

CPW Aquatic Research Publications, Reports and Presentations 2018-2019

Publications

- Avila, B. W., D. L. Winkelman, and **E. R. Fetherman**. 2018. Survival of whirling-disease-resistant rainbow trout fry in the wild: A comparison of two strains. *Journal of Aquatic Animal Health* 30:280-290. DOI: 10.1002/aah.10040.
- Bestgen, K. R., **K. B. Rogers**, R. Granger. 2019. Distinct phenotypes of native Cutthroat Trout emerge under a molecular model of lineage distributions. *Transactions of the American Fisheries Society* DOI: 10.1002/tafs.10145.
- Morris, J. M., **S. F. Brinkman**, M. W. Carney and J. Lipton. 2019. Copper toxicity in Bristol Bay headwaters: Part 1 - Acute mortality and ambient water quality criteria in low hardness water. *Environmental Toxicology and Chemistry* 38: 190-197. doi:10.1002/etc.4252
- Morris, J. M., **S. F. Brinkman**, R. Takeshita, A. K. McFadden, M. W. Carney and J. Lipton. 2019. Copper toxicity in Bristol Bay headwaters: Part 2 - Olfactory inhibition in low-hardness water. *Environmental Toxicology and Chemistry* 38: 198-209. doi:10.1002/etc.4295
- **Cadmus, P.**, H. Guasch, A. T. Herdrich, B. Bonet, G. Urrea and W. H. Clements. 2018. Structural and functional responses of periphyton and macroinvertebrate communities to ferric Fe, Cu, and Zn in stream mesocosms. *Environmental Toxicology and Chemistry* 37: 1320-1329. <https://doi.org/10.1002/etc.4070>.
- **Cadmus, P.**, **S. F. Brinkman** and M. K. May. 2018. Chronic Toxicity of Ferric Iron for North American Aquatic Organisms: Derivation of a Chronic Water Quality Criterion Using Single Species and Mesocosm Data. *Archives of Environmental Contamination and Toxicology* 74: 605-615. <https://doi.org/10.1007/s00244-018-0505-2>
- **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.
- **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.
- Herrmann, S, D. Nimmo, J. Carsella, C. Kennedy, **K. B. Rogers**, J. Wood, L. H. Hoelsing, and B. V. Heuvel. 2018. Mercury and Selenium in twelve Cutthroat Trout tissues from high-elevation Colorado lakes (USA): Intraspecific and interspecific comparisons. *Transactions of the American Fisheries Society* 147:444-458.
- Hooley-Underwood, Z. E., S. B. Stevens, N. R. Salinas, and **K. G. Thompson**. 2019. An intermittent stream supports extensive spawning of large-river native fishes. *Transactions of the American Fisheries Society*. DOI: 10.1002/tafs.10141

- **Nehring, R. B.**, J. Alves, J. B. Nehring, and B. Felt. 2018. Elimination of *Myxobolus cerebralis* in Placer Creek, a Native Cutthroat Trout Stream in Colorado. *Journal of Aquatic Animal Health* 30:264–279,
- **Rogers, K. B.**, K. R. Bestgen, S. M. Love Stowell, and A. P. Martin. 2018. Cutthroat Trout diversity in the southern Rocky Mountains. Pages 323-341 *in* P. Trotter, P. Bisson, L. Schultz, and B. Roper, editors. *Cutthroat Trout: evolutionary biology and taxonomy*, American Fisheries Society, Special Publication 36, Bethesda, Maryland.

