### CRAIG PATRICK PAUKERT

Current Address: U.S. Geological Survey

Missouri Cooperative Fish and Wildlife Research Unit 302 Anheuser-Busch Natural Resources Building Department of Fisheries and Wildlife Sciences, University of Missouri, Columbia, MO 65211

573-882-3524

paukertc@missouri.edu

#### **Education**

Ph.D., South Dakota State University (SDSU), 2001

Major: Biological Sciences (Fisheries); Minor: Statistics

M.S., Oklahoma State University (OSU), 1998

Major: Fisheries and Wildlife Ecology

B.S., University of Minnesota, 1993

Major: Fisheries and Wildlife

## **Employment**

2010-present: Leader, USGS, Missouri Cooperative Fish and Wildlife Research Unit

2018-present: Cooperative Professor, The School of Natural Resources, University of Missouri 2010-2018: Cooperative Associate Professor, The School of Natural Resources, University of

Missouri

2008-2010: Acting Leader, USGS, Kansas Cooperative Fish and Wildlife Research

Unit

2003-2008: Assistant Leader-Fisheries, USGS, Kansas Cooperative Fish and Wildlife

Research Unit

2009-2015: Adjunct Associate Professor, Division of Biology, Kansas State University 2003-2008: Adjunct Assistant Professor, Division of Biology, Kansas State University

2006-present: Adjunct Assistant Professor, University of Arizona

2002-2003: Fishery Biologist, USGS, Grand Canyon Monitoring and Research Center Assistant Professor (non tenure track), Department of Wildlife and Fisheries

Sciences, South Dakota State University

## **Professional Associations**

American Fisheries Society (AFS), 1993 – present (Life member)

Missouri Chapter of the AFS, 2010-present (Life member)

Fish Management Section of the AFS, 1994 - present

Education Section of the AFS, 1995 - present

Equal Opportunities Section of the AFS, 2008-present

International Fisheries Section, 2016-present

Society of Freshwater Science, 2008-present

Desert Fishes Council, 2004-present

# **Professional Service (last 12 years):**

# Professional Society:

2016-2017:	Guest Editor, climate change issue in Reviews in Fish Biology and Fisheries
2015-2017:	Past-President, Education Section of the AFS
2016:	Symposium Coordinator, World Fisheries Congress, Busan, South Korea
2016:	Workshop coordinator, effects of climate change on inland fish and fisheries;
	North American Wildlife and Natural Resources Conference, Pittsburgh, PA
2016:	Co-Guest Editor, climate change issue in Fisheries (July 2016)
2015-2016:	Symposium Co-Chair, American Fisheries Society Annual Meeting, Kansas City
2015-2017:	Historian, Missouri Chapter of the American Fisheries Society
2015-present:	Nominating Committee, American Fisheries Society
2014-2016:	AFS Emmeline Moore Prize Award Committee
2013-2015:	President, Education Section of the AFS
2014:	Search Committee for AFS Student and Professional Development Coordinator
2011-2014:	Steering Committee, 2014 Midwest Fish and Wildlife Conference
2011-2013:	President Elect, Education Section of the AFS
2010-2013:	Guest Editor, Endangered Species Management
2009-2011:	Secretary/Treasurer, Education Section of the AFS
2003-2011:	Associate Editor, North American Journal of Fisheries Management
2008-2009:	President, Kansas Chapter of the AFS
2007-2010:	Member, AFS Board of Professional Certification
2006:	Symposium coordinator, Midwest Fish and Wildlife Conference, Omaha, NE
2006:	Session moderator, Annual AFS meeting, Lake Placid, NY
2005-2008:	Chair, Skinner Award Committee for the Education Section of AFS
2004-2007:	Chair, Education Sect. of AFS committee to revise Careers in Fisheries Brochure
2003-2004:	Member, best paper in N. Am. Journal of Fisheries Management Committee
2003-2004:	Co-chair, Education Section of the AFS Membership Committee
2003-2005:	Skinner Award Committee for the Education Section of AFS
2001-2004:	Newsletter editor, AFS Computer User's Section

# University and Governmental:

2018:	Invited by Chinese Academy of Sciences, Institute for Hydrobiology to help on
	river conservation and possible student exchange, Chinese Academy of Sciences,
	Wuhan, China
2018:	Steering Committee, Mississippi River-Yangtze River Symposium, Chongqing,
	China
<i>2017:</i>	Keynote Speaker, European Union Inland Fisheries and Aquaculture Advisory
	Commission, Stare Joblonki, Poland
2017:	Invited to workgroup to help Myanmar with food security for inland fisheries
2017:	Hosted 8 Chinese Academy of Science scientists to learn about University of
	Missouri fish research

2016-2018: IUCN Red List Paddlefish Status Report Update Lead (C. Paukert) Committee to develop of Landscape Science initiative in USGS 2015-2016: Invited Member, USGS Large River Monitoring Forum 2012-2016: 2012-2016: Invited participant, USGS Floodplain connectivity workshop National Climate Assessment, Technical Input Committee, Biodiversity, 2011-2012: Ecosystems and Ecosystem Services Technical Committee 2010-2016: Graduate Affairs Committee, Dept. of Fisheries and Wildlife Sciences, MU 2009-2010: Chair, Ecology and Evolutionary Biology Section, Division of Biology, KSU 2005-present: Member, Science Committee, National Fish Habitat Initiative Member, KSU Fish and Wildlife Biology Curriculum Committee 2004-2005: Session moderator, Grand Canyon Science Symposium, USGS, Tucson, AZ 2003: 2002-2003: Publications review committee, Southwest Biol. Science Center, Flagstaff, AZ

# Manuscript Reviews:

Fisheries, Fisheries Management and Ecology, Hydrobiologia, Intermountain Journal of Science, North American Journal of Fisheries Management, Transactions of the American Fisheries Society, Canadian Journal of Fisheries and Aquatic Sciences, Aquatic Sciences, Axizona-Nevada Academy of Sciences, Prairie Naturalist Ecology of Freshwater Fish, Environmental Biology of Fishes, Southeastern Naturalist, Southwestern Naturalist, Great Plains Research, Journal of Fish Biology, River Research and Applications, Journal of Neotropical Ichthyology, PLoS One, Global Change Biology, Ecological Applications, Proceedings of the Southeastern Association of Fish and Wildlife Agencies, Conservation Biology

### **Awards and Honors by Students:**

- 2018: University of Missouri Staff Development Award, The University of Missouri (awarded to research technician Brandon Brooke)
- 2018: American Fisheries Society Skinner Memorial Award (awarded to undergraduate student Cheyenne Stratton)
- 2018: American Fisheries Society Skinner Memorial Award Honorable Mention (awarded to graduate student Corey Dunn)
- 2018: Finalist, Best Student Poster, American Fisheries Society Annual Meeting (undergraduate student Cheyenne Stratton and graduate student Nick Sievert)
- 2018: Finalist, Best Student Poster, American Fisheries Society Annual Meeting (graduate student Elisa Baebler)
- 2018: Travel Award, Equal Opportunities Section of American Fisheries Society, (graduate student Elisa Baebler)
- 2018: Undergraduate Travel Assistance Award, Student SubUnit of the Education Section of the American Fisheries Society (undergraduate student Cheyenne Stratton)
- 2018: Trans World Airlines Scholarship, only 5 non law school awards given each year in the University of Missouri system (graduate student Corey Dunn)
- 2018: Best Poster Award Winner, School of Natural Resources Research Day (graduate student Michael Moore)
- 2018: Best Poster Award Winner, School of Natural Resources Research Day (graduate student Corey Dunn)

