

**Desert Fishes Council 56th Annual Symposium, 2024
Grand Junction, CO, USA**

SHORT PROGRAM



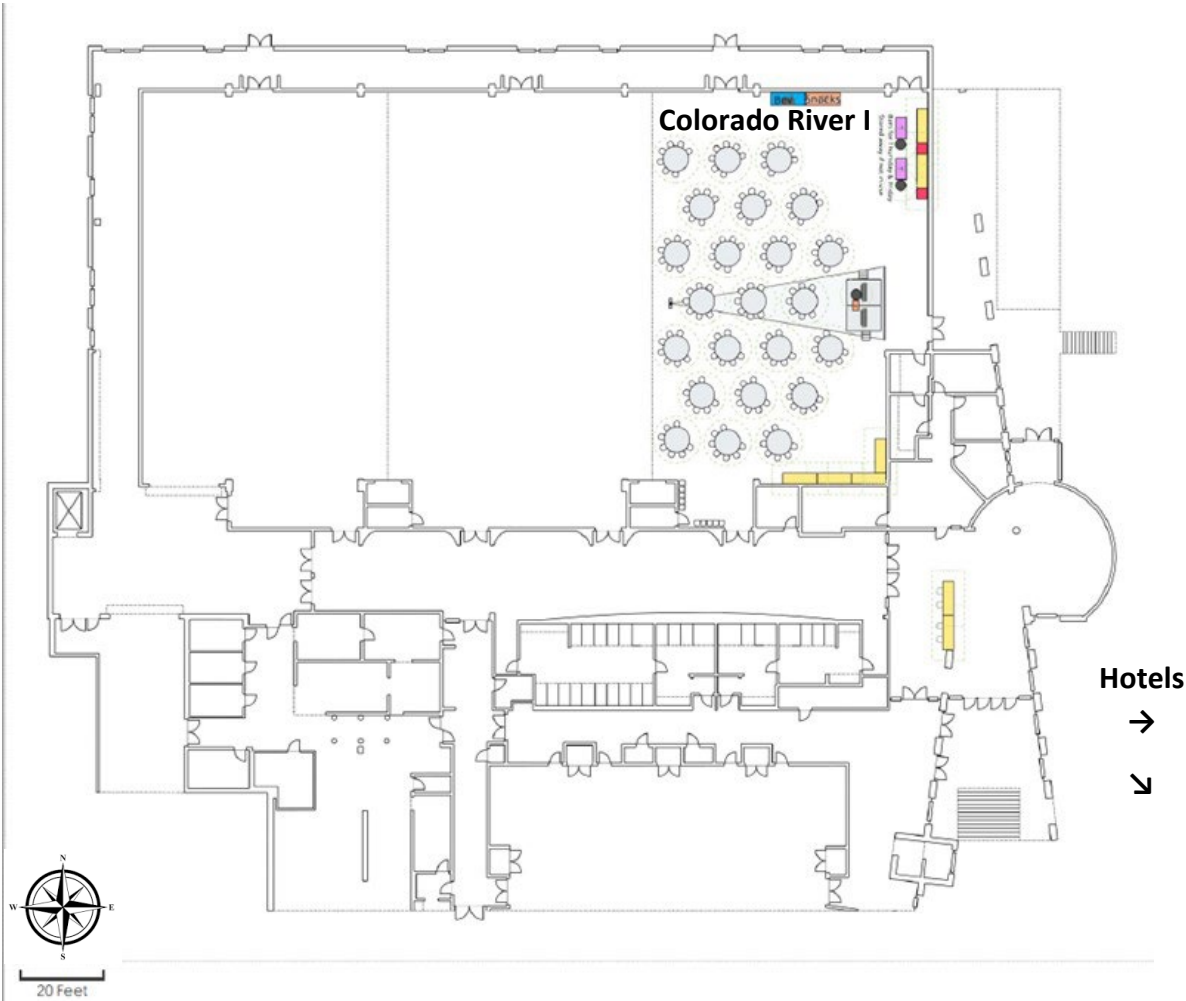
Artwork by Lindsey Elkins

**THANKS TO LOCAL HOSTS & MEETING ORGANIZERS
MELISSA TRAMMELL, DAVE SPEAS, & JENN LOGAN!**

Keep up with DFC business & news:

1. Sign in to Google Groups.
2. Search for the group: Desert Fishes Council Group or desertfishes@googlegroups.com
3. Click the group
4. Join group

Grand Junction Convention Center layout: all DFC events will be held in Colorado River I (upper right).