Publications *In Press* or *In Review*

- Bailey, L. L., P. Jones, **K. G. Thompson**, H. P. Foutz, J. M. Logan, F. B. Wright, and H. J. Crockett. *In Press*. Determining presence of rare amphibian species: testing and combining novel survey methods. *Journal of Herpetology*.
- Budy, P., **K. B. Rogers**, Y. Kanno, B. Penaluna, N. P. Hitt, G. P. Thiede, J. Dunham, C. Mellison, W. L. Somer. *In Press*. Distribution and status of trouts and chars in North America. Pages *in* J. L. Kershner, J. E. Williams, R. E. Gresswell, and J. Lobon-Cervia, editors. *Diversity and status of trouts and chars of the world*. American Fisheries Society, Bethesda, Maryland.
- Carson, E. W., M. R. Schwemm, **K. G. Thompson**, **K. B. Rogers**, J. M. Logan, J. Wood, J. K. Epp, P. Power, M. J. Osborne, and T. F. Turner. *In review*. Distribution of genetic variation and hybrids of *Catostomus* fishes among sub-basins of the Colorado River. *Transactions of the American Fisheries Society*.
- **Fetherman, E. R.**, **P. J. Cadmus**, A. L. Jefferson, and M. K. Hura. *In review*. Increasing copper concentrations do not affect *Myxobolus cerebralis* triactinomyxon viability. *Aquatic Toxicology*.
- Fraser, G. S., K. R. Bestgen, D. L. Winkelman, and **K. G. Thompson**. *In Press*. Temperature - not flow - predicts native fish reproduction with implications for climate change. *Transactions of the American Fisheries Society*. Upcoming Feature Article.
- **Hansen, A. G.** *In Review*. Size-dependent retention of pelagic-oriented kokanee salmon in multimesh vertical gill nets. *North American Journal of Fisheries Management*.
- **Hansen, A. G.**, J. A. Gardner, K. A. Connelly, M. Polacek, and D. A. Beauchamp. *In Review*. Potential for competition among native piscivores in an irrigation reservoir: implications for threatened bull trout and water management. *Transactions of the American Fisheries Society*.
- Herrmann, S. J., D. W. R. Nimmo, J. S. Carsella, I. V. Melnykov, C. M. Kennedy, **K. B. Rogers**, and L. M. Hermann-Hoesing. *In Review*. Differential bioaccumulation of mercury

and selenium in stomach contents and tissues of three Colorado, USA, Cutthroat Trout populations. Transactions of the American Fisheries Society.

- Litz, M. N. C., J. A. Miller, R. D. Brodeur, E. A. Daly, L. A. Weitkamp, **A. G. Hansen**, and A. M. Claiborne. *In Press*. Energy dynamics of subyearling Chinook salmon reveal the importance of piscivory to short term growth during early marine residence. Fisheries Oceanography.
- Schwemm, M. R., **K. G. Thompson**, E. W. Carson, M. J. Osborne, and T. F. Turner. *In review*. Challenges with use of instream exclusion devices to limit hybridization and favor native fish reproduction. Western North American Naturalist.
- **Richer, E. E.**, E. A. Gates, **M. C. Kondratieff**, and A. T. Herdrich. *In review*. Modeling changes in trout habitat following stream restoration. River Research and Applications.
- Swarr, T. R., C. M. Myrick and **R. M. Fitzpatrick**. *In review*. PIT tag retention, survival, and effects on swimming performance in a small-bodied fish, the Arkansas darter, *Etheostoma cragini*. Journal of Fish Biology.
- Swarr, T. R., C. M. Myrick and **R. M. Fitzpatrick**. *In review*. Design, construction, and preliminary hydraulic evaluation of a model rock ramp fishway. Journal of Ecohydraulics.
- Swarr, T. R., C. M. Myrick and **R. M. Fitzpatrick**. *In review*. Effects of slope on small-bodied fish passage success in an experimental rock ramp fishway. Journal of Ecohydraulics.
- **Thompson, K. G.**, **K. B. Rogers**, B. Hines, M. J. Breen. *In review*. Development of standard weight equations for Bluehead Sucker *Catostomus discobolus* using two methods. North American Journal of Fisheries Management.
- Zeigler, M. P., **K. B. Rogers**, J. J. Roberts, A. S. Todd, K. D. Fausch. *In Review*. Predicting persistence of Rio Grande Cutthroat Trout populations in an uncertain future. North American Journal of Fisheries Management.

Special Reports and White Papers

- Bachman, P., B. Beyea, H. Crockett, P. Foutz, T. Jackson, J. Logan, M. May, K. Reiner, J. Smith, **K. Thompson**, **A. Treble**, G. Wilcox, B. Wright, and R. Wertsbaugh. Biological Importance of Non-Adjacent Wetlands, and Ephemeral and Intermittent Streams in Colorado.
- **Cadmus, P.** 2018. Water Pollution Studies. Federal Aid Project F243-R25. Job Progress Report. Colorado Parks and Wildlife, Aquatic Wildlife Research Section. Fort Collins, Colorado.
- **Fetherman, E. R.**, **G. J. Schisler**, and B. W. Avila. 2018. Sport Fish Research Studies. Federal Aid Project F-394-R17. Federal Aid in Fish and Wildlife Restoration, Job Progress Report. Colorado Parks and Wildlife, Aquatic Wildlife Research Section. Fort Collins, Colorado.

