**Christopher W. Schwinghamer**  
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208 Edgemont Blvd.

SMT 3060

Alamosa, CO 81101

(620) 344-1992

**ACADEMIC BACKGROUND**

**West Virginia University (Davis College of Agriculture, Natural Resources, and Design)**

Morgantown, WV 26506

**Doctorate of Philosophy- Forest Resource Science**

Advisor- **Dr. Kyle Hartman**

Graduated May 2022

**Dissertation:** Factors Influencing Brook Trout Population Dynamics and Resilience in Central Appalachian Headwater Streams

**Overall GPA:** 4.0

**Southeast Missouri State University**

Cape Girardeau, MO 63701

**Master of Science- Natural Science, Complementary Area- Environmental Science**

Advisor- **Dr. Quinton Phelps, Dr. John Scheibe**

Graduated May 2017

**Thesis:** PaddlefishReproductive Ecology in Missouri Reservoirs

**Overall GPA:** 3.97

**Emporia State University**

Emporia, KS 66801

**Bachelor of Science-Biology (Zoology Concentration)**

Advisor- **Dr. David Edds**

Graduated December 2014

**Overall GPA**: 3.53

**Relevant Coursework:** Ichthyology, Stream Ecology, Introduction to Geospatial Analysis, Field Ecology, Ecology, Entomology, Mammalogy, Comparative Animal Physiology, Evolution, Animal Behavior, Natural History of Vertebrates, Marine Biology

**PROFESSIONAL EXPERIENCE**

**Adams State University**

Assistant Professor of Biology, August 2023-present, 40+ hours per week

General Responsibilities

* Courses Taught
  + Introductory Biology Lecture and Lab (Non-Majors) BIOL101
  + General Biology Lab BIOL 209
  + Invertebrate Zoology BIOL 440
  + Ichthyology Lecture and Lab BIOL463
  + Fisheries Management BIOL 469
  + Statistics for Biological Sciences BIOL479
  + Thesis II BIOL494

**West Virginia University**

Post-Doctoral Research Fellow, May 2022-August 2023, 40+ hours per week

General Responsibilities

* Managing lab activities and graduate students
* Finding funding opportunities
* Writing grant proposals

Management in Recreation, Parks, and Tourism Organization (RPTR 335) Co-Instructor

* Preparing lecture materials
* Planning in-class activities
* Preparing exams and quizzes
* Lecturing
* Keeping grades
* Interacting with students and answering questions

National Visitor Use Monitoring (NVUM)

* Coordinating research related travel, lodging, etc. for workers
* Managing grants funds
* Working with US Forest Service
* Preparing reports
* Collecting visitor survey data

NMS-Count (National Marine Sanctuary Visitor Use)

* Preparing reports

NSF Convergence Accelerator iCOAST

* Preparing reports
* Managing and coordinating with project personnel
* Managing and creating content for project social media accounts

**West Virginia University**

Graduate Assistant, August 2017-May 2022, 40+ hours per week

Long Term Appalachian Mountain Headwater Stream Monitoring

* Conducting habitat assessment in Appalachian Mountain headwater streams following standardized visual assessment protocol
* Conducting standardized fish surveys using backpack electrofishing
* Analyzing long term data
* Managing and maintaining a large dataset
* Presenting research at professional meetings
* Managing undergraduate interns and volunteers
* Preparing manuscripts for publication

Black Bass Research

* Sampling Smallmouth Bass using backpack electrofishing
* Collecting data in the field
* Conducting Bioelectrical Impedance Analysis
* Collecting diet samples using gastric lavage
* Removing otoliths for aging
* Assisting in the creation of population simulation models

Stony River Larval Fish and Crayfish Monitoring

* Sampling larval fish using larval light traps and spot and sweep
* Sampling crayfish using crayfish traps

Asian Carp eDNA

* Collecting eDNA samples from the Ohio, Kanawha, and Little Kanawha rivers following USFWS protocols
* Preparing the samples for genetic analysis

Trout Bioelectrical Impedance Analysis

* Assisting with Bioelectrical Impedance Analysis data collection on captive Brown and Rainbow Trout

Ichthyology (BIO 341) Teaching Assistant

* Setting up for labs and lab practicals
* Assisting in teaching students how to identify fish and internal/external fish anatomy
* Grading assignments and tests
* Communicating with students
* Keeping and recording grades

