.1080/02755947.2015.1120830.
- **Vigil, E.**, Christianson, K., **Lepak, J.**, and Williams, P. 2015. Temperature effects on hatching and viability of juvenile gill lice, *Salmincola californiensis*. Journal of Fish Diseases. DOI:10.1111/jfd.12422

Publications *In Press or In review*

- Bestgen, K. R., **H. J. Crockett**, M. Haworth, and **R. M. Fitzpatrick**. *In review*. Production of non-adhesive eggs by flathead chub and implications for downstream transport and conservation. Journal of Fish and Wildlife Management.
- Broms, K. M., M. B. Hooten, **R. M. Fitzpatrick**, and **H. J. Crockett**. *In review*. An occupancy-based approach for predicted fish distributions in the South Platte River basin in eastern Colorado. North American Journal of Fisheries Management.
- Broms, K. M., M. B. Hooten, and **R. M. Fitzpatrick**. *In press*. Model selection and assessment for multi-species occupancy models. Ecology.
- Bestgen, K. R., **K. B. Rogers**, and R. Granger. *In review*. Phenotype predicts genotype for lineages of native Cutthroat Trout in the Southern Rocky Mountains. Transactions of the American Fisheries Society
- **Cadmus, P.**, J. P. F. Pomeranz, and J. M. Kraus. *In review*. Low-cost floating emergence net: comparison of two designs. Freshwater Ecology.
- **Cadmus, P.**, J. F. Ranville, J. L. Williamson, J. S. Meyer, M. J. Gutiérrez-Ginés and W. H. Clements *In review*. The Use of Mesocosm and Field Experiments to Predict Restoration Effectiveness and Potential for Recovery in Mining-Contaminated Streams. Environmental Science and Technology
- **Fetherman, E. R.**, J. A. Wardell, **C. J. Praamsma**, and M. K. Hura. *In press*. Critical dissolved oxygen tolerances of whirling disease-resistant rainbow trout. Submitted to North American Journal of Aquaculture.
- **Hansen, A. G.**, J. R. Gardner, D. A. Beauchamp, R. Paradis, and T. P. Quinn. *In review*. Restoration potential for sockeye salmon in the Elwha River, Washington after dam removal: rearing capacity of Lake Sutherland for landlocked and anadromous *Oncorhynchus nerka*. Transactions of the American Fisheries Society.

- Hodge, B. W., K. Battige, **K. B. Rogers**. *In review*. Seasonal and temperature-related movement of Colorado River Cutthroat Trout in a low-elevation, Rocky Mountain stream. Transactions of the American Fisheries Society.
- Gibson-Reinemer, D. K., F. J. Rahel, S. E. Albeke and **R. M. Fitzpatrick**. *In review*. Natural and anthropogenic barriers to climate tracking in river fishes along a mountain-plains transition zone. North American Journal of Fisheries Management.
- Kotalik, C. J., W. H. Clements and **P. Cadmus** *In review*. Effects of liquid magnesium chloride road deicer on montane stream benthic communities. Hydrobiologia
- **R. B. Nehring, G. J. Schisler**, L. Chiaramonte, A. Horton and B. Poole *In review*. Accelerated deactivation of *Myxobolus cerebralis* myxospores by susceptible and non-susceptible *Tubifex tubifex*. Diseases of Aquatic Organisms.
- Penaluna, B. E., **K. B. Rogers**, and 21 others. *In press*. Conservation of native pacific trout diversity in western North America. Fisheries.
- Purdy, P., E.A. Barbosa, **C. J. Praamsma**, and **G. J. Schisler**, *In review*. Modification of trout sperm membranes associated with activation and cryopreservation. Implications for fertilizing potential. Cryobiology.
- Sorel, M. H., **A. G. Hansen**, K. A. Connelly, A. C. Wilson, E. D. Lowery, and D. A. Beauchamp. *In press*. 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.
- Williamson, J. L., J. S. Meyer, M. R. Pastorinho, **P. Cadmus**, W. H. Clements and J. F. Ranville. *In review*. Development of an in-situ method for simulating potential post-remediation sediment recovery for a stream affected by acid mine drainage. Environmental Science: Processes & Impacts.