- **Fetherman, E. R.** 2018. Rainbow Trout Stocking Evaluations. Colorado Parks and Wildlife Fact Sheet. Fort Collins, Colorado.
- **Fetherman, E. R.** 2019. Hatchery Fish Enrichment. Colorado Parks and Wildlife Fact Sheet. Fort Collins, Colorado.
- **Hansen, A. G.** 2018. Summer profundal index netting for tracking trends in the abundance of lake trout in Colorado's coldwater lakes and reservoirs: results from 2018. Internal CPW report. 6 pages.
- **Hansen, A. G.** 2018. Lake Trout Population Monitoring. Colorado Parks and Wildlife Fact Sheet. Fort Collins, Colorado.
- **Hansen, A. G.** 2018. Predation on Stocked Fish. Colorado Parks and Wildlife Fact Sheet. Fort Collins, Colorado.
- **Kondratieff, M. C., and E. E. Richer.** 2018. Stream Habitat Investigations and Assistance. Federal Aid Project F-161-R24. Colorado Parks and Wildlife, Aquatic Wildlife Research Section. Fort Collins, Colorado.
- **Kowalski, D. A.** 2018. Colorado River Aquatic Resource Investigations. Federal Aid Project F-237-R25. Colorado Parks and Wildlife, Aquatic Wildlife Research Section. Fort Collins, Colorado.
- **Kowalski, D. A., D. Drennan, V. M. Milano.** 2018. Bacterial Kidney Disease Research. Colorado Parks and Wildlife Fact Sheet. Denver, Colorado.
- **Richer, E. E., W. Clements, D. Baker, M. Myers, and M. C. Kondratieff.** 2019. Upper Arkansas River habitat restoration project: Annual site assessment. Colorado Parks and Wildlife, Aquatic Wildlife Research Section. Fort Collins, Colorado.
- **Rogers, K. B.** 2018. Rediscovery of the San Juan River basin's native trout. Colorado Parks and Wildlife fact sheet, Steamboat Springs, Colorado.
- **Treble, A. J.** 2018. Statewide Fisheries Assessments and Surveys. Federal Aid Project F-86-R-31. Colorado Parks and Wildlife, Aquatic Wildlife Research Section. Fort Collins, Colorado.
- **Treble, A. J.** 2018. Aquatic Data Analysis. Federal Aid Project F-239-R-25. Colorado Parks and Wildlife, Aquatic Wildlife Research Section. Fort Collins, Colorado.