Fisheries Science Summer Camp (WMAN 205) Teaching Assistant

* Preparing and presenting lectures on:
  + Age and Growth
  + Length, Weight, and Condition
  + Fish Families
  + Fish Identification
* Teaching students how to sample using
  + Parallel Wire Electrofishing
  + Backpack Electrofishing
  + Fyke Nets
  + Seine
  + Habitat Survey
  + Minnow Traps
  + Boat Electrofishing
  + Gill Nets
  + Larval Light Traps
* Identifying fish and taking data in the field
* Grading assignments and tests

Marine Ecology (WMAN 314) Teaching Assistant

* Lecturing on aquatic plants and marine ecosystems
* Supervising students during marine field experience in an off-campus setting
* Setting up and grading lab practical exams

Wildlife Ecosystem Ecology (WMAN 313) Lab Assistant

* Assisting with aquatic ecosystem lab (Backpack electrofishing, macroinvertebrate sampling, substrate classification, collecting and recording data)

WVU AFS Fish Tagging Workshop

* Assisted with teaching undergraduates how to properly tag fish (Vemco acoustic tags, floy tags, elastomer tags, jaw bands)

Cheat Mountain Salamander Research

* Installing mesocosoms for threatened Cheat Mountain Salamanders

**Indiana Department of Natural Resources: Sugar Ridge Fish and Wildlife Area, Winslow, IN**

Assistant Fisheries Biologist, December 2016-August 2017, 37.5 hours per week

Reservoir and Lake Surveys

* Sampling crappie and muskellunge using Michigan style trap nets
* Sampling crappie using fyke nets
* Performing standardized fisheries surveys using fyke nets, gill nets, and night electrofishing
* Largemouth Bass survey using night electrofishing
* Measuring and recording data in the field
* Taking aging structures; scales and fin rays, in the field
* Aging Largemouth Bass, Bluegill, Redear Sunfish, crappie, Walleye, and Hybrid Striped Bass using scales
* Estimating population size using mark/recapture
* Evaluating fishery quality and making management recommendations
* Preparing reports
* Mending nets

Big River Surveys

* Sampling crappie using fyke nets
* Sampling Shovelnose Sturgeon using gill nets
* Sampling catfish using hoop nets
* Removing catfish pectoral fin spines for aging

Lake Vegetation Treatments

* Treating vegetation using herbicides and algaecides

Maintenance and Base Operations

* Winterizing boat motors for storage
* Maintenance of equipment and sampling gear

**Missouri Department of Conservation: Big Rivers and Wetlands Field Station, Jackson, MO**

Graduate Research Assistant, January 2015-January 2017, 40+ hours per week

Paddlefish Reproduction and Exploitation in Missouri’s Reservoirs and Rivers

* Sampling Paddlefish with gill nets
* Mending gill nets
* Implanting ultrasonic transmitters into Paddlefish
* Tagging Paddlefish with jaw band
* Removing section of dentary bone for aging
* Identification of sex and reproductive stage
* Tracking Paddlefish movement with stationary receivers and manual tracking
* Sampling embryos and larvae with egg mats, trawling, and manual search
* Hatching out collected embryos
* Rearing larval paddlefish
* Communicating with anglers using creel surveys and tag returns
* Manuscript preparation and submission

Long Term Monitoring of Pallid Sturgeon Populations in the Middle Mississippi River

* Collecting federally endangered Pallid Sturgeon with trotlines
* Implanting sturgeon with floy tags

Asian Carp (Silver and Bighead Carp) Research

* Collecting fish with gill nets, electrofishing, and trammel nets
* Removing otoliths from Silver/Bighead Carp
* Collecting embryos and larvae with conical nets
* Tracking age 1 fish with stationary receivers and manual tracking
* Constructing enclosures for use in overwintering assessment
* Filleting and cooking Asian carp for public outreach

American Eel Movement and Habitat Use

* Collecting American Eels with electrofishing

Catfish Research

* Collecting catfish using gill nets, trawling and electrofishing
* Removing pectoral fin spine from catfish
* Removing otoliths from catfish
* Removing filets from catfish to be analyzed for contaminants

Grotto Sculpin Research

* Assessing habitat characteristics of streams inhabited by a federally endangered species, Grotto Sculpin in the caves of Perry Co., MO
* Sampling for Grotto Sculpin within the caves and resurgence sites of Perry Co. MO with seines

Lake Sturgeon Reproductive Ecology in the Upper and Middle Mississippi River

* Trawling for larval Lake Sturgeon in the Upper Mississippi River
* Sectioning Lake Sturgeon fin rays for aging
* Surgically implanting Lake Sturgeon with ultrasonic transmitters

Temporal Community Shifts of the Upper Mississippi River System

* Preparing manuscript for publication
* Utilizing and managing a large data set
* Statistical analysis in R (Redundancy Analysis)