Parking:

- Free underground
- Free outside on south side

WEDNESDAY NOVEMBER 20 – GRAND JUNCTION CONVENTION CENTER LOBBY

16:00-18:00: Registration

THURSDAY NOVEMBER 21 – GRAND JUNCTION CONVENTION CENTER COLORADO RIVER I

07:45-08:15: **Registration in the Lobby & coffee in Colorado I**

Opening formalities

08:15-08:30: Welcome – **Michael Schwemm**, President; **Melissa Trammell, Dave Speas and Jenn Logan**, Local Hosts

Special Session – Dave Speas, moderator

08:30-08:45: Grand Rivers: Challenges & opportunities in native fish conservation in the Upper Colorado River basin (2024 Area Report) – **Dave Speas**

08:45-09:00: Status & conservation of Upper Colorado River basin fishes – **Kevin Bestgen, Koreen Zelasko**

09:00-09:15: Increasing native fish survival with a fish-friendly canal screen: an Upper Colorado River basin success story – **Cat Adams, Kevin Bestgen, David Speas, Mark McKinstry**

09:15-09:30: If you build it, will they pass? A systematic evaluation of fish passage efficiency for three large-bodied warm-water fishes – **Kayla Kelley***, **Eliza Gilbert, Casey Pennock, Mark McKinstry, Peter Mackinnon, Scott Durst, Nathan Franssen**

** This presentation is under consideration for the Carl L. Hubbs Award ↑*

09:30-09:45: Translocation in a fragmented river provides demographic benefits for imperiled fishes – **Casey Pennock, Brian Healy, Matthew Bogaard, Mark McKinstry, Keith Gido, Nate Cathcart, Brian Hines**

09:45-10:00: If you build it, can they get there? Managing flows & habitats to improve recruitment of wild Razorback Sucker, *Xyrauchen texanus* – **M. Tildon Jones, Kevin Bestgen, David Speas, Matthew Breen, Christian T. Smith, Robert Schelly, Michael Partlow, Saidee Hyder**

10:00-10:15: **COFFEE BREAK**

10:15-10:30: Management of Smallmouth Bass in the Upper Colorado River basin: past, present, & future – **Katherine Lawry, Christian Smith**

THURSDAY NOVEMBER 21 – GRAND JUNCTION CONVENTION CENTER COLORADO RIVER I

- 10:30-10:45: Flow spikes reduce Green River smallmouth bass reproductive success – **Kevin Bestgen, Edward Kluender, Matthew Haworth, Ben Applegate, Tildon Jones**
- 10:45-11:00: Evaluation of post-stocking re-encounters of an endangered fish using a large, multi-agency database to inform recovery – **Casey Pennock, Dave Speas, Gary Thiede, Christopher Michaud**
- 11:00-11:15: Shifting the Bonytail management mindset toward innovation in the Upper Colorado River basin – **Koreen Zelasko, Zane Olsen, Jared Smith, Brian Scheer, Ricardo Romero**
- 11:15-11:30: Remote PIT tag detections improve precision of mark-recapture parameter estimates for Humpback Chub *Gila cypha* in the Upper Colorado River basin. – **Zachary Ahrens, Brian A. Hines, Travis A. Francis, Kevin R. Bestgen, Gary C. White, David W. Speas**
- 11:30-11:45: Colorado Pikeminnow Population Trends in the Colorado River. – **Darek Elverud**
- 11:45-12:15: The Palisade High School Fish Hatchery Partnership. The many benefits of partnering directly with Colorado River communities to build trust & achieve long-term conservation goals... ownership for all – **Mike Gross**

12:15-14:00: LUNCH BREAK

Student Awards Session – **Pilar Rinker, moderator**

Student Presentations under consideration for **THE ROBERT RUSH & FRANCES HUBBS MILLER AWARD**

- 14:00-14:15: Genetic evaluation of refuge populations of Desert Pupfish (*Cyprinodon macularius*) – **Casandra Manuelitio, Megan Osborne, Tom Turner**

Student Presentations under consideration for **THE CARL L. HUBBS AWARD**

- 14:15-14:30: Characterizing river metabolism & resource availability across a gradient of flow alteration in desert rivers to inform native fish management – **Chloe Lyles, Phaedra Budy, Charles Yackulic, Casey Pennock**
- 14:30-14:45: Assessment of predator naiveté for an insular fish species: the White Sands Pupfish, *Cyprinodon tularosa* – **Molly Johnson, Brian Wisenden, Craig Stockwell**
- 14:45-15:00: Odonate predation on *Cyprinodon nevadensis shoshone* – **Bridger Scraper, Sekhar M. A., Brian Wisenden, Craig Stockwell**