- 2018: Charles P. Bell Graduate Scholarship, Conservation Federation of Missouri Charitable Trust (graduate student Elisa Baebler)
- 2018: Winemiller Award for Excellence in Data Analytics, The University of Missouri ((graduate student Corey Dunn)
- 2018: Joe G. Dillard Outstanding Undergraduate Scholarship, Missouri Chapter of the American Fisheries Society (undergraduate student Cheyenne Stratton)
- 2018: Janice Lee Fenske Memorial Award finalist (awarded to graduate student Michael Moore)
- 2018: Joan Duffy Travel Grant Winner, Missouri Chapter of the AFS, (graduate student Michael Moore)
- 2018: Student Achievement Award, Missouri Chapter of the American Fisheries Society (awarded to graduate student Elisa Baebler)
- 2017: American Fisheries Society Skinner Memorial Award (awarded to graduate student Michael Moore)
- 2017: American Fisheries Society Skinner Memorial Award Honorable Mention (awarded to graduate student Zach Morris)
- 2017: Best Student Poster Honorable Mention, American Fisheries Society Annual Meeting (graduate student Corey Dunn)
- 2017: Outstanding Poster for Life Sciences Week: Innovative Science, University of Missouri (graduate student Corey Dunn)
- 2017: Trans World Airlines Scholarship, only 5 non law school awards given each year in the University of Missouri system (graduate student Michael Moore)
- 2017: Joe G. Dillard Outstanding Undergraduate Scholarship, Missouri Chapter of the American Fisheries Society (undergraduate student Cheyenne Stratton)
- 2017: Best Poster Award Winner, School of Natural Resources Research Day (graduate student Corey Dunn)
- 2017: The Wildlife Society, Wetlands Working Group Student Award (graduate student Julia Guyton)
- 2017: Charles P. Bell Graduate Scholarship, Conservation Federation of Missouri Charitable Trust (graduate student Corey Dunn)
- 2017: Janice Lee Fenske Memorial Award Winner (awarded to graduate student Elisa Baebler)
- 2017: Janice Lee Fenske Memorial Award finalist (awarded to graduate student Corey Dunn)
- 2017: Joan Duffy Travel Grant Winner, Missouri Chapter of the AFS, (graduate student Corey Dunn)
- 2017: Best Student Aquatics Presentation, Missouri Natural Resources Conference (graduate student Julia Guyton)
- 2017: Jimmie Pigg and Melissa Coughlin Memorial Outstanding Student Achievement Award, Southern Division of the American Fisheries Society (graduate student Corey Dunn)
- 2017: Douglas D. Randall Young Scientists Travel Award, University of Missouri (graduate student Corey Dunn)
- 2016: Board of Directors, Conservation Federation of Missouri (graduate student Zach Morris)
- 2016: Selected as one of four participants in the Emerging Leaders Mentorship Award Program for the American Fisheries Society (awarded to graduate student Michael Moore)
- 2016: Charles P. Bell Conservation Scholarship, Conservation Federation of Missouri Charitable Trust (awarded to graduate student Nick Sievert)

- 2016: The Wildlife Society Wetland Working Group Travel Award (awarded to graduate student Julia Guyton)
- 2016: Janice Lee Fenske Memorial Award finalist (awarded to graduate student Julia Guyton)
- 2016: Student Achievement Award, Missouri Chapter of the American Fisheries Society (awarded to graduate student Corey Dunn)
- 2016: Best Student Aquatics Presentation, Missouri Natural Resources Conference (awarded to graduate student Jacob Schwoerer)
- 2016: University of Missouri Graduate fellowship, Missouri Chapter of The Wildlife Society (awarded to graduate student Julia Guyton)
- 2016: University of Missouri Graduate Fellowship (awarded to graduate student Julia Guyton)
- 2016: D.L. Hallett Award (awarded to graduate student Julia Guyton)
- 2016: Student Achievement Award, Missouri Chapter of the American Fisheries Society (awarded to graduate student Corey Dunn)
- 2016: Carl Morrow Graduate Scholarship, Conservation Federation of Missouri (awarded to graduate student Nick Sievert)
- 2015: Outstanding MS Thesis Award Finalist, University of Missouri (one thesis per Department is selected as a finalist; awarded to graduate student Nick Sievert)
- 2015: John D. Chambers Memorial Scholarship, Missouri Chapter of The Wildlife Society (awarded to graduate student Julia Guyton)
- 2015: Best Oral Presentation, Missouri Natural Resources Conference (awarded to graduate student Corey Dunn)
- 2014: American Fisheries Society Skinner Memorial Award (awarded to graduate student Nick Sievert)
- 2014: Finalist, Best Student Poster, American Fisheries Society Annual Meeting (awarded to undergraduate student Josey Ridgway)
- 2014: Second Place, Best Poster, Missouri River Natural Resources Conference (awarded to undergraduate student Josey Ridgway)
- 2014: Conservation Federation of Missouri Morrow Scholarship (awarded to graduate student Emily Pherigo)
- 2014: Best Student Aquatics Presentation, Missouri Natural Resources Conference (awarded to graduate student Emily Pherigo),
- 2014: Robert A. Klumb Missouri River Natural Resources Conference Student Travel Award (awarded to graduate student Emily Pherigo),
- 2014: Missouri Chapter of the Society of Conservation Biology Best Student Poster at the Missouri Natural Resources Conference (awarded to undergraduate student Josey Ridgway and graduate student Emily Pherigo),
- 2014: Janice Lee Fenske Memorial Award Winner (awarded to graduate student Emily Pherigo)
- 2014: Janice Lee Fenske Memorial Award finalist (awarded to graduate student Nick Sievert)
- 2014: Joan Duffy Travel Grant (awarded to graduate student Nick Sievert),
- 2013: Hutton Scholarship, American Fisheries Society (awarded to high school student Samantha See)
- 2013: McNair Scholarship, University of Missouri (awarded to undergraduate student Josey Ridgway)
- 2013: Best Student Poster, American Fisheries Society Annual Meeting (awarded to graduate student Nick Sievert)

- 2013: Undergraduate Travel Award, American Fisheries Society Annual Meeting (awarded to undergraduate student Travis Schepker
- 2013: Conservation Federation of Missouri Stegner Scholarship (awarded to undergraduate student Jackman Eschenroeder)
- 2013: Best Student Aquatics Presentation, Missouri Natural Resources Conference (awarded to graduate student Jason Harris)
- 2013: MO AFS Student Achievement Award (awarded to undergraduate student Mike Moore)
- 2012: Joan Duffy Travel Grant (awarded to graduate student Landon Pierce)
- 2012: American Fisheries Society Skinner Memorial Award (awarded to graduate student Landon Pierce)
- 2012: Finalist, Best Student Presentation at the American Fisheries Society Annual Meeting, St. Paul, MN (awarded to graduate student Jon Spurgeon)
- 2012: Outstanding Graduate Student, Department of Fisheries and Wildlife Sciences, MU, (awarded to graduate student Jake Faulkner)
- 2012: Best Student Aquatics Presentation, Missouri Natural Resources Conference (awarded to graduate student Jason Harris)
- 2012: Second Place, Best Student Poster, Missouri Chapter of the Society for Conservation Biology (awarded to graduate student Jake Faulkner)
- 2011: Joan Duffy Travel Grant (awarded to graduate student Jake Faulkner)
- 2011: Janice Lee Fenske Memorial Award finalist (awarded to graduate student Jake Faulkner
- 2011: Special Achievement Award, Kansas Cooperative Fish and Wildlife Research Unit, (awarded to graduate student Joe Gerken)
- 2011: Best Student Presentation, Kansas Chapter of the AFS (awarded to graduate student Joe Gerken)
- 2010: Outstanding Unit Student, Kansas Cooperative Fish and Wildlife Research Unit (awarded to graduate student Jason Fischer)
- 2010: Second Place, Best Student Presentation, Midwest Fish and Wildlife Conference (awarded to graduate student Jason Fischer)
- 2010: Certificate of Appreciation, Education Section, American Fisheries Society (awarded to graduate student Joe Gerken)
- 2010: Outstanding Kansas Coop Unit Student (awarded to graduate student Joe Gerken)
- 2010: Best Student Poster, Kansas Chapter of the AFS (awarded to undergraduate student Katie White)
- 2010: Kansas Chapter AFS Tiemeier-Cross Award (awarded to graduate student Joe Gerken)
- 2009: Second place, best student oral presentation, American Water Resources Association Annual Water Resources Conference (awarded to graduate student Andrea Severson)
- 2009: Ackert Award for Outstanding Presentation at the Biology Graduate Student Forum (awarded the graduate student Andrea Severson)
- 2009: Kansas Chapter of the Wildlife Society Travel Award (awarded to graduate student Mackenzie Shardlow)
- 2009: American Fisheries Society Skinner Memorial Award (awarded to graduate student Joe Gerken)
- 2009: Finalist, Best Student Poster, Annual AFS Meeting, (awarded the graduate student Andrea Severson)
- 2009: Nominee, Watkins Award for outstanding graduate student teaching in Biology, KSU (Andrea Severson)