Guild Based Habitat Use by Feeding and Reproductive Guilds of the Upper Mississippi River System

* Preparing manuscript for publication
* Utilizing and managing a large data set
* Statistical analysis in R (Non-Metric Multidimensional Scaling)

Long Term Resource Monitoring Program

* Sampling fish with electrofishing, hoop nets, mini hoop nets, fyke nets, and mini fyke nets
* Identifying fish collected
* Measuring and recording data in the field
* Recording water quality data (secchi disc, dissolved oxygen, conductivity, velocity

Flood Plain Research

* Sampling flood plain and main channel fish with conical nets and electrofishing
* Sorting larval fish samples

Alligator Gar Prey Selectivity

* Collecting Gizzard Shad, Emerald Shiners, and Asian Carp
* Running feeding trials

Pallid Sturgeon Early Life History

* Using LA-ICP-MS to assess chemical signatures of aging structures of endangered Pallid Sturgeon

*Macrhybopsis* Chub Research

* Removing and aging chub otoliths

Crappie Age and Growth

* Sampling Black and White Crappie using seines
* Removing crappie otholiths

Fish Passage Through Lock and Dam 19

* Sampling fish using a variety of gears including electrofishing, trot lines, gill nets and trammel nets
* Implanting ultrasonic transmitters into Blue Suckers, Grass Carp, Silver Carp, Bighead Carp, Lake Sturgeon, Bigmouth Buffalo, Walleye, and Sauger
* Tracking fish using manual tracking and stationary receivers

Black Carp Monitoring

* Collecting YOY Black Carp using seining and backpack electrofishing
* Differentiating YOY Black Carp and Grass Carp using external features and pharyngeal teeth
* Preparing samples for genetic analysis

**Illinois Natural History Survey: Illinois River Biological Station, Havana, IL**

National Great Rivers Research and Education Center Intern, May 2014-August 2014, 40 hours per week

Status and trends of two native planktivores in the La Grange Reach of the Illinois River in relation to the establishment of Asian carp

* Using long term data set to evaluate trend in relative weight over time
* Preparing poster and oral presentations and manuscript
* Utilizing and managing a large data set
* Statistical analysis (Two-Sample t-Test, Mann-Whitney U Test, Simple Linear Regression)

Long Term Resource Monitoring Program

* Sampling fish with electrofishing, hoop nets, mini hoop nets, fyke nets, and mini fyke nets
* Identifying fish collected
* Measuring and recording data in the field
* Recording water quality data (secchi disc, dissolved oxygen, conductivity, velocity)
* Collecting zooplankton samples

Emiquon National Wildlife Refuge Monitoring Program

* Collecting and identifying aquatic vegetation
* Sampling fish with fyke nets, mini fyke nets, and tandem fyke nets
* Measuring and recording data in the field

**David Traylor Zoo, Emporia, KS**

Zookeeper Intern, January 2013-May 2013, 10 hours per week

* Feeding animals and cleaning exhibits
* Animal husbandry
* Preparing animal diets
* Monitoring animals

**United States Fish and Wildlife Service: Flint Hills National Wildlife Refuge, Hartford, KS**

Youth Conservation Corps Youth Leader, May 2011-August 2011

* Supervising youth conservation corps employees
* Building and maintaining nature trails
* Aiding staff with maintenance of manipulated wetlands
* Working with Emporia State University biology professors to learn sampling Techniques (seining, point counts for birds, small mammal trapping, plant collecting, and herp collecting)

**United States Fish and Wildlife Service: Flint Hills National Wildlife Refuge, Hartford, KS**

Youth Conservation Corps, May 2010-August 2010

* Building and maintaining nature trails
* Aiding staff with maintenance of manipulated wetlands
* Working with Emporia State University Biology Professors to learn sampling techniques (seining, point counts for birds, small mammal trapping, plant collecting, and herp collecting)

**PUBLICATIONS**

***Published***

Andrew, R.G., C.W. Schwinghamer, K.J. Hartman, and E.E. Briggs. 2022. Climate change influence on brook trout populations in the Central Appalachians. Ecology of Freshwater Fish, 31(4): 710-725.

Hartman, K.J., R.G. Andrew, C.W. Schwinghamer, D.W. Thorne, J.S. Webster. 2019. Springtime exploitation of Brook Trout by anglers in remote headwater streams of Central Appalachia. North American Journal of Fisheries Management. 39:403-411.

Schwinghamer, C., S. Tripp, and Q.E. Phelps. 2019. Using ultrasonic telemetry to evaluating Paddlefish (*Polyodon spathula*) spawning behavior in Harry S. Truman Reservoir, Missouri. North American Journal of Fisheries Management, 39:231-239.