THURSDAY NOVEMBER 21 – GRAND JUNCTION CONVENTION CENTER COLORADO RIVER I

- 15:00-15:15: Abundance & detection correlates for Ash Meadows speckled dace across a heterogenous desert riverscape – **Jacob Wolff, Michael Schwemm, Ambre Chaudoin, Michael Bower, Kevin Guadalupe, Joshua Perkin**
- 15:15-15:30: Genetic diversity & introgression in the Yaqui catfish (*Ictalurus pricei*) population from Arroyo Cajón Bonito, Mexico – **Alexandre Gutiérrez-Barragán, Alejandro Varela-Romero, Francisco Javier García-De León, Mariana Mateos, José Manuel Grijalva-Chon, John Carlos Garza, José Raúl Romo-León**
- 15:30-15:45: **COFFEE BREAK**
- 15:45-16:00: Seasonal movements of invasive Channel Catfish, *Ictalurus punctatus*, in the San Juan River, New Mexico & Utah – **Keegan Epping, Keith Gido, John Cleveland, Sophia Bonjour, Rachel Grey, Tracy Diver, Stephani Clark Barkalow, Casey Pennock, Justin Furby**
- 16:00-16:15: Evaluating seasonal variation in basal resource use and trophic niche space among four prairie river fishes – **Wade Wilson, Jane Rogosch, Scott Collins, Bart Durham**
- 16:15-16:30: Comparing field based temperature standards to laboratory derived standards for Bluehead Sucker, Flannelmouth Sucker & Roundtail Chub larvae – **Darian Woller, Tawni Riepe, Dana Winkelman**
- 16:30-16:45: Gila Topminnow (*Poeciliopsis occidentalis*) demographics (2016-2023) in the Santa Cruz River, Arizona – **Matthew Mayer, Peter Reinthal**
- 18:00-20:00: *Evening Social in Colorado River I*

08:00-09:30: **Poster Session with coffee & snacks**

Student Posters under consideration for **THE PHIL PISTER POSTER AWARD**

1. Integrated monitoring strategies for Independence Valley Speckled Dace, *Rhinichthys osculus lethoporus*, conservation: An applied approach for optimizing long-term species status assessment – **Lindsey Roberts, James Peterson**
2. Insect communities & richness differences in treated vs. untreated sagebrush wet meadows, Year 1– **Sophia Reggiani, Susan Washko**
3. Energetic implications for Guadalupe Bass, *Micropterus trecullii*, management under a projected climate change scenario – **Gabriel Murillo, Preston Bean, Nate Smith, Mitch Nisbet, Matthew Troia**
4. Environmental DNA tools to inform conservation of desert fishes at Ash Meadows National Wildlife Refuge – **Dana Shellhorn, Caren S. Goldberg, Jesse L. Brunner, Mary Sterling, David Navarro, Ambre Chaudoin, Michael Schwemm, Kevin Guadalupe, Michael Bower**
5. Species composition of the Verde River: Analyzing competition against Sonora Suckers – **Sydney Wooldridge, Reagan Doss**

General Posters

6. Virgin River Chub *Gila seminuda* long-term monitoring in the Moapa (Muddy) River, Nevada, 2007–2024 – **Justin Handtke, Brandon Albrecht, Ron Rogers, Michael Schwemm**
7. Do remnant Peppered Chub (*Macrhybopsis tetranema*) constitute a panmictic population? – **Guilherme Caeiro-Dias, Megan Osborne, Tom Turner**
8. Using underwater telemetry to monitor spatial & temporal patterns of invasive Northern Pike in Utah Lake – **Wesley Franklin, Brian Kesner, Paul Reap**
9. Applications & capabilities of passive integrated transponder tags – **Alex Marini, Brian Kesner, Paul Marsh**
10. Hoop net capture efficiencies of previously pit tagged fish using submersible antenna detections – **Pilar Rinker, David Ward, Michael Pillow**
11. No bones about it: Population structure of Bonytail in High Levee Pond – **Tiffany Love-Chezem, Ethan Rasset, Aaron Meuhler**
12. We are going to need a bigger Razorback: Flathead age structure & predation potential in the Lower Colorado River – **Tiffany Love-Chezem, Chase Ehlo, Ethan Rasset, Aaron Meuhler**
13. Independent Evaluation of Voda IQ PIT Tags in Fisheries Research – **Brian Beckley, Josh Maurskas, Armando Piccinini**