- 2009: Best Student Presentation, Kansas Chapter of the AFS (awarded to graduate student Andrea Severson)
- 2009: Best Student Poster, Kansas Chapter of the AFS (awarded to graduate student Joe Gerken)
- 2009: Kansas Chapter AFS Tiemeier-Cross Award (Awarded to graduate student Andrea Severson)
- 2008: Outstanding Kansas Coop Unit Student (awarded to graduate student Mackenzie Shardlow)
- 2008: Second Place, Best Student Presentation, Midwest Fish and Wildlife Conference (awarded to graduate student Mackenzie Shardlow)
- 2008: Joan Duffy Travel Grant (awarded to graduate student Wes Bouska)
- 2008: Janice Lee Fenske Memorial Award finalist (awarded to graduate student Wes Bouska)
- 2008: Janice Lee Fenske Memorial Award Winner (awarded to graduate student Mackenzie Shardlow)
- 2008: Kansas Chapter AFS Tiemeier-Cross Award (Awarded to graduate student Josh Schloesser)
- 2008: American Fisheries Society Skinner Memorial Award (awarded to graduate student Josh Schloesser)
- 2008: American Fisheries Society Skinner Memorial Award (awarded to graduate student Jeff Eitzmann)
- 2008: American Fisheries Society Equal Opportunities Travel Award (awarded to graduate student Kristen Pitts)
- 2007: Janice Lee Fenske Memorial Award finalists (awarded to graduate student Josh Schloesser)
- 2007: Joan Duffy Travel Award runner up (awarded to graduate student Josh Schloesser)
- 2007: Runner Up, American Fisheries Society Best Student Writing Contest (awarded to graduate student Wes Bouska)
- 2007: American Fisheries Society Skinner Memorial Award (awarded to graduate student Jeff Eitzmann)
- 2007: American Fisheries Society Skinner Memorial Award (awarded to graduate student Jesse Fischer)
- 2007: Fourth place, best poster (coauthor with graduate student Josh Schloesser). Missouri River Natural Resources Conference
- 2007: Kansas Chapter AFS Tiemeier-Cross Award (Awarded to graduate student Jesse Fischer)
- 2007: Best Student Poster, Kansas Chapter of the AFS (coauthor with graduate student Jesse Fischer)
- 2007: Best Student Presentation, Kansas Chapter of the AFS (coauthor with graduate student Jesse Fischer)
- 2006: Kansas Chapter AFS Tiemeier-Cross Award (Awarded to graduate student Andy Makinster)
- 2006: Outstanding KS Coop Unit Student (awarded to graduate student Jesse Fischer)
- 2006: Janice Lee Fenske Memorial Award (awarded to graduate student Jesse Fischer)
- 2005: Outstanding KS Coop Unit Student (awarded to graduate student Andy Makinster)
- 2001: 2001 Bentley Research Award given to Nathan Olson (undergraduate advisor, SDSU)

#### **Awards and Honors:**

- 2018: Promoted to Full Professor at University of Missouri
- 2018: Gold Chalk Award for Outstanding Teaching and Mentoring, University of Missouri (only 4 faculty throughout the university are awarded this each year)
- 2018: Quality Step Increase (raise based on sustained high performance)
- 2017: USGS STAR Award for outstanding performance
- 2016: Co-lead Capitol Hill briefing to congressional staffers on effects of climate change on inland fish
- 2016: USGS STAR Award for development of Landscape Science initiative in USGS
- 2016: John L. Funk Award of Excellence, Missouri Chapter of the American Fisheries Society
- 2015: USGS STAR Award in the Cooperative Research Units for outstanding performance
- 2014: USGS STAR Award in the Cooperative Research Units for outstanding performance
- 2013: USGS STAR Award in the Cooperative Research Units for outstanding performance
- 2012: USGS STAR Award in the Cooperative Research Units for outstanding performance
- 2012: Letter of Appreciation from the Executive Office of the President, Office of Science and Technology Policy for contribution to the National Climate Assessment Technical Input on Biodiversity, Ecosystems, and Ecosystem Services
- 2012: Outstanding Graduate Professor, Department of Fisheries and Wildlife Sciences, MU
- 2011: USGS STAR Award in the Cooperative Research Units for outstanding performance
- 2010: USGS STAR Award in the Cooperative Research Units for service
- 2010: USGS STAR Award in the Cooperative Research Units for outstanding performance
- 2010: Best Professional Presentation, Kansas Chapter of the AFS
- 2009: USGS STAR Award in the Cooperative Research Units
- 2009: Finalist, Outstanding Biology Graduate Faculty Award, KSU
- 2009: Invited speaker, Natural Resources Ecology and Management, Iowa State University
- 2008: USGS STAR Award in the Cooperative Research Units
- 2008: Certificate of Appreciation, Education Section, American Fisheries Society
- 2007: USGS STAR Award in the Cooperative Research Units
- 2007: Best Professional Presentation, Kansas Chapter of the AFS
- 2006: USGS STAR Award for outstanding performance
- 2005: USGS STAR Award for outstanding performance
- 2005: Cooperative Research Units Leadership Development Program
- 2003: Selected as 1 of 2 Biological Resources Discipline posters from Western Region, USGS to be presented at the Program Coordinators-Regional Executives Meeting, Reston, VA
- 2000: Outstanding Ph.D. student, Dept. of Wildlife and Fisheries Sciences, SDSU
- 1999: Honorable Mention, Best Student Poster, Midwest Fish and Wildlife Conference, Chicago, IL
- 1999: Honorable Mention, Best Student Poster, 129<sup>th</sup> Annual American Fisheries Society Meeting, Charlotte, NC
- 1998: Skinner Memorial Award, American Fisheries Society
- 1998: Honorable Mention, Best Student Presentation Award, Southern Division AFS Mid-Year Year Meeting, Lexington, KY
- 1998: Oklahoma Chapter AFS Jimmie Pigg Student Travel Award
- 1997: Skinner Memorial Award Honorable Mention, American Fisheries Society
- 1996: Best Student Presentation, OK-TX joint AFS Annual Meeting, Pottsboro, TX

## **Invited Speakers and University Seminars:**

2016: Department of Watershed Sciences, Utah State University

2016: USGS, Columbia Environmental Science Center

2016: Natural Resources Ecology and Management, Iowa State University

2015: Global Inland Fisheries Conference, United Nations, Rome

2015: USGS, Columbia Environmental Science Center

2014: Department of Zoology, Southern Illinois University

2014: University of Arizona

2013: Department of Fisheries and Wildlife, Michigan State University

2013: Missouri S & T University

2012: Glen Canyon Dam Adaptive Management Program Technical Working Group Meeting

2011: Annual Meeting of the Texas Cooperative Fish and Wildlife Research Unit

2009: Kansas Engineering Conference

2009: Natural Resources Ecology and Management, Iowa State University

2007: University of Kansas Field Station and Ecological Reserves Seminar Series

2005: Keynote Speaker, Kansas Chapter of the American Fisheries Society Annual Meeting

2005: The Ohio State University, School of Natural Resources, Departmental Seminar Series

# **Presentations at Professional Society Meetings**

Craig has been lead or coauthor on over 375 presentations at professional society meetings such as state, regional, and international American Fisheries Society meeting, the World Fisheries Congress, Society of Freshwater Science, Global Inland Fisheries Conference, and the American Water Resources Association.

## **Teaching**

## Instructor of Record:

2019: Perspectives for Emerging Professionals (FW 8001), Univ. of Missouri

2016: Future of Fisheries (FW 8001), University of Missouri (MU)

2012, 2014, 2018: Advanced Fisheries Science (FW 8001), University of Missouri (MU)
2004-2008: Advanced Fisheries Science (BIOL 890), Kansas State University (KSU)

2004-2008: Fisheries Management (BIOL 696), KSU

2006: Food Webs (BIOL 890), KSU

2001-2002: Environmental Conservation (WL 110), SDSU

#### **Current Graduate Students:**

Hadley Boehm, Ph.D. expected 2023 Michael Moore, Ph.D. expected 2021 Michael Thomas, M.S. expected 2020 Nick Sievert, Ph.D. expected 2020 John Brant, M.S. expected 2019 Corey Dunn, Ph.D. expected 2019 Landon Pierce, Ph.D. expected 2019 Emily Pherigo, M.S. expected 2019

## Post Doctoral Research Associates and Staff

Post docs:

Garth Lindner, 2014-present Ralph Tingley, 2017-present

Staff:

Emily Tracy-Smith, Sr. Research Specialist, 2011-present Brandon Brooke, Sr. Research Technician, 2015-present Tyler Arnold, Sr. Research Technician, 2019-present

#### Past Post Docs and Research Staff:

1. Dr. Allison Pease, 2010-2012

Topic: Effects of climate change on fish and fish habitat Current Employment: Assistant Professor, Texas Tech University.