Schwinghamer, C., Q.E. Phelps, S. Tripp, T. Yasger, and J. Colehour. 2019. The role of propagation in Paddlefish restoration and conservation: a case study of the Missouri Paddlefish propagation program. American Fisheries Society Symposium 88; Paddlefish: Ecological, Aquacultural, and Regulatory Challenges of Managing a Global Resource.

Pendleton, R.M., C. Schwinghamer, L.E. Solomon, and A.F. Casper. 2017. Competition among river planktivores: are native planktivores still fewer and skinnier in response to Asian Carp invasion?. Environmental Biology of Fishes, 100(10):1213-1222.

***In Prep***

Schwinghamer, C.W. and Q.E. Phelps. In Prep. Community shifts in the Middle Mississippi River relative to the introduction of two *Hypophthalmichthys* carps.

Schwinghamer, C.W., M. Cogar, Q.E. Phelps, and S. Cayton. In Prep. Fish assemblage recovery following acid mine drainage remediation in Deckers Creek, West Virginia.

Schwinghamer, C.W., R.G. Andrew, and K.J. Hartman. In Prep. Brook Trout population resiliency in central Appalachian headwater streams using yield per recruit modeling.

Schwinghamer, C.W., R.G. Andrew, and K.J. Hartman. In Prep. Evaluating drivers of Brook Trout stock/recruitment relationships in West Virginia headwater streams.

Schwinghamer, C.W., R.G. Andrew, and K.J. Hartman. In Prep. Using simulation modeling to elucidate Brook Trout life history strategies in headwater streams.

**GRANTS**

National visitor use monitoring for recreational systems on Custer Gallatin National Forest: FY 2023. PI: Robert C. Burns, Co-PI: Ross G. Andrew, Christopher W. Schwinghamer. **$78,008.87, Funded**

Using cultural and economic benefits to improve measurement of climate impact vulnerabilities and limits in coastal communities served by National Marine Sanctuaries. PI: Robert C. Burns, Co-PI: Ross G. Andrew, Christopher W. Schwinghamer, Manoj Shivlani. **$399,137, Not Funded**

National Visitor Use Monitoring for Recreational Systems on Custer Gallatin National Forest: FY 2023. PI: Robert C. Burns, Co-PI: Ross G. Andrew, Christopher W. Schwinghamer. **$78,009, Funded**

Building Resilient Communities through Habitat Restoration and Connection with Natural Resources in National Marine Sanctuaries. PI: Robert C. Burns, Co-PI: Ross G. Andrew, Senior Personnel: Christopher W. Schwinghamer. **$982,793, Not Funded**

Socioeconomic Monitoring Iconic Reefs in Florida Keys National Marine Sanctuary. Mission: Iconic Reefs Baseline Human Use and Economic Impact Study. PI: Robert C. Burns, Co-PI: Ross G. Andrew, Senior Personnel: Don English, Manoj Shivlani, Christopher W. Schwinghamer. **$310,005, Funded**

National Visitor Use Monitoring (NVUM) for Recreational Systems on the Public Lands in US Forest Service Region 6: Modification to 21-CR-11062759- 013 for FY 2023. USDA-Forest Service, PI: Robert C. Burns, Co-PI: Ross G. Andrew, Christopher W. Schwinghamer. **$328,159.00,** **Funded**

Eastern Brook Trout Stewardship through Restoration, Research, and Reach, National Fish and Wildlife Foundation Central Appalachia Habitat Stewardship Program, PI: Kyle J. Hartman Co-PI: Ross G. Andrew, Mary E. Allen, Robert C. Burns, Christopher W. Schwinghamer, David W. Thorne, and Chad Landress. **$188,795.12, Not funded**

**GUEST LECTURES**

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| **April 7-9, 2020** | Macroinvertebrates and Community Metrics, WMAN 250 Wildlife Ecosystem Ecology, West Virginia University |
| **October 22-24, 2019** | Stream Sampling Techniques, WMAN 300 Wildlife and Fisheries Techniques, West Virginia University |
| **September 9-25, 2019** | Fish Identification, WMAN 224 Vertebrate Natural History, West Virginia University |
| **January 22, 2018** | Multivariate Analysis, WMAN 642 Advanced Fish Management, West Virginia University |

