

## Daily Schedule of talks with full co-author list and title (\* indicates student speaker).

### Monday March 1, 2021

8:30-12:00PM	Leaders: Michael Callahan, Elissa Chott, and Torrey Ritter and Moderator Lily Haines	Workshop: Beavers, Restoration, and Effective Conflict Resolution
2:00-3:00PM	Andrea Reid and Zachary Penney	Plenary: Meeting at the Confluence: Indigenous and Western Science Coexistence in Modern Fisheries
3:15-4:00PM		Panel Discussion

### Tuesday March 2, 2021

#### Symposium: Crossing Disciplines in Large River Restoration (Clark Fork River Restoration)

10:00-10:15 AM	Joe Griffin	Silver Bow Creek: 100 years as a copper mine — Can it be restored?
10:15-10:30 AM	Nathan Cook	The highs and lows of upper Clark Fork River trout populations
10:30-10:45 AM	Rafael Feijo de Lima; Colman, B. ; Cross, W.; Gold-Quiros, T.; Ruiz-Sanchez, J. Shaw, J.; Valett, M.; White, D.; Witzowskey, C.	Disentangling the impacts of multiple stressors in the Upper Clark Fork food webs
10:45-11:00 AM	Erick Greene	Ospreys as environmental sentinels
11:00-11:10AM	<b>BREAK</b>	
11:10-11:25AM	Will McDowell	Long Shot: the potential to restore fluvial native trout in a fragmented, contaminated basin
11:25-11:40AM	Michelle Terwilliger*; Floyd, T.M. ; Metcalf, E.C.; Mohr, J.J.	Collaboration on the Upper Clark Fork River: a case study from the Montana CREWS project
11:40-11:55AM	Alex Leone	Responding to public doubts: what about the habitat?
11:55-12:10PM	Arica Crootof	Restoring the Upper Clark Fork: integrating public perceptions of the Warm Springs ponds & conducting collaborative research for successful river restoration
12:10-12:30PM	<i>All available speakers</i>	<i>Didn't get your question answered? Want to chat with available speakers? Join the collaborative session</i>

12:30-1:30PM

**LUNCH**

**Tuesday Contributed Sessions**

1:30-1:45PM	Taylor Preul*; Verhille, C.; Bourret, S.	Validation of the use of behavioral assessments in identifying wild origin westslope cutthroat trout vulnerable to artificial selection at Sekokini Springs Hatchery, MT
1:45-2:00PM	Mike Siemiantkowski*; Guy, C.; Cox, T.; Williams, J.; Eckelbecker, R.; Glassic, H.; Lewis, M.; Maskill, P.; McGarvey, L.	A paradoxical knowledge gap in science for critically endangered fishes, species of special concern, and game fishes during the sixth mass extinction.
2:00-2:15PM	Kristen Cook*; Zale, A.; Stagliano, D.; Anderson, M.; Guy, C.; Albertson, L.	Reproductive phenology and hermaphroditism of western pearlshell mussels in two watersheds in Montana
2:15-2:30PM	David Stagliano; Anderson, M.; Cook, K.	Evaluating western pearlshell mussel populations for viability, reproduction and host fish glochidia Infestations across five watersheds in western Montana.
2:30-2:45PM	<b>BREAK</b>	
2:45-3:00PM	Sam Bourret	Illegal fish introductions in Montana: how can we stop the spread?
3:00-3:15PM	Mark Schnee; Bourret, S.; Clancy, N.; Boyer, M.	Recovery of freshwater invertebrates in alpine lakes and streams following eradication of nonnative trout with rotenone
3:15-3:30PM	Shannon Blackburn; Ruggles, M.; Radonski, E.; Olszewski, B.	Status of Burbot in the Yellowstone River from the Bighorn River to Park City, Montana
3:30-3:45PM	Jacob Williams; Holmquist, L.; Rhoten, J.; Grisak, G.	Using large scale PIT arrays to monitor native species movements in a large prairie stream tributary to the Missouri River
3:45-4:00PM	<b>BREAK</b>	
<b>Lightening Talks</b>		
4:00-4:10PM	Jared Krebs; Dalbey, S.	Status and future assessment of Burbot ( <i>Lota lota</i> ) in the Missouri River Drainage.
4:10-4:20PM	Hayley Glassic*; Driscoll, S; Guy, C; Koel, T	Presence of microplastics in the food web of the largest high-elevation lake in North America.
4:20-4:30PM	Kerrie Berger	Washoe Park Trout Hatchery- spawning overview 2020
4:30-4:40PM	Beth Gardner	Case study of six intentional migration barriers to protect cutthroat trout. Some lessons learned at what it takes to be successful

4:40-5:00PM

All available speakers

Want to chat with available speakers? Join the collaborative session.

### Wednesday March 3, 2021

11:00AM-12:00

**Business Meeting**

12:00-1:00PM

**LUNCH**

**Contributed Sessions**

1:00-1:15PM

Madeline Lewis\*; Guy, C.; Oldenburg, E.

Individual characteristics, population density, and environmental conditions explain temporal variation in out-migration dynamics of juvenile Bull Trout

1:15-1:30PM

Kadie Heinle\*; Al-Chokhachy, R.; Sepulveda, A.; Bouwes, N.; Verhille C.

Investigating the effects of streamflow and non-native Brown Trout (*Salmo trutta*) on native Yellowstone Cutthroat Trout (*Oncorhynchus clarkii bouvieri*) in Duck Creek, MT, USA

1:30-1:45PM

Colter Brown\*; Guy, C.; Webb, M.; Rhea, D.

