

**MINUTES OF THE
MISSOURI CHAPTER OF THE AMERICAN FISHERIES SOCIETY
EXECUTIVE COMMITTEE MEETING**

**MISSOURI DEPARTMENT OF CONSERVATION
SPRINGFIELD REGIONAL OFFICE AUDITORIUM
28 AUGUST 2019**

ATTENDEES:

Andy Turner, President	Alex Prentice
Eric Rahm, President-Elect	Jen Girondo
Darby Niswonger, Treasurer	Brad Farwell
Brandon Baumhoer, Secretary	Blake Stephens
Clint Hale	Kat Lackman
Mary Scott	Emily Tracy-Smith

INTRODUCTIONS AND WELCOME

Andy Turner called the meeting to order at 1005. For those who were not in attendance, a WebEx option was available.

INFORMATION TECHNOLOGY COMMITTEE

Andy Turner reported that constant contact was routing emails for membership to the junk folder. Alex Prentice found a solution and corrected the issue.

CONTINUING EDUCATION COMMITTEE

Brad Farwell reported the committee is preparing for the MNRC job fair workshop. The committee is also trying to plan a few ½ day classes for the 2020 Southeast Association of Fish and Wildlife Agencies (SEAFWA) conference, which will be held in Springfield, Missouri.

ANGLERS WITH DISABILITIES COMMITTEE

Mary Scott announced that the committee has two fishing events planned. The first will be at the Rolla Lions Club on September 21st, 2019 from 0900-1200. The Wheeling Sportsman group will be assisting and providing lunch at 1200. The second event will take place at Meramec State Park on April 10th, 2020 from 0900-1200. Lunch will also be provided at 1200.

Mary also requested \$800.00 from the budget to purchase fish for an event.

LEGISLATIVE AND ENVIRONMENTAL CONCERNS COMMITTEE

Emily Tracy-Smith announced that she has become a board member for Stream Teams United. Emily said the board is meeting monthly and discussing issues of concern, which has been a beneficial experience.

Emily also reported the Conservation Federation of Missouri (CFM) Affiliate Summit will be held on September 12-13, 2019 at the capitol in Jefferson City, Missouri. The summit provides

good networking opportunities and workshops discussing legislative updates. Emily encourages all membership to attend.

MNRC STEERING COMMITTEE

Blake Stephens reported the Society of American Foresters will host the 2020 conference. Registration begins November 1st, with 1st call for paper on September 15th. MOAFS will have a booth, and will be looking for volunteers to work at the booth throughout the conference.

MOAFS will host the 2022 conference.

RIVERS AND STREAMS COMMITTEE

Eric Rahm announced Tom Boersig has agreed to take over as chair of the Rivers and Streams Committee. Eric will help Tom as needed.

The Missouri Stream Team in cooperation with MDC staff published a fact sheet entitled “Heads up on Low Head Dams” (Attachment 1). The fact sheet explains the concerns and dangers associated with low head dams.

Eric also announced, a celebration for 30th Anniversary of Missouri Stream Teams will be held at Echo Bluffs State Park. Planning for the event is not complete, but Eric will pass along information as he receives it.

STUDENT SUPPORT COMMITTEE

Jen Gironde is contacting student sub-units to encourage them to take advantage of upcoming scholarship opportunities this fall.

NEWSLETTER COMMITTEE

Emily Tracy-Smith reported the Newsletter Committee will publish a newsletter in the spring and winter. Emily urges membership to submit content for the newsletter.

TREASURER’S REPORT

Refer to Attachment 2.

SCHOLARSHIP SPONSORSHIP

Eric Rahm is searching for sponsorships to help supplement the student support money used to cover scholarship costs. Excom and committee members discussed multiple ways to get the word out to potential sponsors, including: social media, email contact lists, and word of mouth.

SES WEITHMAN AWARD

Andy Turner explained the SES Weithman Award is given to the best poster or presentation on socioeconomics at the MNRC. Traditionally, the scholarship is worth \$150.00 with MOAFS donating \$75.00 and the AFS Socioeconomic Section covering the remaining \$75.00. A brief written agreement is being constructed to specify the monetary responsibilities each section has for this award. The agreement will be signed by both MOAFS and the AFS Socioeconomic Section.

MEMBERSHIP APPRECIATION

The 2019 MOAFS Membership Appreciation Event will be located on the Eleven Point River. Details are listed below.