FRIDAY NOVEMBER 22 – GRAND JUNCTION CONVENTION CENTER COLORADO RIVER I

General Session – **Koreen Zelasko**, moderator

09:30-09:45: Working to save groundwater-dependent organisms in the face of the resource-extraction boom in the Amargosa River basin – **Patrick Donnelly**

09:45-10:00: Dissolved oxygen depletion for invasive fish eradication – **David Ward, Shaula Hedwall**

10:00-10:15: Destruction is easy, but can we undo degradation & improve riverscapes? – **Skyler Hedden, Julie Carter, George Cathey**

10:15-10:30: Simulations of YY Red Shiner *Cyprinella lutrensis* Introductions for nuisance population mitigation in a southwestern stream – **Chad Teal, Erin Landguth, Casey Day, Javan Bauder, Scott Bonar, Daniel Schill, Christopher Jenney, Heidi Blasius, Peter Reinthal**

10:30-10:45: Success, setbacks & perseverance: Native fish conservation efforts in the Blue River, Arizona 2012-2024 – **Brian Hickerson, Kent Mosher, Paul Reap**

10:45-11:00: Current status & management of Sonora Chub in Arizona – **Alex Cameron, Brian Hickerson**

11:00-13:00: **LUNCH BREAK**

- **STUDENT NETWORKING EVENT** (free lunch for students & mentors, organizer Heidi Blasius)

General Session – **Alex Cameron**, moderator

13:00-13:15: Where have all the catfish gone? – **David Rogowski, Dale Fonken**

13:15-13:30: Multi-model analysis reveals habitat & conservation needs of two Rio Grande fishes – **Ryan Friebertshauser, Kevin Bestgen**

13:30-13:45: Advancing conservation, avoiding extinction: an update from the U.S. Fish & Wildlife Service on west Texas fishes – **Maritza Mallek**

13:45-14:00: Post stock monitoring of hatchery reared suckers in Upper Klamath Lake, Oregon – **Josh Gondek, McKenzie Wasley**

14:00-14:15: Seasonal movements between mainstem & tributaries may facilitate the persistence of Roundtail Chub & Flannelmouth Sucker within an altered stream system – **Annika Walters, Alisa Magruder, Gabriel Barrile, Stephen Siddons, John Walrath**

14:15-14:30: Little Colorado River Humpback Chub Monitoring: stories from the early years – **Chuck Minckley, Dean Hendrickson, David Ward**

14:30-14:45: **COFFEE BREAK**

FRIDAY NOVEMBER 22 – GRAND JUNCTION CONVENTION CENTER COLORADO RIVER I

- 14:45-15:00: Large-scale monitoring of Humpback Chub in Grand Canyon: Determining key vital rates & informing broader conservation insights – **Benjamin Miller, Lindsay Hansen, Maria Dzul**
- 15:00-15:15: Long-term temporal sampling reveals upstream-downstream differences in genetic variation & effective population size in Rio Grande silvery minnow – **Megan Osborne, Guilherme Caeiro-Dias, Thomas Turner**
- 15:15-15:30: Quantification of genome-wide inbreeding in Bonytail (*Gila elegans*) & preliminary evaluation of reproductive success in Cibola High Levee Pond – **Guilherme Caeiro-Dias, Megan Osborne, Tom Turner**
- 15:30-15:45: Documenting native desert fish conservation in Arizona – **Wesley Franklin**
- 15:45-16:00: Genetic diversity of *Gila eremica* lineage populations in Sonora, Mexico – **Carlos Alonso Ballesteros-Córdova, Alejandro Varela-Romero, Gorgonio Ruiz-Campos, Lloyd T. Findley, José Manuel Grijalva-Chón, Luis Enrique Gutiérrez-Millán**
- 16:00-16:15: Population status of native & non-native turtles along the effluent-dependent Santa Cruz River in Pima County, AZ – **Michael Bogan, Miguel Grageda, Woods Nystedt, Isabel Ross, Sydney Ingham, Conor Varela Handley**
- 16:15-16:30: **BREAK**
- 16:30-17:30 *Annual DFC business meeting & Executive Committee elections (see meeting agenda on next page) in Colorado River I*
- 18:00-21:00: *Banquet in Colorado River I*