2. Dr. Karthik Masagounder, 2010-2012

Topic: Validation of an Asian carp bioenergetics model

Current position: Biologist, Evonics Inc.

3. Dr. Michelle Staudinger, 2011-2014

Topic: Effects of climate change on biodiversity

Current Employment: Science Coordinator, USGS Northeast Climate Science Center.

4. Dr. Jacob Westhoff, 2012-2014

Topic: Effects of climate change on stream temperature and smallmouth bass Current Employment: Native Fish Research Biologist, Missouri Department of Conservation.

5. Dr. Katy Klymus, 2012-2014

Topic: Use of eDNA as an assessment tool for Asian carp detection Current Employment: Ecologist, USGS, Columbia Environmental Research Center.

6. Dr. Damon Krueger, 2014

Topic: Effects of climate change on stream fish in the Northeast US Current Employment: Quality Assurance Engineer, Ford Motor Company.

7. Mr. Dan Whiting, 2010-2013

Topic: Translocation of humpback chub in Grand Canyon Current Employment: High school biology teacher, Harrisburg, Missouri

8. Mr. Ryan Lueckenhoff, 2013-2015

Topic: Effects of dissolved oxygen on fishes in the Osage River Current Employment: Private Lands Specialist, Missouri Department of Conservation

9. Dr. Kristen Bouska, 2014 - 2015

Topic: Effects of climate change on river floodplains

Current Employment: Ecologist, USGS, Upper Midwest Environmental Science Center

10. Dr. James Whitney, 2014 - 2015

Topic: Effects of climate change on inland fisheries

### **Past Graduate Students:**

- 1. Makinster, A. 2006. Ecology of flathead catfish in the Kansas River. M.S. thesis, Kansas State University.
  - Current position: Fisheries Biologist, Arizona Game and Fish Department
- 2. Fischer, J. 2007. Structural organization of Great Plains stream fish assemblages: Implications for sampling and conservation. M.S. thesis, Kansas State University. Current position: Post-Doctoral Researcher, North Carolina State University
- 3. Eitzmann, J. 2008. Spatial habitat variation in a Great Plains river: effect on the fish assemblage and food web structure. M.S. thesis, Kansas State University. Current position: Mineral extraction consultant, Nevada
- 4. Pitts, K. 2008. Assessing threats to native fishes in the Lower Colorado River Basin. M.S. thesis, Kansas State University.
  - Current position: Post-doctoral research associate, University of Missouri
- 5. Schloesser, J. 2008. Large river fish community sampling strategies and fish associations to engineered and natural river channel structures. M.S. thesis, Kansas State University. Current position: Fish Biologist, US Fish and Wildlife Service, Wisconsin
- 6. Bouska, W. 2008. Road crossing design and their impact on fish assemblages and geomorpholgy of Great Plains streams. M.S. thesis, Kansas State University. Current position: Biologist, US Fish and Wildlife Service, Missouri
- 7. Shardlow, M. 2009. Factors affecting detectability and distribution of the North American river otter. M.S. thesis, Kansas State University.

  Current position: Wildlife Diversity Biologist, Nevada Department of Wildlife
- 8. Severson, Andrea. 2010. Thesis: Effects of zebra mussel invasion in fish and invertebrates in a Great Plains reservoir. M.S. thesis, Kansas State University. Current position: Biologist, Bureau of Land Management, Nebraska
- 9. Spurgeon, Jonathan. 2012. Thesis: Translocation of humpback chub (Gila cypha) and foodweb dynamics in Grand Canyon National Park tributary streams. M.S. thesis, University of Missouri.
  - Current position: Ph.D. student, University of Nebraska-Lincoln
- 10. Fischer, Jason. 2012. Thesis: Effects of sand dredging on fish and fish habitat in a large river. M.S. thesis, Kansas State University.
  - Current position: Ecologist, US Geological Survey, Michigan
- 11. Harris, Jason. 2013. Thesis: Habitat selection, movement, and home range of largemouth bass (*Micropterus salmoides*) following a habitat enhancement project in Table Rock Lake, Missouri. M.S. thesis, University of Missouri.
  - Current position: Fish Biologist, Minnesota Department of Natural Resources
- 12. Sievert, Nick. 2014. Thesis: An assessment of stream fish vulnerability and an evaluation of conservation networks in Missouri. M.S. thesis, University of Missouri. Current position: PhD student, University of Missouri
- 11. Faulkner, Jake. 2015. Thesis: Multi-scale Resource Selection of Niangua Darters in the Osage River Basin, Missouri. M.S. thesis, University of Missouri Current position: Chief, Operating Permits, Water Protection Program, Missouri Department of Natural Resources

- 12. Gerken, Joe. 2015. Dissertation: Fish and Invertebrate Community Response to Flow Magnitude in the Kansas River. PhD Dissertation, Kansas State University. Current position: University of Florida
- 13. Kleekamp, Ethan. 2016. Thesis: Streams in a changing landscape: Identifying candidate reference reaches to assess the physical and biotic integrity of Missouri's wadeable streams.M.S. thesis, University of Missouri
  Current position: Technician University of Missouri
- 14. Schwoerer, Jacob. 2016. Thesis: Assessing the vulnerability of stream communities and the consistency and use of biotic indices in least-disturbed streams. M.S. thesis, University of Missouri
  - Current position: Technician University of Missouri
- 15. Julia Guyton. 2017. Evaluating sampling methods and investigating distribution and richness of fish and amphibians in Missouri wetlands. M.S. thesis, University of Missouri Current position: Ducks Unlimited, Missouri
- 16. Zach Morris. 2018. Determining electrofishing immobilization thresholds of Smallmouth Bass, Flathead Catfish, and Blue Catfish. M.S. thesis, University of Missouri Current position: Consulting Firm, Missouri
- 17. Elisa Baebler. 2018. Habitat selection and movement by Spotted Bass and Shorthead Redhorse downstream of a hydropeaking dam in Missouri. M.S. thesis, University of Missouri
  - Current position: Research Specialist, University of Missouri

#### **Publications**

**Books** 

Paukert, C. P., and G. Scholten, editors. 2009. Paddlefish Management, Propagation, and Conservation in the 21<sup>st</sup> Century: Building from 20 years of Research and Management. American Fisheries Society, Bethesda, Maryland.

# Book chapters

- Paukert, C. P., and \*J. Spurgeon. 2017. Age structure. Pages 221 to 232 in M. Quist and D. Isermann, editors. Age and growth of fishes: principles and techniques. American Fisheries Society, Bethesda, Maryland.
- Paukert, C. P and D. Galat. 2010. Large warmwater rivers. Pages 699-730 in: W. A. Hubert and M. C. Quist, editors. Inland Fisheries Management in North America, third edition. American Fisheries Society, Bethesda, Maryland.
- Isermann, D. and C. P. Paukert. 2010. Regulating harvest. Pages 185-212 in: W. A. Hubert and M. C. Quist, editors. Inland Fisheries Management in North America, third edition. American Fisheries Society, Bethesda, Maryland.
- \*Gerken, J.., and C. Paukert. 2009. Habitat threats to paddlefish. Pages 173-184 *in*: C. P. Paukert and G. Scholten, editors. Paddlefish management, propagation, and conservation in the 21<sup>st</sup> century: building from 20 years of research and management. American Fisheries Society, Bethesda, Maryland.

- Hansen, K., and C. Paukert. 2009. Current management of paddlefish sport fisheries. Pages 277-290 *in* Paukert, C. P., and G. Scholten, editors. Paddlefish Management, Propagation, and Conservation in the 21<sup>st</sup> Century: Building from 20 years of Research and Management. American Fisheries Society, Bethesda, Maryland.
- Peterson, J. T., and C. P. Paukert. 2009. Data conversion methods for various sampling methods. Pages 194-214 *in*: S. A. Bonar, D. W. Willis, and W. A. Hubert, editors. Standardized sampling methods for fishes in North America.
- Quinn, S. P., and C. P. Paukert. 2009. Recreational and commercial fisheries for centrarchids. Pages 312-339 *in*: S. J. Cooke and D. P. Phillip, editors. Ecological Diversity of Centrarchid Fishes: Basic and Applied Perspectives. Blackwell Science.
- Paukert, C. P., and J. M. Long. 2004. GIS applications in reservoir fisheries. Pages 85-112 *in* W. L. Fisher and F. J. Rahel, editors. Geographic information systems in fisheries. American Fisheries Society, Bethesda, Maryland.