- September 14th, 11am start time
- Float Trip: Greer Crossing Access to Turner Mill South Access
- Potluck/Grill to follow, 6pm
- Lodging and camping available
- RSVP to Andy Turner @ andywturnerms@gmail.com

MOAFS FACEBOOK PRESENCE

Clint Hale is seeking out ideas for MOAFS to increase our facebook presence to reach a larger audience. Several ideas were discussed and are listed below:

- Purchasing promotional tools that help promote the MOAFS website and facebook page
- “Liking” other organizations with similar viewpoints
- Weekly postings
- Create an Instagram account to attract a younger audience

STUDENT SUB-UNIT VOLUNTEER OPPORTUNITY

Eric Rahm announced that a ladies fish for free day will be held on September 28th at Bennet Spring State Park. The event will also consist of knot tying, fly tying, cleaning and cooking fish demonstrations. Eric is reaching out to student sub-units in search for volunteers to help throughout the day.

ORGANIZATIONAL CHART UPDATES

Andy Turner presented an updated organizational chart. Upon review by excom and committee members, a few additional vacancies/changes were updated.

NEW BUSINESS

Clint Hale mentioned how difficult it has been to find members willing to nominate peers for awards. After some discussion, a few solutions were proposed to help persuade members to submit nominees. Simplifying the nomination form making it more generic and more user friendly, and sending out reminders for membership to view past award recipients and to nominate peers were both solutions discussed to boost nominations.

ACTION ITEMS

- Update award recipients on MOAFS website
- Data upkeep and continuous archiving
 - 2019 MNRC photos
 - Newsletter content
 - Any photos of relevance

ATTACHMENT 1
Heads Up on Low Head Dams Fact Sheet



Stream Team Academy Fact Sheet Series

- #1 Tree Planting Guide
- #2 Spotlight on Big Muddy
- #3 Lewis & Clark
- #4 Missouri Is Number One?
- #5 Responsible ATV Use
- #6 Headwater Streams
- #7 Whatology?
- #8 Exotic Does Not Mean Beauty
- #9 Wetlands
- #10 Stream Sedimentation
- #11 Emerald Ash Borer
- #12 Protecting Prairies & Streams
- #13 Aquatic Insects (Part 1)
- #14 Aquatic Insects (Part 2)
- #15 Aquatic Insects (Part 3)
- #16 Aquatic Insects (Part 4)
- #17 Aquatic Insects (Part 5)
- #18 Aquatic Insects (Part 6)
- #19 Aquatic Insects (Part 7)
- #20 Aquatic Insects (Part 8)
- #21 Freshwater Mussels
- #22 The Crayfishes
- #23 Where Does the Rain Go?
- #24 Rain Gardens
- #25 Native Plants
- #26 Invasive Species: Hydrilla
- #27 Invasive Species: Didymo
- #28 Invasive Species: Honeysuckle
- #29 The Properties of Water
- #30 Blue-Green Algae
- #31 Microplastics
- #32 Heads Up on Low Head Dams

Collect this entire educational series for future reference! Contact us at 1-800-781-1989 if you'd like copies of previous Fact Sheets and a binder for storing them.

HEADS UP ON LOW HEAD DAMS

An Educational Series For Stream Teams To Learn and Collect

By Ange Corson, MDC Streams Program Coordinator

A quaint mill dam on a flowing stream is reminiscent of a bygone era, back when mills were the community gathering place to get the latest local news and gossip while your grain was being milled. Not to mention swimming in the ponded backwaters of the dam or fishing in the waters below it on a hot summer day. What's not to like?

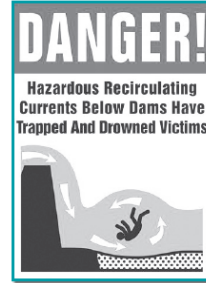
While mill and other types of low head dams are alluring and seem wistful and benign, they can have a more sinister side that is all too often overlooked. They are responsible for hundreds of drownings across the U.S., with numbers increasing since the last decade. Dams are not the only perpetrators though; there are many places in MO where low water crossings behave like dams and cause drownings, too. All told, they pose a threat to humans and aquatic resources. To understand why, we need to know how stream hydraulics interact with these structures.

Dam Dynamics:

Low head dams typically span the width of the stream channel and pool water upstream for a certain distance depending on their height from the bed of the stream. They are called run-of-the-river dams because the river can flow over them. They range from just a few feet high to ~25 ft. from the bed. Even though they allow water to pass over and/or through them, they do not allow for much sediment movement. This sediment stacks up, shallowing and widening the upstream pooled stream channel. Below the dam, the plunging effect of the water spilling over the top erodes the streambed, forming a scour pool directly below and just downstream of the dam.