Special Reports and White Papers

- **Cadmus, P.** 2015. Water Pollution Studies. Federal Aid Project F243-R22. Job Progress Report. Colorado Parks and Wildlife, Aquatic Wildlife Research Section. Fort Collins, Colorado.
- **Fetherman, E. R.**, and **G. J. Schisler**. 2015. Sport Fish Research Studies. Federal Aid in Fish and Wildlife Restoration Project F-394-R14, Job Progress Report. Colorado Parks and Wildlife, Aquatic Wildlife Research Section. Fort Collins, Colorado.
- **Hansen, A. G.**, J. R. Gardner, and D. A. Beauchamp. 2016. 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.

- **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.
- **Kondratieff, M. C. and E. E. Richer.** 2015. Stream Habitat Investigations and Assistance. Federal Aid Project F-161-R21. Colorado Parks and Wildlife, Aquatic Research Section. Fort Collins, Colorado.
- **Kowalski, D. A.** 2015. Colorado River Aquatic Resource Investigations. Federal Aid Project F-237-R21. Colorado Parks and Wildlife, Aquatic Wildlife Research Section. Fort Collins, Colorado.
- **Richer, E. E., M. C. Kondratieff,** and B. D. Swigle. 2015. Post-flood recovery assessment and stream restoration guidelines for the Colorado Front Range. Colorado Parks and Wildlife, Aquatic Research Section. Fort Collins, Colorado.
- **Rogers, K. B.** 2015. Mapping the bathymetry of Upper and Lower Sand Creek Lakes: determining lake volume for reclamation efforts. Colorado Parks and Wildlife, Steamboat Springs, Colorado.
- **Rogers, K. B.,** and C. M. Kennedy. 2016. Distribution of Rio Grande cutthroat trout alleles in the Forest Canyon basin, Rocky Mountain National Park. Colorado Parks and Wildlife, Steamboat Springs, Colorado.
- **Rogers, K. B., A. J. Treble,** D. E. Brauch, and J. P. Ewert. 2016. Hydroacoustic assessments conducted in 2015: Blue Mesa and Granby Reservoirs. Colorado Parks and Wildlife, Steamboat Springs, Colorado.
- Sorel, M. H., D. A. Beauchamp, and **A. G. Hansen.** Reintroducing native salmon above formally impassable dams on the Lewis River. Washington State Lake Protection Agency. WATERLINE. June 2015 issue.
- **Treble, A.J.** 2015. Aquatic Data Analysis. Federal Aid in Fish and Wildlife Restoration. Job Progress Report . Colorado Parks and Wildlife, Aquatic Wildlife Research Section, Fort Collins, CO.

Internal Presentations

- **Avila, B. W.,** D. L. Winkelman, and **E. R. Fetherman.** 2016. Evaluation of resistant rainbow trout fry stocking in Colorado. Colorado Parks and Wildlife Aquatic Biologist Meeting. Loveland, Colorado. January 21, 2016.

- Broms, K. M., M. B. Hooten and **R. M. Fitzpatrick**. Optimal adaptive sampling design. Annual Colorado Parks and Wildlife Plains Fish Research Meeting. Fort Collins, Colorado. January 5, 2016.
- **Cadmus, P. M. K.** May, and **S. F. Brinkman**. Evidence for a recalculation of the nation's ferric Fe standard for pH neutral waters. Joint meeting with USEPA. Jan 6th, 2016.
- **Fetherman, E. R.** 2015. East Portal of the Gunnison River rainbow trout (GRR). Colorado Parks and Wildlife Aquatic Senior Staff Meeting. Fort Collins, Colorado. December 16, 2015.
- **Fetherman, E. R.** 2016. Wild rainbow trout brood stock development and maintenance. Colorado Parks and Wildlife Aquatic Biologist Meeting. Loveland, Colorado. January 21, 2016.
- **Fitzpatrick, R. M.** Eastern plains native fishes research update. Aquatic Senior Staff Meeting. Fort Collins, Colorado. December 16, 2015.
- **Fitzpatrick, R. M.** and K. R. Bestgen. Mobile PIT tag array gear comparison. Annual Colorado Parks and Wildlife Plains Fish Research Meeting. Fort Collins, Colorado. January 5, 2016.
- **Hansen, A. G.** 2016. Colorado kokanee: research, emerging threats, and long-term management. Annual Coldwater Reservoir Management Workshop. Buena Vista, Colorado. February 9, 2016.
- **Hansen, A. G.** 2016. Introduction and potential research topics. Annual Biologist Meeting. Loveland, Colorado. January 20, 2016.
- **Hansen, A. G.** 2015. Introduction and discussion of research priorities. Senior Staff Meeting. Fort Collins, Colorado. December 16, 2015.
- **Kondratieff, M.C.** 2015. What makes a healthy trout stream? Colorado Parks and Wildlife Technician In-Service Meeting. Frisco, Colorado. April 2, 2015.
- **Kopack, C., L. Angeloni, R. Fitzpatrick, D. Broder, and E. Fetherman.** 2016. Training fish to survive: A hatchery life. 2016 Annual Colorado Parks and Wildlife Plains Fish Research Meeting. Fort Collins, Colorado. January 5, 2016.
- **Richer, E., M. Kondratieff, and E. Fetherman.** 2016. RFID-GPS system development and issues with PIT tag retention. 2016 Annual Colorado Parks and Wildlife Plains Fish Research Meeting. Fort Collins, Colorado. January 5, 2016.