Reproductive ecology of Mountain Whitefish in dissimilar populations

1:45-2:00PM

Robert Eckelbecker\*; Guy, C.; Schmetterling, D.; Heili, N.

Relative-condition equations for Montana fishes

2:00-2:15PM

Andriana Puchany\*; Zale, A.; Koel, T.; Shepard, B.

Status of Westslope Cutthroat Trout and Arctic Grayling following conservation translocations in Yellowstone National Park

2:15-2:30PM

**BREAK**

2:30-2:45PM

Dan Isaak; Young, M.

Factors contributing to present and future occurrence of relict headwater bull trout populations in the northern Rocky Mountains

2:45-3:00PM

Adam Sepulveda; Al-Chokhachy, R.; Laramie, M.

It's complicated...Environmental DNA as a predictor of trout and char abundance in streams

3:00-3:15PM

Robert Al-Chokhachy; Letcher, B.; Muhlfeld, C.; Dunham, J.; Hitt, N.; Roberts, J.; Schmetterling, D.

Factors driving the body size of trout species: beyond climate refuges and refugees

3:15-3:30PM

Kate Gaut; Sylte, T.; DeArment, J.; Thompson, M.

A Toolbox, Prybar, and Megaphone for your Fisheries Data: Don't Miss How We Built an User-friendly, Interactive, Cost-Efficient Reporting Platform Utilizing Data Visualizations, Dashboards, and Story Maps to Facilitate Analysis and Promote Sharing of Stream Temperature Data

3:30-3:45PM

**BREAK**

3:45-4:00PM	Mike Anderson	Montana DNRC habitat conservation plan riparian timber harvest monitoring
4:00-4:15PM	Andrew Lahr*; Eby, L.	Quantifying the effects of beaver dam analogs on fish habitat and communities
4:15-4:30PM	Franz Ingelfinger	A developing approach for restoring cottonwood communities from seed
4:30-4:45PM	Niall Clancy; Wolf, M.; Rosenthal, L.	Bull Trout passage at beaver dams in the Bitterroot and Flathead basins
4:45-5:00PM	Mike LeMoine; Eby, L.; Clancy, C.; Nyce, L.; Jakober, M.; Isaak D.	Landscape resistance mediates native fish species distribution shifts and vulnerability to climate change in riverscapes

5:00-5:15 PM

**BREAK**

### Thursday March 4, 2021

1:00-1:15PM	Donovan Bell*; Kovach, R.; Muhlfeld, C.; Schmetterling, D.; Whited, D.; Al-Chokhachy, R.; Lukacs, P.; Whiteley, A.	Past and future projected shifts in the occupancy of trout in Montana
1:15-1:30PM	Ryan Kovach; Leary, R.; Bell, D.; Painter, S.; Whiteley, A.	Genetic variation in westslope cutthroat trout reveals that widespread genetic rescue is warranted
1:30-1:45PM	Troy Smith*; Liermann, B.; Eby, L.	Natal stream characteristics associated with migratory Westslope Cutthroat Trout
1:45-2:00PM	Jeff Strait; Kovach, R.; Kardos, M.; Muhlfeld, C.; Amish, S.; Eby, L.; Boyer, M.; Lowe, W.; Luikart, G.	Genome-wide SNP analysis reveals loci linked to fitness-related traits in a Westslope Cutthroat x Rainbow Trout hybrid zone

2:00-2:15PM

**BREAK**

2:15-2:30PM	Amber Steed; Boyer, M.	Diversifying conservation and management of Westslope Cutthroat Trout in the upper Flathead River System
2:30-2:45PM	Anthony Dangora*; Barfoot, C.; Whiteley, A.; Eby, L.	Evaluating the effects of selective passage of Westslope Cutthroat Trout on non-native admixture in the Jocko River, MT over 15 years

2:45-3:00PM	<p>Matt Jaeger, Bateman, L.; Berry, J.; Breen, L.; Clancey, P.; Detjens, C.; Duncan, M.; Edgington, C.; Franklin, T.; Gander, T.; Gatlin, M.; Horton, T.; Hutchinson, P.; Koel, T.; Kovach, R.; Kreiner, R.; Kruse, C.; Larsen, N.; Leinonen, E.; Lodmell, A.; Lohrenz, T.; Luckenbill, P.; McCormack, M.; Olsen, J.; Painter, S.; Pipinich, C.; Spoon, R.; Stringer, A.; Thomas, N.; Whiteley, A.; Weinner, K.; Korb, N.</p>	<p>Westslope cutthroat trout conservation in the Missouri River headwaters</p>
3:00-3:15PM	<p>Brad Shepard; Delomas, T.; Campbell, M.; Kruse, C; Taper, M.; Zale, A.</p>	<p>Contributions, inbreeding, and outbreeding of wild- and hatchery-origin stocks of Westslope Cutthroat Trout released as eyed embryos into vacant habitat</p>
3:15-3:30PM	<p>Clint Muhlfeld; Kovach, R.; Strait J.; Leary, R; Allendorf, F.</p>	<p>What we've learned from 40 years of hybridization research in Montana</p>
3:30-3:50PM	<p><i>All available speakers</i></p>	<p><i>Want to chat with available speakers? Join the collaborative session.</i></p>

**4:00-5:00PM Awards Event (Student Scholarship, MTAFS Awards, and 50:50 Raffle Results)**

**Friday March 5, 2021**

8:30AM-12:00	<p>Leader: Joe Wheaton; Moderator: Adam Sepulveda</p>	<p>Workshop: Introduction to Low Tech Restoration</p>
1:00-3:00PM	<p>ExComm Meeting</p>	