#### Peer-reviewed

- \*denotes graduate student/post doc; \*\*denotes undergraduate student
- Counihan, T. D., I. R. Waite, A. F. Casper, D. L. Ward, J. S. Sauer, E. R. Irwin, C. G. Chapman, B. S. Ickes, C. P. Paukert, J. J. Kosovich, and J. M. Bayer. 2018. Can data from disparate long-term fish monitoring programs be used to increase our understanding of regional and continental trends in large river assemblages? PLoS ONE doi.org/10.1371/journal.pone.0191472.
- \*Dunn, C., B. Brooke, R. Hrabik, and C. Paukert. In press. Intensive sampling reveals underreported use of Great-River tributaries by large-river fishes in Missouri. Southeastern Naturalist.
- Long, J. M., J. S. Schooley, and C. P. Paukert. 2017. Long term movement and estimated age of a paddlefish in the Arkansas River Basin of Oklahoma. Southwestern Naturalist 62: 212-215.
- \*Harris, J. M., C. P. Paukert, S. C. Bush, M. J. Allen, and M. J. Siepker. 2017. Diel habitat selection of largemouth bass following woody structure installation in Table Rock Lake, Missouri. Fisheries Management and Ecology doi/10.1111/fme.12266.
- Paukert, C. P., A. J. Lynch, T. D. Beard Jr., Y. Chen, S. Cooke, M. J. Cooperman, I. G. Cowx, L. Ibengwe, D. M. Infante, B. J. E. Meyers, P. Hòa Nguyễn, and I. J. Winfield. 2017. Designing a global assessment of climate change on inland fish and fisheries: knowns and needs. Reviews in Fish Biology and Fisheries 27:393-409.
- Anderson, K. R., D. C. Chapman, T. T. Wynne, and C. P. Paukert. 2017. Assessment of phytoplankton resources suitable for bigheaded carps in Lake Michigan derived from remote sensing and bioenergetics. Journal of Great Lakes Research 43:90-99 https://doi.org/10.1016/j.jglr.2017.03.005
- \*Whitney, J. E., J. B. Whittier, C. P. Paukert, J.D. Olden, and A. L Strecker. 2017. Forecasted range shifts of arid-land fishes in response to climate change. Reviews in Fish Biology and Fisheries 27:1-17.
- Myers, B.E., A. J. Lynch, D. B. Bunnell, C. Chu, J. A. Falke, R. P. Kovach, T. J. Krabbenhoft, T. J. Kwak, and C.P. Paukert. 2017. Global synthesis of the projected and documented effects of climate change on inland fishes. Reviews in Fish Biology and Fisheries 27:339-361.

- Wagner, T., S. Midway, J. Whittier, J. DeWeber, and C. Paukert. 2017. Annual changes in seasonal river water temperatures in the eastern and western United States. Water 9(2):90; doi:10.3390/w9020090.
- \*Whitney, J. E., J. B. Whittier, and C. P. Paukert. 2017. Environmental niche models for native and nonnative fishes in an arid-land riverscape and their similarity according to phylogeny and functionality. Ecosphere 27:463-479.
- \*Bouska, K., G. Lindner, C. Paukert, and R. Jacobson. 2016. Stakeholder-led science: engaging resource managers to identify science needs for long-term management of floodplain conservation lands. Ecology and Society 21(3):12.
- Kaemingk, M. A., J. C. Jolley, C. P. Paukert, D. W. Willis, K. Henderson, R. S. Holland, G. A. Wanner, and M. L. Lindvall. 2016. Common carp disrupt ecosystem structure and function through middle-out effects. Marine and Freshwater Research.
- Midway, S. R., T. Wagner, J. D. Zydlewski, B. J. Irwin, and C. P. Paukert. 2016. Transboundary fisheries science: Meeting the challenges of inland fisheries management in the 21st century. Fisheries 41:537-546.
- Paukert, C. P., B. Glazer, G. J. A Hansen, B. Irwin, P. C. Jacobson, J. L. Kershner, B. Shuter, J. Whitney, and A. Lynch. 2016. Adapting inland fisheries management to a changing climate. Fisheries 41(7):374-384.
- Lynch, A. J., B. J. E. Myers, C. Chu, L. A. Eby, J. A. Falke, R. P. Kovach, T. J. Krabbenhoft, T. J. Kwak, J. Lyons, C. P. Paukert, and \*J. E. Whitney. 2016. Climate change effects on North American inland fish populations and assemblages. Fisheries 41(7):346-361.
- Hunt, L. E. P. Fenichel, D. C. Fulton, R. Mendelsohn, J. W. Smith, T. D. Tunney, A. J. Lynch,C. P. Paukert, and J. Whitney. Accepted. Identifying alternate pathways for climate change to impact inland recreational fishers. Fisheries 41(7):362-373.
- \*Whitney, J. E., R. Al-Chokhachy, D. B. Bunnell, C. A. Caldwell, S. J. Cooke, E. J. Eliason, M. Rogers, A. Lynch, and C. Paukert. 2016. Physiological basis of climate change impacts on North American inland fishes. Fisheries 41(7): 332-345.
- \*Breeggemann, J. J., M. A. Kaemingk, T. J. DeBates, C. P. Paukert, J. R. Krause, A. P. Letvin, T. M. Stevens, D. W. Willis, and S. R. Chipps. 2016. Potential direct and indirect effects of climate change on a shallow natural lake fish assemblage. Ecology of Freshwater Fish 25:487-499.
- \*Sievert, N., Craig Paukert, Y. Tsang, and D. Infante. 2016. Development and assessment of indices to determine stream fish vulnerability to climate change and habitat alteration. Ecological Indicators: 403-416.
- \*Westhoff, J.T., C. Paukert, S. Ettinger-Dietzel, H. Dodd, and M. Siepker. 2016. Behavioural thermoregulation and bioenergetics of riverine smallmouth bass associated with ambient cool-period thermal refuge. Ecology of Freshwater Fish 25:72-85 doi: 10.1111/eff.12192.
- Anderson, K. R., D. C. Chapman, T. T. Wynne, K. Masagounder, and C. P. Paukert. 2015. Suitability of Lake Erie for bighead carps based on bioenergetics models and remote sensing. Journal of Great Lakes Research 41:358-366
- \*Klymus, K. E., C. A., Richter, D. C. Chapman, and C. P. Paukert. 2015. Quantification of eDNA shedding rates from invasive bighead carp *Hypophthalmichthys nobilis* and silver carp *Hypophthalmichthys molitrix*. Biological Conservation 183:77-84.