**ORAL PRESENTATIONS (\*Primary Presenter)**

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| **February 28, 2024** | **Christopher Schwinghamer\* and Kyle Hartman,** Evaluating the Resilience of Brook Trout in Headwater Streams Using Yield per Recruit Modeling. **Colorado/Wyoming Chapter of the American Fisheries Society Annual Meeting.** |
| **April 20, 2023** | **Chris Schwinghamer\*, Ross Andrew, and Robert Burns,** Trends in perceptions of and participation in West Virginia’s trout program. **West Virginia Chapter of the American Fisheries Society Annual Meeting.** |
| **April 17, 2023** | **Chris Schwinghamer\*, Ross Andrew, and Robert Burns,** Constraints to equitable access of marine recreational resources in Florida’s public waters and tools to improve connection to these resources. **National Environment and Recreation Research Symposium.** |
| **February 4, 2023** | **Chris Schwinghamer\*, Ross Andrew, and Robert Burns,** Constraints to equitable access of marine protected areas in Florida, and tools to improve connection to these resources with implications to R3 initiatives. **American Fisheries Society Southern Division Annual Meeting** |
| **October 25, 2022** | **Chris Schwinghamer\*, Amy Welsh, and Kyle Hartman,** Genetic predictors of population resilience in headwater Brook Trout populations. **Southeastern Association of Fisheries and Wildlife Agencies Annual Meeting** |
| **August 29, 2022** | **Chris Schwinghamer\*, Amy Welsh, and Kyle Hartman,** Genetic predictors of population resilience in headwater Brook Trout populations. **American Fisheries Society Annual Meeting** |
| **February 9, 2022** | **Chris Schwinghamer\* and Kyle Hartman**, Evaluating factors affecting Brook Trout abundance in Central Appalachian headwater streams using long-term ecological data and N-mixture modeling. **West Virginia Chapter of the American Fisheries Society Annual Meeting** |
| **January 23, 2022** | **Chris Schwinghamer\* and Kyle Hartman**, Evaluating factors affecting Brook Trout abundance in Central Appalachian headwater streams using long-term ecological data and N-mixture modeling. **American Fisheries Society Southern Division Annual Meeting** |
| **November 9, 2021** | **Chris Schwinghamer\* and Kyle Hartman**, Evaluating factors affecting Brook Trout abundance in Central Appalachian headwater streams using  long-term ecological data and N-mixture modeling. **American Fisheries Society Annual Meeting** |
| **April 27, 2021** | **Chris Schwinghamer\*, Ross Andrew, Kyle Hartman,** Using simulation modeling to elucidate Brook Trout life history strategies in headwater streams. **West Virginia Chapter of the American Fisheries Society Annual Meeting** |
| **August 13, 2020** | **Chris Schwinghamer\*, Ross Andrew, Kyle Hartman, and Quinton Phelps,** From headwaters to big rivers: Evaluating threats to America’s freshwater systems using long-term ecological datasets. **International Fisheries Section of the American Fisheries Society Virtual Business Meeting, Invited Speaker** |
| **February 22, 2020** | **Chris Schwinghamer\*, Ross Andrew, and Kyle Hartman**, Evidence of Mating System and Sex-Based Life History Characteristics of Central Appalachian Brook Trout. **American Fisheries Society Southern Division Annual Meeting** |
| **October 3, 2019** | **Chris Schwinghamer\*, Ross Andrew, and Kyle Hartman**, Evidence of Mating System and Sex-Based Life History Characteristics of Central Appalachian Brook Trout. **American Fisheries Society Annual Meeting** |
| **September 30, 2019** | **Chris Schwinghamer\*, Quinton Phelps, and Kyle Hartman**, Community Shifts in the Middle Mississippi River Relative to the Introduction of Two *Hypophthalmichthys* Carps. **American Fisheries Society Annual Meeting** |
| **June 11, 2019** | **Chris Schwinghamer\*, Ross Andrew, and Kyle Hartman**, Evaluating drivers of Brook Trout stock/recruitment relationships in West Virginia headwater streams. **East Coast Trout VI Management and Culture Workshop** |
| **April 26, 2019** | **Chris Schwinghamer\*, Quinton Phelps, and Kyle Hartman**, Community Shifts in the Middle Mississippi River Relative to the Introduction of Two *Hypophthalmichthys* Carps. **Mississippi River Research Consortium Annual Meeting** |