DESERT FISHES COUNCIL 56TH ANNUAL – BUSINESS MEETING AGENDA
NOVEMBER 22, 2024, 16:30-17:30

- I. Welcome & call to order – **Michael Schwemm**, President
 - a. Discussion & approval of 2023 Business Meeting minutes
 - b. President’s report
- II. Executive Committee Reports
 - a. Immediate Past President – Kevin Wilson
 - b. Treasurer, Executive Secretary – Stewart Reid
 - i. Alternative signatory on financial accounts
 - c. Membership Secretary – Melissa Trammell
 - d. Member-at-Large – Lindsey Elkins
 - i. 2024 Grants
 - ii. Nominations & voting:
 - 1. Member at Large
 - 2. Areas Coordinator
 - e. Student awards – Kevin Wilson
 - f. Outreach Coordinator – Heidi Blasius
 - g. Program Secretary – Chris Hoagstrom
 - h. Proceedings Editor & Data Management, Webmaster – David Rogowski
- III. Old Business
 - a. 2025 Meeting – Michael Schwemm
 - b. Call for additional old Business – Michael Schwemm
- IV. New Business
 - a. Shining Star Award to Chuck Minckley – Michael Schemm
 - b. Call for additional new business – Michael Schwemm
- V. Adjourn

SATURDAY NOVEMBER 23 – GRAND JUNCTION CONVENTION CENTER COLORADO RIVER I

08:00-08:30: **Morning coffee**

General Session – **Cat Adams**, moderator

08:30-08:45: Captive Devils Hole Pupfish at the Ash Meadows Fish Conservation Facility – **Desiree Moore, Olin Feuerbacher, Jennifer Gumm, Daniel Villanueva, Michael Schwemm, Ambre Chaudoin, Kevin Wilson, Jeffrey Goldstein, John Wullschleger, Brandon Senger, Bryce Donaghue**

08:45-09:00: What's up with the Devils Hole Pupfish: spring & autumn counts highest in over 20 years – **Kevin Wilson, Jeffrey Goldstein, John Wullschleger, Ambre Chaudoin, Olin Feuerbacher, Jennifer Gumm, Daniel Villanueva, Michael Schwemm, John Umek, Mark Hausner**

09:00-09:15: Ongoing restoration projects for the endangered Moapa dace (*Moapa coriacea*) & Virgin River chub (*Gila seminuda*) at the Moapa (Muddy) Warm Springs, Clark County, Nevada – **David Syzdek, Michael Schwemm**

09:15-09:30: Virile crayfish in the Lower Colorado River basin: detection, distribution, & interactions with native fishes – **Matthew Troia**

09:30-09:45: The value of experiential learning: Examples from aquatic ecology research in southwest CO – **Susan Washko**

09:45-10:00: Influences of geologic history & climatic factors on the phylogeographic structure of two sucker species in Arizona's Little Colorado River drainage – **Derek Houston, Ashley Hurst, Cristian Román-Palacios, Mark Grover, Dennis Shiozawa**

10:00-10:15: **COFFEE BREAK**

10:15-10:30: Environmental correlates for abundance, temporary emigration, & detection of Ash Meadows Amargosa Pupfish – **Joshua Perkin, Jacob Wolff, Michael Schwemm, Ambre Chaudoin, Michael Bower, Kevin Guadalupe**

10:30-10:45: Assembling a fish fauna: insights for conservation – **Chris Hoagstrom**

10:45-11:00: Bluehead & Flannelmouth sucker restoration in the Big Sandy River, Wyoming – **John Walrath, Stephen Siddons, Beth Bear, Joe Gillis, Matt Joki, Jessica Lockwood, Robert Keith, Kevin Gelwicks**

11:00-11:15: Planned Restoration of the Crystal Spring Outflow Ecosystem at Ash Meadows National Wildlife Refuge – **Ambre Chaudoin, Michael Bower, Shannon Hurn, Christa Weise, Kevin Desroberts**

SATURDAY NOVEMBER 23 – GRAND JUNCTION CONVENTION CENTER COLORADO RIVER I

11:15-11:30: Demographics & monitoring of repatriated Razorback Sucker in Lake Mohave – **Allison Downey, Brian Kesner, Paul Marsh**

11:30: **56th Annual Meeting Adjourned – enjoy the field trips & have a great year!**

FIELD TRIPS

Sunday Nov 24

08:00-13:00: Details available at the meeting. Signup sheets will be provided

- 1. Upper Colorado River Endangered Fish Recovery Program – Fish screens and Fish Passage (USFWS)**
- 2. Upper Colorado River Endangered Fish Recovery Program – Fish Hatchery (USFWS)**
- 3. Palisade High School Razorback Sucker Fish Hatchery (tentative).**
- 4. Self-guided Walking Tour – Connected Lakes, map provided.**