- \*Klymus, K. E., C. A., Richter, D. C. Chapman, and C. P. Paukert. 2015. A reply to Iversen et al.'s comment "Monitoring of animal abundance by environmental DNA An increasingly obscure perspective." Biological Conservation 192:481-482.
- \*Spurgeon, J.J., C. P. Paukert, B.D. Healy, M. Trammell, D. Speas, and E. Omana-Smith. 2015. Translocation of Humpback Chub into tributary streams of the Colorado River: implications for conservation of large river fishes. Transactions of the American Fisheries Society 144:502-514.
- \*Fischer, J., *C. Paukert*, and M. Daniels. 2015. Influence of riparian and watershed alterations on sandbars in a Great Plains river. River Research and Applications 31:1140-1150. DOI: 10.1002/rra.2811.
- \*Westhoff, J.T. and *C. Paukert. 2014*. Climate change simulations predict altered biotic response in a thermally heterogeneous stream system. PLoS ONE. e111438.
- \*Spurgeon, J. J., C. P. Paukert, B. D. Healy, C. A. Kelley, and D. P. Whiting. 2014. Can translocated native fishes retain their trophic niche when confronted with a resident invasive? Ecology of Freshwater Fish. DOI: 10.1111/eff.12160
- Whiting, D. P., C. P. Paukert, B. D. Healy, and \*J. J. Spurgeon. 2014. Macroinvertebrate prey availability and food web dynamics of non-native trout in a Colorado River tributary, Grand Canyon. Freshwater Science 33:872-884
- Paukert, C. P. 2014. Paddlefish. Pages 105-106 in Kansas Fishes Committee (editors), Kansas Fishes, University of Kansas Press, Lawrence.
- \*Pease, A.A., and C. P. Paukert. 2014. Potential impacts of climate change on growth and prey consumption of stream-dwelling smallmouth bass in the central United States. Ecology of Freshwater Fish 23:336-346
- Staudt, A., A. K. Leidner, J. Howard, K. A. Brauman, J. S. Dukes, L. Hansen, C. Paukert, J. Sabo, and L. A. Solórzano. 2013. The added complications of climate change: understanding and managing biodiversity, ecosystems, and ecosystem services under multiple stressors. Frontiers in Ecology and the Environment 11(9):494-501.
- \*Gerken, J., and C. Paukert. 2013. Fish community and habitat factors associated with the distribution of Topeka shiner (*Notropis topeka*) in Kansas streams. Journal of Freshwater Ecology 28: 503-516
- \*Fischer, J., C. Paukert, and M. Daniels. 2012. Fish community response to habitat alteration: impacts of sand dredging in the Kansas River. Transactions of the American Fisheries Society 141:1532-1544.
- \*Schloesser, J. T., C. P. Paukert, W. J. Doyle, T. D. Hill, K. D. Steffensen, and V. H. Travnichek. 2012. Fish assemblages at engineered and natural channel structures in the Lower Missouri River: implications for modified dike structures. River Research and Applications 28: 1695-1707.
- Staudt, A., A. Leidner, J. Howard, K. Brauman, J. Dukes, L. Hansen, C. Paukert, J. Sabo, L. Solorzano. 2012. Climate change effects on already stressed biodiversity, ecosystems, and ecosystem services. Pages 5-1 to 5-32 in: S. Carter, F. S. Chapin III, N. Grimm, P. Kareiva, M. Ruckelshaus, M. Staudinger, A. Staudt, B. Stein, editors. Climate Change Impacts on Biodiversity, Ecosystems, and Ecosystem Services: Technical Input to the National Climate Assessment. U.S. Geological Survey, Reston, VA.
- Cooke, S., C. Paukert, and Z. Hogan. 2012. Endangered river fish: Factors hindering conservation and restoration. Endangered Species Research 17:179-191.

- \*Schloesser, J. T., C. P. Paukert, W. J. Doyle, T. D. Hill, K. D. Steffensen, and V. H. Travnichek. 2012. Heterogeneous detection probabilities for imperiled Missouri River fishes: implications for large river monitoring programs. Endangered Species Research 16:211-224.
- Strecker, A., J. Olden, J. Whittier, and C. Paukert. 2011. Defining conservation priorities for freshwater fishes according to taxonomic, functional, and phylogenetic diversity. Ecological Applications 21:3002-3013.
- \*Jeffress, M., R., C. P. Paukert, J. B. Whittier, B. K. Sandercock, and P. S. Gipson. 2011. Scale-dependent factors affecting North American river otter distribution in the Midwest. American Midland Naturalist 166:177-193.
- \*Jeffress, M. R., C. P. Paukert, B. K. Sandercock, and P. Gipson. 2011. Factors affecting the detectability of river otters during sign surveys. Journal of Wildlife Management 75:144-150.
- Paukert, C.P., \*K. L. Pitts, J. B. Whittier, and J. D. Olden. 2011. Development and assessment of a landscape-level ecological threat index for the Lower Colorado River Basin. Ecological Indicators 11:304-310.
- Pool, T. K., J. D. Olden, J. B. Whittier, and C. P. Paukert. 2010. Environmental drivers of fish functional diversity and composition in the Lower Colorado River Basin. Canadian Journal of Fisheries and Aquatic Sciences 67:1791-1807.
- Bouska, W. W., T. Keane, and C. P. Paukert. 2010. The effects of road crossing design on geomorphology and classification of prairie streams. Journal of Freshwater Ecology 25:499-506.
- \*Eitzmann, J. L., and C. P. Paukert. 2010. Urbanization in a Great Plains river: effects on fishes and food webs. River Research and Applications 26:948-959.
- \*Bouska, W. W., and C. P. Paukert. 2010. Effects of visible implant elastomer mark color on the predation of red shiners by largemouth bass. Fisheries Management and Ecology 17:294-296.
- \*Bouska, W. W., and C. P. Paukert. 2010. Road crossing designs and their impact on fish assemblages of Great Plains streams. Transactions of the American Fisheries Society 139:214-222.
- \*\*White, K., \*J. Gerken, C. Paukert, and \*A. Makinster. 2010. Fish community structure in natural and engineered habitats in the Kansas River. River Research and Applications 26:797-805.
- \*Eitzmann, J. L., and C. P. Paukert. 2010. Longitudinal differences in habitat complexity and fish assemblage structure of a Great Plains River. American Midland Naturalist 163:14-32.
- \*Pullen, R. R., \*W. W, Bouska, S. Campbell, and C. P. Paukert. 2009. Intestinal helminths of *Cyprinella lutrensis* in Deep Creek, Kansas; prevalence and spatial distribution estimates for *Bothriocephalus acheilognathi* (the Asian fish tapeworm) and *Rhabdochona Canadensis*. Journal of Parasitology 95(5):1224-1226.
- \*Fischer, J.R., and C. P. Paukert. 2009. Spatial scale of stream fish assemblage and abundance estimates: effects of sampling effort, community structure, and habitat heterogeneity. Canadian Journal of Fisheries and Aquatic Sciences 66:277-290.
- Paukert, C. P., and \*A. S. Makinster. 2009. Longitudinal patterns in flathead catfish relative abundance and length at age within a large river: effects of an urban gradient. River Research and Applications 25:861-873.

- \*\*Brinkley, P., \*J. R. Fischer, and C. P. Paukert. 2008. Effects of fixative on total length of small bodies stream fishes. Journal of Freshwater Ecology 23:471-473.
- Davis, N, and C. P. Paukert. 2008. Impact of gravel bar scalping on Neosho madtom populations from the Lower Neosho River, Kansas. Journal of Freshwater Ecology 23:501-511.
- Doyle, W., C. P. Paukert, A. Starostka, and T. D. Hill. 2008. A comparison of four sampling gears used to collect shovelnose sturgeon in the Lower Missouri River. Journal of Applied Ichthyology 24:637-642.
- Paukert, C. P., \*J. Schloesser, \*J. Eitzmann, \*J. Fischer, \*K. Pitts, and \*D. Thornbrugh. 2008. Effect of instream sand dredging on fish communities in the Kansas River USA: current and historical perspectives. Journal of Freshwater Ecology 23:623-633
- \*Fischer, J. R., and C. P. Paukert. 2008. Habitat relationships with fish assemblages in least disturbed Great Plains regions. Ecology of Freshwater Fish 17:597-609.
- \*Fischer, J. R., and C. P. Paukert. 2008. Historical and current environmental influences of an endemic Great Plains fish. American Midland Naturalist 159:364-377.
- \*Makinster, A.S., and C. P. Paukert. 2008. Effects and utility of minimum length limits and mortality caps for flathead catfish in discrete reaches of a large prairie river. North American Journal of Fisheries Management 28:97-108.
- Petersen, J. H., D. L. DeAngelis, and C. P. Paukert. 2008. Developing bioenergetics and life history models for rare and endangered species. Transactions of the American Fisheries Society 137: 244-253.
- \*\*Eitzmann, J. L., A. S. Makinster, and C. P. Paukert. 2007. Distribution and growth of blue sucker in a Great Plains, USA river. Fisheries Management and Ecology 14:255-262.
- Paukert, C. P., and J. H. Petersen. 2007. Simulated effects of temperature warming on rainbow trout and humpback chub in the Colorado River, Grand Canyon. Southwestern Naturalist 52:232-242.
- Paukert, C. P., M. McInerny, and R. Schultz. 2007. Current and historical black bass regulations in North America. Fisheries (Bethesda) 32(2): 62-72.
- Franssen, N. R., K. B. Gido, C. S. Guy, J. A. Tripe, and S. J. Schrank, T. R. Strakosh, K. N. Bertrand, C. M. Franssen, K. L. Pitts, and C. P. Paukert. 2006. Effects of floods and intermittence on fish assemblages in a prairie stream. Freshwater Biology 51:2072-2086.
- Paukert, C. P., L. G. Coggins, and C. F. Flaccus. 2006. Distribution and movement of humpback chub in the Colorado River, Grand Canyon, based on recaptures. Transactions of the American Fisheries Society 135:539-544.
- Whittier, J. B., C. P. Paukert, and K. Gido. 2006. Development of an Aquatic GAP for the Lower Colorado River Basin. Maxwell et al., editors. Gap Analysis Bulletin No. 14 USGS/BRD/Gap Analysis Program. Moscow, Idaho.
- Paukert, C. P., D. L. Ward, P. J. Sponholtz, and K. D. Hilwig. 2005. Effects of repeated hoopnetting and handling on bonytail chub. Journal of Freshwater Ecology 20:649-653.
- Petersen, J. H., and C. P. Paukert. 2005. Development of a bioenergetics model for humpback chub and evaluation of water temperature changes in Grand Canyon, Colorado River. Transactions of the American Fisheries Society 134:960-974.
- Phelps, Q.E., M.J. Ward, C.P. Paukert, S.R. Chipps, and D.W. Willis. 2005. Biotic and abiotic correlates with black bullhead population characteristics in Nebraska Sandhill lakes. Journal of Freshwater Ecology 20:295-302.