| **February 20, 2019** | **Chris Schwinghamer\*, Ross Andrew, and Kyle Hartman**, Evaluating drivers of Brook Trout stock/recruitment relationships in West Virginia headwater streams. **Joint Meeting of the Virginia-West Virginia-Virginia Tech Chapters of the American Fisheries Society** |
| **January 20, 2019** | **Chris Schwinghamer\*, Quinton Phelps, and Kyle Hartman**, Community Shifts in the Middle Mississippi River Relative to the Introduction of Two *Hypophthalmichthys* Carps. **Midwest Fish and Wildlife Conference** |
| **August 20, 2018** | **Chris Schwinghamer\*, Kyle Hartman, and Quinton Phelps,** Evaluating the Resiliency of Brook Trout in West Virginia Headwater Streams Using Yield per Recruit Modeling. **American Fisheries Society Annual Meeting** |
| **April 19, 2018** | **Chris Schwinghamer\*, Kyle Hartman, and Quinton Phelps,** Evaluating the Resiliency of Brook Trout in West Virginia Headwater Streams Using Yield per Recruit Modeling. **West Virginia Chapter of the American Fisheries Society Annual Meeting** |
| **April 11, 2018** | **Chris Schwinghamer\*, Kyle Hartman, and Quinton Phelps,** Evaluating the Resiliency of Brook Trout in West Virginia Headwater Streams Using Yield per Recruit Modeling. **Davis College Graduate Student Research and Creative Scholarship Conference** |
| **March 10, 2018** | **Chris Schwinghamer\*, Kyle Hartman, and Quinton Phelps,** Evaluating the Resiliency of Brook Trout in West Virginia Headwater Streams Using Yield per Recruit Modeling. **American Fisheries Society Southern Division Annual Meeting** |
| **February 4, 2017** | **Chris Schwinghamer\*, Quinton Phelps, Sara Tripp, Trish Yasger\*, Jake Colehour,** The Role of Propagation in Paddlefish Restoration and Conservation: A Case Study of the Missouri Paddlefish Propagation Program. **American Fisheries Society Southern Division Annual Meeting** |
| **August 22, 2016** | **Chris Schwinghamer\*, Quinton Phelps,** Guild based habitat use and environmental drivers of fish community structure in the Upper Mississippi River System. **American Fisheries Society Annual Meeting** |
| **April 28, 2016** | **Chris Schwinghamer\*, Quinton Phelps,** Guild based habitat use and environmental drivers of fish community structure in the Upper Mississippi River System. **Mississippi River Research Consortium Annual Meeting** |
| **March 29, 2016** | **Chris Schwinghamer\*, Quinton Phelps,** Guild based habitat use and environmental drivers of fish community structure in the Upper Mississippi River System. **AFS NCD Rivers and Streams Technical Committee Annual Meeting** |
| **January 26, 2016** | **Chris Schwinghamer\*, Sara Tripp, Quinton Phelps,** Paddlefish reproductive ecology in Truman Reservoir, MO. **Midwest Fish and Wildlife Conference** |
| **October 20, 2015** | **Chris Schwinghamer\*, Sara Tripp, Quinton Phelps,** Paddlefish reproductive ecology in Truman Reservoir, MO. **North American Sturgeon and Paddlefish Society Annual Meeting** |
| **August 19, 2015** | **Chris Schwinghamer\*, Sara Tripp, Quinton Phelps,** Paddlefish reproductive ecology in Truman Reservoir, MO. **American Fisheries Society Annual Meeting** |
| **April 23, 2015** | **Chris Schwinghamer\*, Ryan Hupfeld, Sara Tripp, David Herzog, and Quinton Phelps,** Can paddlefish populations within Missouri’s large reservoirs support increased interest in snagging. **Mississippi River Research Consortium Annual Meeting** |
| **April 4, 2015** | **Chris Schwinghamer\*, Rich Pendleton, and Levi Solomon,** Status and trends of two native planktivores in the La Grange Reach of the Illinois River in relation to the establishment of Asian carp. **Southwestern Association of Naturalists Annual Meeting** |
| **February 4, 2015** | **Chris Schwinghamer\*, Rich Pendleton, and Levi Solomon,** Status and trends of two native planktivores in the La Grange Reach of the Illinois River in relation to the establishment of Asian carp. **Missouri Chapter of the American Fisheries Society Annual Meeting** |
| **August 5, 2014** | **Chris Schwinghamer\*, Rich Pendleton, and Levi Solomon,** Status and trends of two native planktivores in the La Grange Reach of the Illinois River in relation to the establishment of Asian carp. **National Great Rivers Research and Education Center Annual Intern Program Symposium** |
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**ROUNDTABLE DISCUSSIONS**