- **Richer, E. E., M. C. Kondratieff, B. Swigle, A.J. Treble, and F.B. Wright.** 2015. Post-flood recovery assessment and stream restoration guidelines. Colorado Parks and Wildlife District Wildlife Manager Training, Denver, Colorado. December 2, 2015.
- **Richer, E. E. and M. K. Kondratieff.** 2016. Stream habitat investigations update. CPW Aquatic Biologist Meeting, Loveland, Colorado. January 21, 2016.
- **Rogers, K. B.** 2015. Maintaining trout fishing opportunity in the face of northern pike predation. DWM trainee pack training, Bellaire, Colorado. August 3, 2015.
- **Rogers, K. B.** 2016. 2015 hydroacoustic population assessments: predicting future egg takes. Coldwater lake and reservoir meeting, Beuna Vista, Colorado. February 9, 2016.
- Swarr, T., C. A. Myrick and **R. M. Fitzpatrick.** Improving rock ramp fishways for small-bodied plains fishes. Annual Colorado Parks and Wildlife Plains Fish Research Meeting. Fort Collins, Colorado. January 5, 2016.
- **Thompson, K. G., M. R. Schwemm, T. F. Turner, M. J. Osborne, and E. W. Carson** 2016. Genetic contribution of native and introduced catostomids to larval drift in experimental and control streams of the Gunnison River Basin, CO. Area 6 meeting, Meeker, Colorado. February 9, 2016.
- **Thompson, K. G., M. R. Schwemm, T. F. Turner, M. J. Osborne, and E. W. Carson** 2016. Genetic contribution of native and introduced catostomids to larval drift in experimental and control streams of the Gunnison River Basin, CO. Area 7 meeting, Collbran, Colorado. March 10, 2016.
- **Treble, A.J.** 2016. Update and data management program overview. Annual CPW Aquatic Biologist's Meeting. Loveland, CO.

External Presentations

- **Avila, B. W., D. L. Winkelman, and E. R. Fetherman.** 2016. Evaluation of resistant rainbow trout fry stocking in Colorado. 2016 Annual Meeting of the Colorado/Wyoming Chapter of the American Fisheries Society. Laramie, Wyoming. March 3, 2016.
- **Avila, B. W., D. L. Winkelman, and E. R. Fetherman.** 2016. Evaluation of whirling disease resistant rainbow trout fry stocking in Colorado. 2016 Annual Meeting of the Western Division of the American Fisheries Society. Reno, Nevada. March 23, 2016.
- Bestgen, K. R., **K. G. Thompson, T. Wilcox, K. Zelasko, and J. Fowler.** 2016. Western catostomid identification workshop. Half-Day continuing education workshop, 2016 Annual Meeting of Colorado-Wyoming Chapter American Fisheries Society. Laramie, Wyoming. March 1, 2016.