Dam Dangerous!

The hydraulics below these structures are often referred to as backwash, rollers, boilers, or drowning machines. The water coming over them has an increased velocity from the drop and when it hits the downstream bed, it recirculates upstream towards the structure creating a



current that rolls continuously in an upstream direction. Imagine the current as being like a clothes dryer barrel, continuously spinning clothes down, up, over, and back down.

These currents can be strong enough to pin boats, trees, and people (with or without life jackets) underwater.

Dam Fish!

People are not the only things harmed by low head dams. Dams and some low water crossings can be significant barriers for aquatic organisms such as fish, amphibians, mussels, and other invertebrates. They inhibit their ability to access habitat, reproduce successfully, find food, or seek refuge when flow or water quality conditions change. This disturbs the stream's trophic energy flow, reducing the quantity and diversity of biota within.

Dam Removal?

It is essential to consult with appropriate agencies and professionals if considering dam removals. While dam



Niangua darter, a federally endangered species in Missouri affected by low head dams and some low water crossings.

removal seems like a simple solution, careful considerations need to be taken. Some considerations include:

- Many dams are privately owned, so locating owners and getting them to agree to removal can be a challenge;

(continued on back)

Stream Team Academy Fact Sheet #32

- Acquiring enough funding to remove them properly can be arduous;
- Some may have historical significance and need to follow State Historic Preservation Office rules before they can be altered or removed;
- Since many of these dams have been in place for decades, they may have accumulated large sediment slugs upstream of the dam.

Additionally, releasing the sediment downstream could cause issues for the stream and landowners as it pulses through the system over time. Conversely, when that slug of sediment above the dam is gone, the streambed is deeper, potentially making nearby streambanks more unstable. Measures may need to be taken to account for these possible concerns ahead of dam removals.

For low water crossings that function as a dam, they can be replaced with better low crossing designs that do not pose a human hazard and allow more conveyance under and over the crossing to pass water, sediment, and aquatic organisms. Although all of these removal projects can be expensive, the cost is usually outweighed by preventing drownings and potentially expensive liability.



Want to know more?

iowadnr.gov/portals/indnr/uploads/riverprograms/dmachine.pdf

iowarivers.org/wp-content/uploads/2016/04/iowa-low-head-dam-modification-success-stories.pdf

alleghenyfront.org/pennsylvania-is-leading-the-nation-in-dam-removals/

wfyi.org/programs/over-under-gone/television/over-under-gone-the-killer-in-our-rivers

americanrivers.org/threats-solutions/restoring-damaged-rivers/

Don't forget to send your questions to streamteam@mdc.mo.gov or call 1-800-781-1989.

Dam Retrofitting?

When dam removal is not an option, there are alternatives for retrofitting that are safer and more aquatic organism-friendly. Several states like Iowa and Pennsylvania are taking the lead in raising awareness and retrofitting dams. One popular alternative is creating rock rapids, which allows for a more gradual drop in slope over a longer distance of stream. These rapids are sometimes designed to provide recreational opportunities for kayakers and canoers as well.



Klondike Mill Dam on the Big Sioux River, retrofitted to create rock arch rapids; photo by the Iowa Department of Natural Resources.



ATTACHMENT 2
Treasurer's Report

Treasury Report--- August 2019

- General funds (checking and savings) total \$23,728.94

- 2019 MNRC
 - \$350 profit from the silent auction
 - \$575 from outdoor auction
 - \$430 from membership dues
 - \$75 Book

- Membership rebates from AFS—includes Chapter dues and rebate from parent society
 - \$720.55
 - In 2018, membership dues netted our chapter over \$2,000

- Donations
 - Stream Team 30th Anniversary Volunteer Banquet---\$250
 - 2020 AFS Catfish Symposium--\$500
 - MO State Student Sub-Unit support for National AFS meeting--\$320
 - Weithman Award--\$75

- Student Support funds \$116,679.27

Account	Balance as of 8/27/2019
General Funds	Total: \$23,728.94
MOAFS Savings	\$8,574.62
MOAFS Checking	\$15,056.19
MOAFS Special Projects Checking	\$98.13

Student Support Funds	Total: \$116,679.27
SSTF Money Market (Savings/ Buffer fund)	\$15,432.18
SSTF Checking	\$5,493.31
SSTF CDs (4 Total)	\$51,516.19
Stock Market Funds	\$44,237.59