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| **April 20, 2023** | **Robert C. Burns, Mary Allen, Chris Schwinghamer, Ross Andrew, Danielle Schwarzmann, Jasmine Moreira, Harrison Pinckney, and Alan Graefe.** Methods of Increasing Access to our Public Waters: Results of an NSF Convergence Accelerator Award. **National Environment and Recreation Research Symposium** |
| **March 27, 2023** | **Robert Burns, Ross Andrew, Chris Schwinghamer, Danielle Schwarzmann, Harrison Pinckney, and Taylor Stein.** Inclusion through Convergence of Ocean and Social Technology (iCOAST): Moving Toward More Equitable Access of Recreation in America’s Blue Economy. **Southeastern Environment and Recreation Research Conference.** |

**POSTER PRESENTATIONS (\*Primary Presenter)**

|  |  |
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| **August 22, 2016** | **Chris Schwinghamer\*, Sara Tripp, and Quinton Phelps**, Seasonal Paddlefish movements in Harry S. Truman Reservoir, Missouri. **American Fisheries Society National Meeting** |
| **April 4, 2015** | **Chris Schwinghamer\*, Sara Tripp, and Quinton Phelps**, History of Paddlefish in the rivers and reservoirs of Missouri. **Southwestern Association of Naturalists Annual Meeting** |
| **August 28, 2014** | **Chris Schwinghamer\*, Rich Pendleton, and Levi Solomon,** Status and trends of two native planktivores in the La Grange Reach of the Illinois River in relation to the establishment of Asian carp. **Emporia State University Undergraduate Research Scholarship and Creative Activities Reception** |
| **August 4, 2014** | **Chris Schwinghamer\*, Rich Pendleton, and Levi Solomon,** Status and trends of two native planktivores in the La Grange Reach of the Illinois River in relation to the establishment of Asian carp. **National Great Rivers Research and Education Center Annual Intern Program Symposium** |

**STUDENT MENTORSHIP**

|  |  |
| --- | --- |
| Sean Grassia | Adams State University Undergraduate Student   * Develop and present a poster presentation at a conference |
| Larissa Martins | West Virginia University Masters Student   * Develop thesis topic * Data analysis of survey data of underserved populations * Prepare oral and poster presentations |
| Lindsey Hartzell | West Virginia University Undergraduate/Masters Student   * Data analysis of trout angler survey data * Oversaw preparation of research manuscript * Prepare oral presentations |
| McKenna Cottrell | West Virginia University Research Apprenticeship Program   * Develop and carry out undergraduate research project * Develop survey instrument for distribution to fisheries professionals * Prepare oral and poster presentations |
| Bethany Wager | West Virginia University Research Apprenticeship Program   * Develop and carry out undergraduate research project * Provide field and lab experience opportunities * Prepare oral and poster presentations |
| Michaela Collins | Work Study Student   * Provide field and lab experience opportunities * Develop and carry out undergraduate research project |
| Andrew Arko | Work Study Student   * Provide field and lab experience opportunities |
| Anthony Mesa | Student Worker   * Provide field and lab experience opportunities |
| Jack Fisk | Summer Capstone Intern/Independent Study Mentee   * Provide field and lab experience opportunities * Provide data and interpretation assistance for senior capstone project |
| Sierra Delaney | Summer Capstone Intern   * Provide field and lab experience opportunities * Provide data and interpretation assistance for senior capstone project |
| Zac Crouse | Summer Capstone Intern   * Provide field and lab experience opportunities * Provide data and interpretation assistance for senior capstone project |
| Josh Winger | Summer Capstone Intern   * Provide field and lab experience opportunities |
| Jacob Frymier | Summer Capstone Intern   * Provide field and lab experience opportunities |

**PROFESSIONAL DEVELOPMENT**

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| **August, 2023** | Culturally Responsive Reaching in STEM for Hispanic Serving Institutions  **ESCALA** |
| **September 20, 2018** | Grant Writing Workshop  **WVU Faculty** |
| **April 27, 2018** | Fisheries Analysis and Modeling Simulator Workshop  **Dr. Quinton Phelps** |
| **February 17, 2017** | R for Fisheries Professionals  **Dr. Jason Doll** |
| **March 24, 2016** | Missouri Department of Conservation Pond Management Workshop  **Dr. Quinton Phelps and Jason Crites** |
| **July 24, 2015** | Multivariate Analysis Workshop  **Dr. James Whitney** |

**KEY SKILLS**

Sampling Gears and Techniques

* Seine (Straight and Bag)
* Gill Net
* Dip Net
* D-Net
* Kick Net
* Surber Sampler
* Boating
* Implantation of ultrasonic transmitters
* VR100 and VR2 Acoustic Receivers
* Electrofishing (Backpack, Boat, and Parallel Wire)
* Hoop Net
* Fyke Net
* Michigan Style Trap Net
* Zooplankton Sampling
* Aquatic Vegetation Sampling
* Water Chemistry (Hach Kit, YSI)
* Trot Lines
* Bioelectrical Impedance Analysis