- Broms, K. M., M. B. Hooten, **R. M. Fitzpatrick**. Spatial monitoring design for plains fishes in the South Platte River Basin. 2016 Annual Meeting of Colorado-Wyoming Chapter American Fisheries Society. Laramie, Wyoming. March 3, 2016.
- **Cadmus, P.** 2015. Aquatic Toxicology for Fisheries Managers. Guest Lecture. Colorado State University's FW204 - Introduction to Fishery Biology. Nov 18, 2015.
- **Cadmus, P., S. F. Brinkman** and W. H. Clements. 2015. A recalculation of the chronic iron standard: laboratory trials and benthic mesocosm experiments suggest a lower value. Rocky Mountain chapter of the Society of Environmental Toxicology and Chemistry Denver CO. April 17, 2015.
- Duggan, S. B., **P. Cadmus**, H. S. Ramsdell, W. H. Clements, J. L. Williamson and J. F. Ranville. Toxic effects of a complex metal mixture on aquatic insects across multiple levels of biological organization. North American 36th Annual Meeting of the Society for Environmental Toxicology and Chemistry. Salt Lake City, Utah. Nov 3, 2015.
- **Fetherman, E. R.** 2016. Salmonid disease research in Colorado. Guest lecture, Introduction to Fisheries. Front Range Community College. Fort Collins, Colorado. March 9, 2016.
- **Fetherman, E. R., G. J. Schisler**, and B. W. Avila. 2015. Post-stocking survival of whirling disease resistant rainbow trout, and changes in fish health before and after stocking whirling disease resistant rainbow trout. Continuing Education session of the 2015 Western Fish Disease Workshop. Steamboat Springs, Colorado. June 2, 2015.
- **Fetherman, E. R.,** and **G. J. Schisler**. 2016. Hofer rainbow trout research update. 2016 Annual Colorado Aquaculture Association Meeting. Mount Princeton Hot Springs, Colorado. January 29, 2016.
- **Fetherman, E. R.** 2016. Whirling disease and Colorado's rainbow trout. Whirling disease, cutthroat trout, and river restoration panel discussion (members **E. R. Fetherman**, F. B. Wright, and **M. C. Kondratieff**). Cheyenne Mountain Chapter of Trout Unlimited. Colorado Springs, Colorado. February 23, 2016.
- Fraser, G. S., and **K. G. Thompson**. 2015. Movement patterns, reproduction and the potential impacts of climate change on three native fishes in the White River drainage, CO. Three-species Rangewide Meeting. Denver, CO. November 4, 2015.
- **Hansen, A. G.** 2016. Environmental and behavioral controls on pelagic predator-prey interactions in large lakes and reservoirs. Invited speaker at Colorado State University student subunit of CO-WY AFS. Fort Collins, Colorado. February 25, 2016.
- Hodge, B, **E. R. Fetherman**, **K. B. Rogers**, and R. Henderson. 2016. Effectiveness of a fishway for restoring passage of Colorado River cutthroat trout. 2016 Annual Meeting of the Western Division of the American Fisheries Society. Reno, Nevada. March 24, 2016.