Internal Presentations

- Baum, C. M., D. L. Winkelman, **R. M. Fitzpatrick**, M. May and P. Bachmann. Temperature and winter duration requirements for reproductive success in Johnny Darter (*Etheostoma nigrum*) in the South Platte River basin, Colorado. Colorado Parks and Wildlife Plains Fish Research Meeting. February 12, 2019. Fort Collins, CO.
- **Fetherman, E. R.**, B. Atkinson, and **M.C. Kondratieff**. 2019. Comparative survival of catchable and fingerling rainbow trout stocked in the Yampa River. 2019 Colorado Parks and Wildlife Aquatic Biologist Meeting. Salida, Colorado. January 23, 2019.
- **Fitzpatrick, R. M.** and K. R. Bestgen. Flathead Chub (*Platygobio gracilis*) movement, survival, age and growth in Fountain Creek, Colorado. Colorado Parks and Wildlife Plains Fish Research Meeting. February 28, 2019. Fort Collins, CO.
- **Hansen, A. G.**, and D. Brauch. Assessing novel threats to kokanee in Blue Mesa Reservoir: introduced yellow perch and gill lice. Coldwater Reservoir Management Meeting, Buena Vista, Colorado. March 3rd, 2019.
- **Hansen, A. G.**, and C. Tucker. Integrating angler dynamics and walleye biology to explore alternative harvest strategies for brood stock in Pueblo Reservoir. Biologist Meeting, Salida, Colorado. January 24, 2019.
- Kopack, C. J., **E. R. Fetherman**, **R. M. Fitzpatrick**, E. D. Broder and L. M. Angeloni. Behavior and survival of Arkansas Darter (*Etheostoma cragini*) in response to abiotic enrichment and predator recognition training. 2019 Colorado Parks and Wildlife Plains Fish Research Meeting. Fort Collins, Colorado. February 12, 2019.
- **Kowalski, D. A.**, **A. J. Treble**, J. Drennan, V. M. Milano, R. Cordes. 2018. Prevalence and distribution of *R. salmoninarum* in Colorado's wild trout and stocked sport fisheries. Colorado Parks and Wildlife Aquatic Section and Aquatic Animal Health Lab, Denver, Colorado. July 5, 2018.
- **Kowalski, D. A.**, **A. J. Treble**, J. Drennan, V. M. Milano, R. Cordes. 2019. Prevalence and distribution of *R. salmoninarum*, the causative agent of bacterial kidney disease, in Colorado's wild trout and stocked sport fisheries. Colorado Parks and Wildlife Aquatic Biologist Meeting, Salida, Colorado. January 23, 2019.
- **Kowalski, D. A.**, **E. E. Richer**, A. B. Brubaker, and **M. C. Kondratieff**. 2019. Effects of Whitewater Parks on Fisheries. Colorado Parks and Wildlife Area 9 Meeting, Hot Sulphur Springs, Colorado. March 12, 2019.
- **Kowalski, D. A.** and **E. E. Richer**. 2019. Quantifying the habitat preferences and emergence ecology of the salmonfly, *Pteronarcys californica*. Colorado Parks and Wildlife Area 9 Meeting, Hot Sulphur Springs, Colorado. March 12, 2019.

- **Richer, E. E.** 2018. Kemp-Breeze SWA habitat project. Colorado Parks and Wildlife Area 9 Meeting, Hot Sulphur Springs, Colorado. July 31, 2018.
- **Richer, E. E., D. A. Kowalski, A. B. Brubaker, B. Heinold, and M. C. Kondratieff.** 2019. Effects of whitewater parks on fisheries. Colorado Parks and Wildlife Aquatic Biologist Meeting, Salida, Colorado. January 23, 2019.
- **Rogers, K. B.** 2018. Fire and drought create a challenging future for Cutthroat Trout. DWM pack training. Bellaire, Colorado. August 13, 2018.
- **Rogers, K. B.** 2019. Cutthroat Trout conservation in a changing climate. Area 10 meeting. Steamboat Springs, Colorado. March 29, 2019.
- Swarr, T. R., C. M. Myrick and **R. M. Fitzpatrick.** Improving rock ramp fishways for small-bodied Great Plains fishes. Colorado Parks and Wildlife Plains Fish Research Meeting. February 12, 2019. Fort Collins, CO.
- **Treble, A. J.** 2019. Data Management Update and Training Session. Annual CPW Biologist's Meeting, Salida, Colorado. January 24, 2019.
- **Treble, A. J.** 2019. Smelt Echo Integration Results from Horsetooth Reservoir. Coldwater Reservoir Management Meeting, Buena Vista, Colorado. March 5th, 2019.
- **Treble, A. J.** 2019. Thermal Niche of Colorado Fishes Overview. Annual CPW Biologist's Meeting, Salida, Colorado. January 23, 2019.
- Wells, C., and **E. R. Fetherman.** 2019. Disinfection of aquatic/fisheries field equipment. 2019 Colorado Parks and Wildlife Aquatic Biologist Meeting. Salida, Colorado. January 23, 2019.

External Presentations

- Atkinson, B., **E. Fetherman,** and **M. Kondratieff.** 2018. Comparative survival of whirling disease resistant catchable and fingerling rainbow trout stocked in restored versus impaired reaches of the Yampa River. Yampa River Private Landowners/Stakeholders Meeting. Steamboat Springs, Colorado. May 14, 2018.
- Avila, B., T. Riepe, and **E. Fetherman.** 2019. Upcoming research projects. 2019 Annual Meeting of the Colorado Aquaculture Association. Mt. Princeton Hot Springs, Colorado. February 1, 2019.
- Avila, B. W., D. L. Winkelman, and **E. R. Fetherman.** 2018. Whirling disease resistant Rainbow Trout fry survival: A comparison of two strains. 43rd Annual Meeting of the Western Division of the American Fisheries Society. Anchorage, Alaska. May 24, 2018.
- Avila, B. W., D. L. Winkelman, and **E. R. Fetherman.** 2018. Quality vs. quantity: Manipulating rearing density to increase survival of Rainbow Trout fry pre- and post-

stocking. 43rd Annual Meeting of the Western Division of the American Fisheries Society. Anchorage, Alaska. May 24, 2018.