Computer Skills

* Microsoft Office (Excel, Word, PowerPoint, and Access)
* SAS
* Sigma Plot
* Idrisi Selva
* ArcGIS
* Program MARK
* R
* Adobe Lightroom
* Adobe Photoshop
* Adobe Premiere Rush
* FAMS
* PAST

**CERTIFICATIONS**

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| **April 2017** | Indiana Pesticide Applicator: Category 5: Aquatic Pesticides |

**MEMBERSHIPS**

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| --- | --- |
| **2018-2022** | West Virginia University Student Subunit of the American Fisheries Society |
| **2015-2016** | North American Sturgeon and Paddlefish Society |
| **2015-Present** | American Fisheries Society  Kansas Chapter (2015-present)  Missouri Chapter (2015-2018)  Indiana Chapter (2017-2018)  West Virginia Chapter (2018-present)  Colorado/Wyoming Chapter (2024-present) |
| **2015-2017** | Southeast Missouri State Student Subunit of the American Fisheries Society |
| **2014-2015** | The Wildlife Society Emporia State Student Chapter |
| **2013-2016** | Southwestern Association of Naturalists Student |
| **2013-2014** | Central Plains Society of Mammalogists Student |
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**AWARDS AND RECOGNITION**

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| **April 2020** | American Fisheries Society International Fisheries Section Fellowship |
| **April 2019** | Mississippi River Research Consortium Student Travel Scholarship |
| **January 2016** | Missouri Chapter of the American Fisheries Society and AFS North Central Division Joan Duffy Travel Award |
| **April 2015** | Mississippi River Research Consortium Student Travel Scholarship |
| **May 2014** | Emporia State Department of Biological Sciences Honors Breakfast Invitee |
| **May 2013** | Emporia State Department of Biological Sciences Honors Breakfast Invitee |

**COMMUNITY SERVICE/OUTREACH**

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| **All Year 2019-2020** | **Mountain Stewardship and Outdoor Leadership School,** Teach elementary/middle school students about ecology and outdoor education. Help teachers monitor classes during outdoor education classes. Develop online video content for remote learning. |
| **November 2018** | **Trout in the Classroom,** Presenting a short, interactive talk to a group of over 70 4th grade students about Brook Trout biology and ecology. |
| **June 2017** | **Ford Hoosier Outdoor Experience,** Performing fish filleting demonstrations and answering fisheries related questions from the public, Indiana Department of Natural Resources |
| **April 2017** | **Women’s Wilderness Weekend,** Assisting women’s basic fishing clinic, Indiana Department of Natural Resources |
| **September 2016** | **Cape Girardeau Day on the River,** Preparing Asian carp hot dogs and walking tacos and working children’s casting range, Southeast Missouri State Student Subunit of the American Fisheries Society |
| **September 2016** | **Bass Pro Shops Outdoor Days, Branson, MO**, Asian Carp Filleting and Tasting Demonstration, Southeast Missouri Student Subunit of the American Fisheries Society |
| **June 2016** | **Bass Pro Shop Outdoor Days, St. Charles, MO,** Asian Carp Filleting and Tasting Demonstration, Southeast Missouri Student Subunit of the American Fisheries Society |
| **June 2016** | **Finley River Jam, Ozark, MO,** Asian Carp Filleting and Tasting Demonstration, Southeast Missouri Student Subunit of the American Fisheries Society |
| **September 2015** | **Bass Pro Shops Outdoor Days, Branson, MO**, Asian Carp Filleting and Tasting Demonstration, Southeast Missouri Student Subunit of the American Fisheries Society |
| **June 2015** | **Sweet Springs Outdoor Expo,** Asian Carp Tasting,Southeast Missouri Student Subunit of the American Fisheries Society |
| **June 2015** | **Missouri Department of Conservation Father’s Day Fish Fry,** Missouri Department of Conservation |
| **June 2015** | **Pond Clean Up and Restoration,** Southeast Missouri Student Subunit of the American Fisheries Society |
| **May 2015** | **Bass Pro Outdoor Days at the Capitol, Filleting and Preparing Asian Carp**, Missouri Department of Conservation, Jefferson City Missouri |
| **April 2015** | **Paddlefish Snagging Clinic, Preparing Paddlefish for Tasting;** Missouri Department of Conservation, Warsaw, MO |
| **June 2014** | **How to Fillet and Cook Asian Carp Community Outreach;** Illinois River Biological Station Havana, IL |

**REFERENCES**

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