- Paukert, C. P. 2004. Comparison of electrofishing and trammel netting variability for sampling native fishes. Journal of Fish Biology 65:1643-1652.
- Paukert, C. P., and R. S. Rogers. 2004. Factors affecting condition of flannelmouth sucker in the Colorado River, Grand Canyon, Arizona. North American Journal of Fisheries Management 24:648-653.
- Paukert, C. P., D. W. Willis, and M. A. Bouchard. 2004. Movement, home range, and site fidelity of bluegills in a Great Plains lake. North American Journal of Fisheries Management 24:154-161.
- Paukert, C. P., and D. W. Willis. 2004. Environmental influences on largemouth bass *Micropterus salmoides* populations in shallow Nebraska lakes. Fisheries Management and Ecology 11: 345-352.
- DeBates, T.J., C. P. Paukert, and D. W. Willis. 2003. Fish community responses to the establishment of a piscivore, northern pike *Esox lucius*, in a Nebraska Sandhill lake. Journal of Freshwater Ecology 18:353-359.
- \*\*Olson, N. W., C. P. Paukert, D. W. Willis, and J. A. Klammer. 2003. Prey selection and diets of bluegills *Lepomis macrochirus* with differing population characteristics in two Nebraska natural lakes. Fisheries Management and Ecology 10:31-40.
- Paukert, C. P., and D. W. Willis. 2003. Aquatic invertebrate assemblages in shallow prairie lakes: fish and environmental influences. Journal of Freshwater Ecology 18:523-536.
- Paukert, C. P., and D. W. Willis. 2003. Population characteristics and ecological role of northern pike in shallow Nebraska natural lakes. North American Journal of Fisheries Management 23:313-322.
- Paukert, C. P., W. Stancill, T.J. DeBates, and D. W. Willis. 2003. Predatory effects of northern pike and largemouth bass: bioenergetic modeling and 10 years of fish community sampling. Journal of Freshwater Ecology 18:13-24.
- Roush, K. D., C. P. Paukert, and W. Stancill. 2003. Distribution and movement of juvenile paddlefish in a mainstem Missouri River reservoir. Journal of Freshwater Ecology 18:79-88.
- Paukert, C. P., and D. W. Willis. 2002. Seasonal and diel habitat selection of bluegills in a shallow natural lake. Transactions of the American Fisheries Society 131:1131-1139.
- Paukert, C. P., D. W. Willis, and R. S. Holland. 2002. Sample size requirements for *in situ* vegetation sampling in shallow Nebraska natural lakes. North American Journal of Fisheries Management 22:1329-1333.
- Paukert, C. P., D. W. Willis, and D. W. Gabelhouse, Jr. 2002. Effect and acceptance of bluegill length limits in Nebraska natural lakes. North American Journal of Fisheries Management 22:1306-1313.
- Stancill, W., G. R. Jordan, and C. P. Paukert. 2002. Seasonal migration patterns and site fidelity of adult paddlefish in Lake Francis Case, Missouri River. North American Journal of Fisheries Management 22:815-824.
- Paukert, C. P., and T. A. Wittig. 2002. Applications of multivariate statistical methods in fisheries. Fisheries (Bethesda) 27(9):16-22.
- Willis, D. W., C. P. Paukert, and B. G. Blackwell. 2002. Biology of white bass in eastern South Dakota glacial lakes. North American Journal of Fisheries Management 22:627-636.
- Paukert, C. P., D. W. Willis, and J. A. Klammer. 2002. Effects of predation and environment on quality of yellow perch and bluegill populations in Nebraska sandhill lakes. North American Journal of Fisheries Management 22:86-95.

- \*\*Harrington, J. C., C. P. Paukert, and D. W. Willis. 2001. Pumpkinseed population characteristics in Nebraska Sandhill lakes. Transactions of the Nebraska Academy of Sciences 27:25-30.
- \*\*Heikes, B. L., C. P. Paukert, and D. W. Willis. 2001. Lentic green sunfish populations in Nebraska sandhill lakes. Journal of Freshwater Ecology 16:367-374.
- Paukert, C.P., and D. W. Willis. 2001. Comparison of exploited and unexploited yellow perch populations in Nebraska sandhill lakes. Fisheries Management and Ecology 8:533-542.
- Paukert, C. P., D. W. Willis, and A. L. Glidden. 2001. Growth, condition, and mortality of black crappie, bluegill, and yellow perch in Nebraska Sand Hills lakes. Great Plains Research 11:261-274.
- Paukert, C. P., P. J. Chvala, B. L. Heikes, and M. L. Brown. 2001. Effects of implanted transmitter size and surgery on survival, growth, and wound healing of bluegill. Transactions of the American Fisheries Society 130:975-980.
- Paukert, C. P., and W. L. Fisher. 2001. Characteristics of paddlefish in a southwestern U.S. reservoir, with comparisons between lentic and lotic populations. Transactions of the American Fisheries Society 130:634-643.
- Paukert, C. P., J. A. Klammer, R. B. Pierce, and T. D. Simonson. 2001. An overview of northern pike regulations in North America. Fisheries 26(6):6-13.
- Paukert, C. P., and W. L. Fisher. 2001. Spring movements of paddlefish in a prairie reservoir system. Journal of Freshwater Ecology 16:113-124.
- Paukert, C.P., and W.L. Fisher. 2000. Abiotic factors influencing summer distribution and movement of male paddlefish in a prairie reservoir. Southwestern Naturalist 45:133-140.
- Paukert, C. P., and W. L. Fisher. 1999. Evaluation of paddlefish length distributions and catch rates in three mesh sizes of gill nets. North American Journal of Fisheries Management 19:599-603.
- Paukert, C. P., and J. M. Long. 1999. New maximum age of bigmouth buffalo, *Ictiobus cyprinellus*. Proceedings of the Oklahoma Academy of Sciences 79:85-86.

### **Grants Received**

- Paukert, C. P., and R. Tingley. Developing Adaptation Strategies and Replacement Costs for Recreational and Tribal Fisheries. U.S. Geological Survey, Climate Adaptation Science Center, \$342,887 (2017-2021)
- Paukert, C. P., and G. Lindner. Potential for conservation lands in Middle Mississippi River floodplains to mitigate flood flows for ecosystem services. U.S. Geological Survey, Science Support Partnership, \$233,520 (2017-2020)
- Paukert, C. P., and M. Byrne. Winter aggregation potential of Grass Carp in Truman Reservoir. U.S. Geological Survey, Columbia Environmental Research Center, \$78,570 (2017-2020)
- Paukert, C. T. Moore, and D. Lobb. Habitat selection and dispersal of Lake Sturgeon in Missouri River tributaries: Implications for species recovery and a future recreational fishery. MO Department of Conservation \$570,777 (2016-2021).
- Paukert, C., and D. Lobb. Habitat use and distribution of lithophilic spawning and riffle fishes in the East Fork Black River. MO Department of Conservation \$139,701 (2016-2019).