- Avila, B. W., D. L. Winkelman, **E. R. Fetherman**, and J. Drennan. 2019. Culturing *Flavobacterium psychrophilum* and standardization of experimental exposures. 2019 Annual Meeting of the Colorado/Wyoming Chapter of the American Fisheries Society. Fort Collins, Colorado. February 28, 2019.
- **Cadmus, P.** 2018. Ecotoxicology at multiple levels of biological organization: predicting recovery of aquatic communities after acid mine drainage remediation. Colorado State University Department of Fish Wildlife and Conservation Biology Research Seminar. Fort Collins, Colorado. October 5, 2018.
- **Cadmus, P.**, A. L. Jefferson and C. J. Kotalik. 2018. Tools for predicting recovery of aquatic ecosystems after mine reclamation: Biomonitoring and in-stream experiments on the North Fork of Clear Creek, Colorado. 31st Annual Meeting of the Rocky Mountain Chapter of the Society of Environmental Toxicology and Chemistry. Fort Collins, Colorado April 20, 2018.
- **Cadmus, P.**, A. L. Jefferson, C. J. Kotalik, J. S. Meyer, J. F. Ranville and W. H. Clements. 2018. Tools for predicting recovery of aquatic ecosystems after mine reclamation: Biomonitoring and in-stream experiments on the North Fork of Clear Creek, Colorado. North Fork of Clear Creek remediation and Metal-mixture modeling meeting. Golden, Colorado. April 25, 2018.
- **Cadmus, P.**, C. J. Kotalik, W.H. Clements and J. F. Ranville. 2018. Predicting recovery of aquatic ecosystems after mine reclamation: Mesocosms and in-stream experiments on the North Fork of Clear Creek, Colorado. Society of Environmental Toxicology and Chemistry. North America 39th Annual Meeting. Sacramento, California. November 5, 2018.
- **Cadmus, P.**, **S. F. Brinkman**, **N. K. M. Vieira**, M. K. May, W.H. Clements, H. Guasch, B. Bonet, G. Urrea, A. L. Jefferson. 2018. Iron Toxicity to Aquatic Life. Colorado Department of Health and Environment - Water Quality Forum. Denver, Colorado. November 19, 2018.
- 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, Colorado. February 28th, 2019.
- **Fetherman, E. R.** 2019. Benefits of AFS membership and a career as a CPW Aquatic Research Scientist. Colorado State University Student Subunit of the Colorado/Wyoming Chapter of the American Fisheries Society. Fort Collins, Colorado. February 21, 2019.
- **Fetherman, E. R.** 2019. Benefits of AFS membership and a career as a CPW Aquatic Research Scientist. Colorado Mesa University Student Subunit of the Colorado/Wyoming Chapter of the American Fisheries Society. Grand Junction, Colorado. March 12, 2019.