- **Kondratieff, M. C.** 2015. Limiting factors and trout. Colorado State University, Guest Lecture Dr. Bledsoe's Stream Rehabilitation Design CIVE613 course, Fort Collins, Colorado. April 9, 2015.
- **Kondratieff, M. C.** 2015. What makes a healthy trout stream? Front Range Community College, Guest Lecture Aquatic Fisheries Course (Jennifer Lee Instructor), Fort Collins, Colorado. April 23, 2015.
- **Kondratieff, M. C.** 2015. Whitewater park hydraulics: Implications for fish habitat and fish passage. Rocky Mountain Stream Restoration Conference, Breckenridge, Colorado. July 22, 2015.
- **Kondratieff, M. C.** 2015. Whitewater park hydraulics: Implications for fish and fisheries. Army Corps of Engineers Headquarters, Grand Junction, Colorado. August 25, 2015.
- **Kondratieff, M. C.** 2015. Terry Wickstrom Outdoors on 105.5 ESPN radio: Charlie Meyers State Wildlife Area Habitat Improvement Project. http://stationcaster.com/player_skinned.php?s=96&c=805&f=4823233. September 12, 2015.
- **Kondratieff, M. C.** 2015. Limiting factors and fish habitat. Army Corps of Engineers Headquarters, Grand Junction, Colorado. August 25, 2015.
- **Kondratieff, M. C.** 2016. What Makes A Healthy Trout Stream? Colorado Mountain Chapter of Trout Unlimited, Colorado Springs, CO. February 23, 2016.
- **Kondratieff, M. C.** 2016. Restoring Colorado Rivers and Introduction to Fisheries Science and Management. Wildlife Management Short Course 2016, Colorado State University, Colorado State University, Fort Collins, CO. March 29, 2016.
- **Kondratieff, M. C.** and **E. E Richer.** 2016. Matching the hatch gets the catch: Matching channel morphology with hydrology optimizes fishery benefits. Anderson Consulting, Fort Collins, CO. February 25, 2016.
- **Kondratieff, M. C., B. D. Fox, N. Kolden,** and **K. Kinzli.** 2016. Whitewater park hydraulics: Implications for fish and fisheries. Anderson Consulting, Fort Collins, CO. February 25, 2016.
- **Kopack, C. J., E. D. Broder, E. R. Fetherman, J. M. Lepak,** and **L. M. Angeloni.** 2016. Rainbow trout post-stocking survival is not increased by a single exposure to distress cues en route to stocking. Colorado State University 2016 Front Range Student Ecology Symposium. Fort Collins, Colorado. February 23-24, 2016. (Won the CSU Venture Award).
- **Kowalski, D.A.** and **E. Gardunio.** 2015. Evaluation of an electric fish guidance system on the South Canal of the Gunnison River, Colorado. Annual Meeting of the of the American Fisheries Society. Portland, Oregon. August 19, 2015.

- **Kowalski, D.A.** 2015. Stream ecology of the upper Colorado River- ongoing research and monitoring. Learning by Doing Technical Committee Meeting. Frisco, Colorado. May 6, 2015.
- **Richer, E. E.** 2015. Effectiveness of in-stream habitat restoration on the upper Arkansas River. Rocky Mountain Stream Restoration Conference, Breckenridge, Colorado. July 22, 2015.
- **Rogers, K. B.** 2015. WaTSS: free software for interpreting water temperature data. American Fisheries Society national meeting, Portland, Oregon. August 17, 2015.
- **Rogers, K. B., J. Epp, J. Wood.** 2015. Phylogenies of Cutthroat Trout built from different mitochondrial genes yield variable genetic distances between lineages. American Fisheries Society national meeting, Portland, Oregon. August 18, 2015.
- **Rogers, K. B., S. F. Brinkman, J. R. Anderson, A. P. Martin.** 2015. Inbreeding depression reduces fitness in Colorado's remaining Greenback Cutthroat Trout. American Fisheries Society national meeting, Portland, Oregon. August 19, 2015.
- **Rogers, K. B.** 2015. Greenback cutthroat trout conservation: preserving our state fish. Colorado Mountain College, Steamboat Springs, Colorado. October 15, 2015.
- **Rogers, K. B.** 2015. What molecular methods can and can't tell us about purity and heritage in cutthroat trout: two decades of chasing shiny new tests. Colorado River Cutthroat Trout Conservation Team meeting, Grand Junction, Colorado. December 10, 2015.
- **Rogers, K. B.** 2016. What molecular methods can and can't tell us about purity and heritage in cutthroat trout. Rio Grande Cutthroat Trout Conservation Team meeting, Taos, New Mexico. January 27, 2016.
- **Salinas, N. R., and K. G. Thompson (presenter).** 2016. Poster presentation: Spawning Movement of Bluehead Sucker *Catostomus discobolus* and Flannelmouth Sucker *C. latipinnis* in Roubideau Creek, Gunnison River Basin, CO. Annual Meeting of Colorado-Wyoming Chapter American Fisheries Society. Laramie, Wyoming. March 2-3, 2016.
- Schwemm, M. R., **K. G. Thompson**, T. F. Turner, E. W. Carson (presenter). 2016. Poster Presentation: Genetic contribution of native and introduced catostomids to larval drift in experimental and control streams of the Gunnison River basin in Colorado. Desert Fishes Council Annual Meeting. Death Valley, California. November 20, 2015.
- Schwemm, M. R., **K. G. Thompson**, T. F. Turner, E. W. Carson (presenter). 2016. Oral Presentation: Genetic contribution of native and introduced catostomids to larval drift in experimental and control streams of the Gunnison River basin in Colorado. Colorado River and San Juan River Recovery Program Researcher's Meeting. Durango, Colorado. January 12, 2016.