- Paukert, C., E. Tracy-Smith, and J. Persinger. Fish community response to stream flow alterations in wadeable Missouri streams. MO Department of Conservation \$549,409 (2015-2019).
- Paukert, C., Z. Ford, and A. Turner. Determining electrofishing immobilization thresholds of Smallmouth Bass, Blue Catfish and Flathead Catfish: A critical Step to develop a standardized sampling protocol. MO Department of Conservation \$366,542 (2015-2019).
- Paukert, C. Assessing the impact of climate change on global inland fisheries. U.S. Geological Survey, National Climate and Wildlife Science Center \$262,011 (2014-2016).
- Paukert, C. R. Jacobson, and K. Lubinski. Science to inform management of floodplain conservation lands under non-stationary conditions. U.S. Geological Survey, Northeast Climate and Wildlife Science Center \$165,678 (2014-2016).
- Paukert, C., D. Infante, J. Stewart, T. Wagner, and J. Whittier. A decision support mapper for conserving stream fish habitats of the Northeast Climate Science Center region. U.S. Geological Survey, Northeast Climate and Wildlife Science Center \$199,881 (2013-2015).
- Paukert, C. Developing measures of vulnerability to climate change and disturbance of aquatic communities in Heartland Network national parks. U.S. Geological Survey/National Park Service, Natural Resources Preservation Program. \$147,761 (2013-2016).
- Paukert, C. Linking thermal and dissolved oxygen dynamics to river flow in the Lower Osage River, Missouri. MO Department of Conservation \$265,555 (2013-2018).
- Paukert, C., and E. Tracy-Smith. Assessment of ecological flow data. MO Department of Conservation \$140,224 (2013-2015).
- Paukert, C. Conservation and management of Missouri's mid-sized rivers. MO Department of Conservation \$390,093 (2013-2018).
- Paukert, C., J. Whittier, and A. Rosenberger. Development of reference reaches for Missouri streams. MO Department of Natural Resources \$219,548 (2013-2016).
- Whittier, J. B., and C. P. Paukert. Developing stream temperature and flow models: identification of gaps in the distribution and availability of stream temperature and flow data. U.S. Geological Survey, Northeast Climate Change and Wildlife Science Center. \$12,500 (2012-2013).
- Whittier, J. B., and C. P. Paukert. Development of stream temperature models for selected Missouri streams. Missouri Department of Conservation. \$217,472 (2012-2015).
- Paukert, C. P., and L. Eggert. Validation of environmental DNA as a tool for Asian carp detection. U.S. Geological Survey. \$135,326 (2012-2014).
- Paukert, C. P., and L. Eggert. Evaluation of environmental DNA as a tool for Asian carp detection. U.S. Geological Survey. \$137,317 (2012-2013).
- Paukert, C. P. Assessing the impact of climate change on biodiversity. U.S. Geological Survey, National Climate Change and Wildlife Science Center. \$400,517 (2011-2013).
- Paukert, C. P., and J. Westhoff. Thermal conditions and stream habitat associations for fishes at Ozarks National Scenic Riverways. U.S. Geological Survey/National Park Service, Natural Resources Preservation Program. \$123,000 (2011-2013).
- Paukert, C. P. The role of tributaries on ecosystem recovery of the Missouri River. US Geological Survey, Science Support Program. \$145,318 (2011-2014).
- Paukert, C. P. Ecological flow linkages in Missouri. Missouri Department of Conservation \$106,039 (2011-2013).

- Paukert, C. P. Distribution and habitat selection of largemouth bass related to artificial habitat structures in Table Rock Lake. Missouri Department of Conservation \$156,839 (2011-2013).
- Paukert, C. P. Invasive bighead and silver carps and the Great Lakes: evaluation of alternative natural food sources for the invading carp. U.S. Geological Survey \$271,406 (2010-2012).
- Paukert, C. P., J. B. Whittier, J. Millspaugh, and R. Gitzen. Evaluation of Humpback Chub Translocations and Native Fish Community Restoration in Grand Canyon Tributaries. National Park Service, Grand Canyon National Park \$90,510 (2010-2013).
- Paukert, C., J. Kershner, D. Infante, S. Hostetler, J. Whittier, L. Johnson, L. Wang, T. Wagner, P. Ferreri, J. Olden, P. Jacobson, D. Pereira, and G. Whelan. Managing the nations fish habitat at multiple spatial scales in a rapidly changing climate. U.S Geological Survey, National Climate Change and Wildlife Science Center. \$2,618,531 (\$636,862 to MU) (2009-2012).
- Paukert, C. P., J. B. Whittier, and J. D. Olden. Conservation planning for fishes in the Upper Colorado River Basin. U.S. Geological Survey, National Biological Information Infrastructure \$779,585 (\$542,780 to MU) (2009-2013).
- Paukert, C. P. Competition between native and non-native fishes in Bright Angel Creek: implications for humpback chub recovery. U.S. Geological Survey/National Park Service, Natural Resources Preservation Program. \$210,000 (2009-2012).
- Paukert, C. P., and M. Daniels. Sand dredging effects on fishes and fish habitat in the Kansas River. Kansas Department of Wildlife and Parks. \$97,341 (2009-2011).
- Paukert, C. P., and M. Daniels. Seasonal fish assemblages and habitat near Bowersock Dam: implications for fish passage. Kansas Department of Wildlife and Parks. \$95,931 (2009-2011).
- Paukert, C. P., and J. B. Whittier. Evaluation of the success of humpback chub translocations in Shinumo Creek. National Park Service, Grand Canyon National Park \$17,684 (2009-2010).
- Paukert, C. P., J. D. Olden, and J. B. Whittier. Development and validation of models to assess the threat to freshwater fishes from environmental change and invasive species. U.S. Geological Survey, Status and Trends Program \$369,993 (2008-2011).
- Paukert, C. P., and J. Gerken. Factors influencing threatened and endangered fishes in the Great Plains. U.S. Fish and Wildlife Service. \$91,149 (2008-2013).
- Paukert, C. P. Effects of zebra mussels on invertebrate and fish abundance, and growth of age-0 largemouth bass: five years after invasions. Kansas Department of Wildlife and Parks. \$30,000 (2008-2010).
- Paukert, C. P. Recruitment of Kansas River fishes. Kansas Department of Wildlife and Parks. \$100,000 (2007-2012).
- Paukert, C. P. Pilot project: inventory and assessment of road-stream crossings for aquatic organism passage. Kansas Department of Transportation. \$115,461 (2006-2009).
- Paukert, C. P., and J. B. Whittier 2006. Development of conservation priorities to protect biodiversity of fishes in the Lower Colorado River Basin. US Geological Survey, National Biological Information Infrastructure. \$314,703 (2006-2009).
- Paukert, C. P. Population dynamics of Kansas River fishes. Kansas Department of Wildlife and Parks. 163,976 (2006-2008).

- Paukert, C. P. Evaluation of sampling protocols used to determine the status and trends of rare and endangered Missouri River fishes. US Geological Survey, Science Support Program. \$103,684 (2005-2008).
- Paukert, C. P., and J. B. Whittier 2005. Determining the influence of current and historic flow variation on native fish species occurrences in the Verde River Basin. US Geological Survey, National Biological Information Infrastructure. \$30,001 (2005-2006).
- Paukert, C. P., and J. B. Whittier 2005. Modeling fish species occurrences in the Verde River basin. US Geological Survey, National Biological Information Infrastructure. \$104,322 (2005-2006).
- Paukert, C. P. Status of blue suckers in the Kansas River. Kansas Department of Wildlife and Parks. 14,975 (2005).
- Paukert, C. P. 2004. Native fish conservation in the Great Plains. Turner Enterprises, Incorporated. 100,000 (2005-2006).
- Paukert, C. P. 2004. Identification of data gaps in published and unpublished literature on fishes in the Lower Colorado River. US Geological Survey, National Biological Information Infrastructure. \$54,290 (2004-2005).
- Paukert, C. P. 2004. Evaluation of trophy potential for flathead catfish in the Kansas River. Kansas Department of Wildlife and Parks. \$136,547 (2004-2006).
- Paukert, C. P., P. J. Sponholtz, and D. L. Ward. 2003. Effects of handling on bonytail. U. S. Geological Survey, Southwest Biological Science Center, Grand Canyon Monitoring and Research Center, Flagstaff, Arizona. \$14,356 (2003-2004).
- Paukert, C. P., and D. W. Willis. 2001. Seasonal food habits of fish in Nebraska Sandhill Lakes. Federal Aid Project Number F-118-R Job Number 2, Segment 4, 5, and 6, Lincoln. \$146,978.
- Paukert, C. P., and D. W. Willis. 2000. Bluegill telemetry and habitat use in Pelican Lake. Nebraska Game and Parks Commission, Federal Aid Project Number F-118-R Job Number 1, Segment 3 and 4, Lincoln. \$141,074.

Revised December 2018