- **Fetherman, E. R.** 2018. Salmonid disease research in Colorado. Guest lecture, Introduction to Fisheries. Front Range Community College. Fort Collins, Colorado. March 28, 2019.
- **Fetherman, E. R., B. W. Avila, and J. Ewert.** 2018. Whirling disease resistant Rainbow Trout fry stocking in the upper Colorado River. 43rd Annual Meeting of the Western Division of the American Fisheries Society. Anchorage, Alaska. May 24, 2018.
- **Fetherman, E. R., B. Neuschwanger, T. Davis, C. L. Wells, and A. Kraft.** 2018. Erythromycin injections for controlling bacterial kidney disease in Colorado hatcheries. 43rd Annual Meeting of the Western Division of the American Fisheries Society. Anchorage, Alaska. May 24, 2018.
- Gardunio, E., **Kowalski, D. A., E. E. Richer, A. B. Brubaker, M. C. Kondratieff.** 2019. Effects of Whitewater Parks on Fisheries. Trout Unlimited Gunnison Gorge Anglers, Delta, Colorado, March 20, 2019.
- Hooley-Underwood, Z, E., and **K. G. Thompson.** 2019. Spawning tributary fidelity of Bluehead and Flannelmouth Suckers. Colorado Wyoming Chapter, American Fisheries Society Meeting, Fort Collins, Colorado. February 28, 2019.
- Kingcade, A., **P. Cadmus,** D. Garrity and H. Ramsdell. 2018. Characterization of pharmaceutical effects on Zebrafish. Society of Environmental Toxicology and Chemistry. North America 39th Annual Meeting. Sacramento, California. November 8, 2018.
- **Kondratieff, M.C.** 2018. What Makes a Healthy Trout Stream? Guest lecture, Introduction to Fisheries. Front Range Community College. Fort Collins, Colorado. April 23, 2018.
- **Kondratieff, M.C.** 2018. Species Conservation Trust Fund Success Stories and South Platte Recovery Program. Water Resources Review Committee, House Committee Update, State Capitol Building. Denver, Colorado. June 19, 2018.
- **Kondratieff, M.C.** 2018. Trick or Treat: Does Natural Channel Design work to improve stream ecological function? River Restoration 2018, Two Harbors, Minnesota. October 29, 2018.
- **Kondratieff, M. C.** 2019. Restoring Colorado Rivers and Introduction to Fisheries Science and Management. Wildlife Management Short Course 2019, Colorado State University, Colorado State University, Fort Collins, CO. March 26, 2019.
- Kotalik, C. J., W. H. Clements and **P. Cadmus.** 2018. Field biomonitoring and stream mesocosms to evaluate aquatic insect life stage responses to acid mine drainage. Society of Environmental Toxicology and Chemistry. North America 39th Annual Meeting. Sacramento, California. November 5, 2018.
- Kotalik, C. J., W. H. Clements and **P. Cadmus.** 2018. The Use of Descriptive & Experimental Approaches to Quantify Remediation Success in Metal-Contaminated Streams.

North Fork of Clear Creek remediation and Metal-mixture modeling meeting. Golden, Colorado. April 25, 2018.

- Kopack, C. J., **E. R. Fetherman**, **R. M. Fitzpatrick**, E. D. Broder and L. M. Angeloni. Can training species of conservation concern prior to release increase survival? 2019 Annual Meeting of the Colorado/Wyoming Chapter of the American Fisheries Society. Fort Collins, Colorado. February 28, 2019.
- **Kowalski, D. A., A. J. Treble**, J. Drennan, V. M. Milano, R. Cordes. 2019. Surveying Colorado's sport fisheries for *R. salmoninarum*, the causative agent of bacterial kidney disease. Colorado Aquaculture Association Meeting, Nathrop, Colorado. February 1, 2019.
- **Kowalski, D. A., A. J. Treble**, J. Drennan, V. M. Milano, R. Cordes. 2019. Prevalence and distribution of *R. salmoninarum*, the causative agent of bacterial kidney disease, in Colorado's wild trout and stocked sport fisheries. Colorado Wyoming American Fisheries Society Meeting, Fort Collins, Colorado. February 28, 2019.
- **Kowalski, D. A., E. E. Richer**, B. Heinold, and **M. C. Kondratieff**. 2018. Quantifying the habitat preferences and emergence ecology of the Salmonfly, *Pteronarcys californica*. Rocky Mountain Biological Laboratory. August 15, 2018, Gothic, Colorado
- **Richer, E. E.** 2018. Upper Arkansas River habitat restoration project: CPW project and monitoring overview. Upper Arkansas River Monitoring Summit, Fort Collins, Colorado. April 24, 2018.
- **Richer, E. E.**, E. A. Gates, **M. C. Kondratieff**, and A. T. Herdrich. 2018. Upper Arkansas River monitoring update: instream structures and habitat quality. Upper Arkansas River Monitoring Summit, Fort Collins, Colorado. April 24, 2018.
- **Richer, E. E., E. R. Fetherman**, and **M. C. Kondratieff**. 2018. Haunted rivers: Application of mobile RFID-GPS systems to evaluate the prevalence of ghost PIT tags. 43rd Annual Meeting of the Western Division of the American Fisheries Society. Anchorage, Alaska. May 24, 2018.
- **Richer, E.E.**, A.B. Brubaker, **D.A. Kowalski**, and **M.C. Kondratieff**. 2018. Making waves: the effects of whitewater parks on fisheries. Sustaining Colorado Watersheds Conference. October 10, 2018, Avon, Colorado.
- Riepe, T., D. L. Winkelman, and **E. R. Fetherman**. 2019. The past, present, and future of bacterial kidney disease. 2019 Annual Meeting of the Colorado/Wyoming Chapter of the American Fisheries Society. Fort Collins, Colorado. February 28, 2019.
- **Rogers, K. B.**, F. B. Wright, A. P. Martin. May 8, 2018. Dry Gulch repatriation: evaluating fitness in the wild. Greenback Recovery Team meeting, Denver, Colorado.
- **Rogers, K. B.** December 4, 2018. Extinction isn't always final: rediscoveries of Colorado's native trout. Science On Tap, Gunbarrel Brewing Company, Boulder, Colorado.