- Sorel, M. H., D. A. Beauchamp, and **A. G. Hansen**. 2015. Evaluating predation risk for reintroduced anadromous salmonids in Merwin Reservoir on the Lewis River, Washington. Annual Washington Cooperative Fisheries and Wildlife Research Unit Meeting. Seattle, Washington. April 2015.
- **Thompson, K. G.** M. R. Schwemm, T. F. Turner, M. J. Osborne, and E. W. Carson. 2016. Genetic contribution of native and introduced catostomids to larval drift in experimental and control streams of the Gunnison River basin in Colorado (Version 2). Annual Meeting of Colorado-Wyoming Chapter American Fisheries Society. Laramie, Wyoming. March 2, 2016.
- **Thompson, K. G.** M. R. Schwemm, T. F. Turner, M. O. Osborne, and E. W. Carson. 2016. Genetic contribution of native and introduced catostomids to larval drift in experimental and control streams of the Gunnison River basin in Colorado (Version 3). Annual Meeting of Western Division American Fisheries Society. Reno, Nevada. March 23, 2016.
- Townsend, A. S., J. R. Anderson, **S. F. Brinkman** and **P. Cadmus**. Reduced thermal tolerance in Colorado salmonid species after exposure to sublethal concentrations of copper. Rocky Mountain chapter of the Society of Environmental Toxicology and Chemistry Denver CO. April 17, 2015.
- **Treble, A.J.** 2015. Great Lakes Sea Lamprey Program Overview. Colorado State University Student Chapter of the American Fisheries Society. Fort Collins, CO).
- **Treble, A.J.** 2015. Lessons learned in fisheries database planning. American Fisheries Society (AFS) Conference, Portland, OR.
- **Vigil, E.M.,** D.L. Winkelman, and **J.M. Lepak**. 2015. Viability of Juvenile Gill lice at Different Temperature Treatments. 2015 Western Division of the American Fisheries Society Student Colloquium. Bear Lake, Utah. February 11-14, 2015.
- **Vigil, E.M., J.M. Lepak,** and D.L. Winkelman. 2015. Distribution and life history traits of gill lice *Salmincola californiensis* in Colorado. Poster presentation. 2015 Colorado-Wyoming American Fisheries Society Annual Meeting. Fort Collins, CO. February 24th-26th 2015.
- **Vigil, E.M., J.M. Lepak,** and D.L. Winkelman. 2015. Distribution and life history traits of gill lice *Salmincola californiensis* in Colorado. Poster presentation. 2015 Annual American Fisheries Society Meeting. Portland, OR. August 16th – 20th 2015.
- **Vigil, E.M.,** D.L. Winkelman, and **J.M. Lepak**. 2015. Status and Life History Traits of Gill Lice *Salmincola californiensis* in Colorado. 2015 Annual American Fisheries Society Meeting. Portland, OR. August 16th – 20th 2015.
- **Vigil, E.M.,** D.L. Winkelman, and **J.M. Lepak**. 2015. Status and Life History Traits of Gill Lice *Salmincola californiensis* in Colorado. Colorado Fish Health Board Meeting. September 18th 2015.

- **Vigil, E.M.** Gill Lice Concerns in Colorado. Radio Interview. Terry Wickstrom Outdoors. December 12th 2015.
- **Vigil, E.M.**, D.L. Winkelman, and **J.M. Lepak**. 2015. Status and Life History Traits of Gill Lice *Salmincola californiensis* in Colorado. Colorado Aquaculture Association Meeting. January 29th 2016.
- **Vigil, E.M.**, D.L. Winkelman, and **G.J. Schisler**. 2016. Interactions of the Parasitic Gill Louse *Salmincola californiensis* and salmonids in Colorado. 2016 Western Division of the American Fisheries Society Annual Meeting. Reno, NV. March 22nd-24th 2016.