- **Rogers, K. B.**, J. White, and M. Japhet. December 6, 2018. Rediscovery of the San Juan lineage Cutthroat Trout. Colorado River Cutthroat Trout Conservation Team meeting, Grand Junction, Colorado.
- **Rogers, K. B.**, J. White, and M. Japhet. January 29, 2019. Extinction isn't always final: rediscovery of the San Juan lineage Cutthroat Trout. Rio Grande Cutthroat Trout Conservation Team meeting, Alamosa, Colorado.
- **Rogers, K. B., B. J. Sucher**, B. W. Hodge, and C. A. Myrick. February 27, 2019. Evaluating thermal tolerance in Colorado's native trout. Colorado/Wyoming Chapter of the American Fisheries Society.
- **Rogers, K. B.**, J. White, and M. Japhet. March 21, 2019. Extinction isn't always final: rediscovery of the San Juan lineage Cutthroat Trout. Colorado Water Conservation Board meeting, Fort Collins, Colorado.
- **Schisler, G. J.** 2019. Salmonid Whirling Disease in Colorado. University of Alberta, January 25, 2019.
- **Schisler, G. J.** 2019. Fisheries Management in Colorado: Implications of Climate Change. 84th North American Wildlife and Natural Resources Conference March 7, 2019.
- **Thompson K. G.**, and Z, E. Hooley-Underwood. 2019. Manipulation of spawning to favor Colorado River Basin native suckers. Colorado Wyoming Chapter, American Fisheries Society Meeting, Fort Collins, Colorado. February 28, 2019.
- Townsend, A., C. Myrick, W. H. Clements, and **P. Cadmus**. 2019. The effect of maternally-transferred selenium on the survival, hatch success and performance of Brown Trout fry. Rocky Mountain Flycasters Chapter of Trout Unlimited member meeting. Fort Collins, CO. March 20, 2019
- Townsend, A., C. Myrick, W. H. Clements, and **P. Cadmus**. 2018. The effect of maternally-transferred selenium on the survival, hatch success and performance of Brown Trout fry. Cutthroat Chapter of Trout Unlimited member meeting. Denver, CO. April 17, 2018.
- Townsend, A., W. H. Clements, C. Myrick and **P. Cadmus**. 2018. The effect of maternally-transferred selenium on the survival, hatch success and performance of Brown Trout fry. The 31st Annual Meeting of the Rocky Mountain Chapter of the Society of Environmental Toxicology and Chemistry. Fort Collins, Colorado. April 20, 2018.
- **Treble, A. J.** 2018. CPW Poudre River Fisheries Data. Poudre River Transition Zone Working Group. Northern Water, Berthoud, Colorado. October 31st, 2018.
- **Treble, A. J.** 2018. Revised Thermal Niche Analyses. Temperature Technical Advisory Committee (TAC). CDPHE, Denver, Colorado. October 29th, 2018.

- Winkelman, D. L., and **E. R. Fetherman**. 2018. Introduction to the symposium on “Fishing for solutions to economically and ecologically important salmonid diseases”. 43rd Annual Meeting of the Western Division of the American Fisheries Society. Anchorage, Alaska. May 24, 2018.