

SDAFS RESERVOIR COMMITTEE
Meeting Minutes
2023 Spring Meeting
January 20, 2022 – 9:00 am to 2:00 pm
Norfolk, Virginia

Attendees:

Sean Kinney, Louisiana Department of Wildlife and Fisheries (*Chair*; Rep) – In-person
Jeremy Risley, Arkansas Game and Fish Commission (*Secretary-Treasurer*; Rep) – In-person
Jeremy Shiflet, Kentucky Department of Fish & Wildlife Resources (*Scholarship Chair*; *Webmaster*; Rep) – In-person
John Odenkirk, Virginia Department of Wildlife Resources (Rep) – In-person
Emilia Omerberg, Georgia Department of Natural Resources (Rep) – In-person
Lawrence Dorsey, North Carolina Wildlife Resources Commission (Rep) – In-person
John Hammonds, Tennessee Wildlife Resources Agency (Rep) – In-person
Amy Breedlove, South Carolina Department of Natural Resources (Rep) – In-person
Mark Rogers, Tennessee Tech University – In-person
Andrew Gable, Tennessee Tech University – In-person
Steve Owens, Virginia Department of Wildlife Resources – In-person
Adam Martin, Kentucky Department of Fish & Wildlife Resources – In-person
Dave Dreves, Kentucky Department of Fish & Wildlife Resources – In-person
Matthew Marshall, Alabama Department of Wildlife and Freshwater Fisheries – In-person
Maddy Ruble, Kentucky Department of Fish & Wildlife Resources – In-person
Ryan Jones, Mississippi Department of Wildlife, Fisheries, and Parks – In-person
Gene Gilliland, B.A.S.S. – In-person
Steve Sammons, Auburn University – In-person
Dustin Smith, West Virginia Department of Natural Resources – Virtual
Dan Shoup, Oklahoma State University – Virtual
Brett Miller, Kansas Department Wildlife and Parks – Virtual
Jim Garavaglia, Illinois Department of Natural Resources – Virtual
Casey Joubert, North Carolina Wildlife Resources Commission – Virtual

Introduction – Sean Kinney

Reservoir Committee (RC) chair Sean Kinney called the meeting to order at 9:00 am, welcomed the attendees, and passed out the agenda (see page 11).

Financial Report – Jeremy Risley

Secretary-Treasurer Jeremy Risley briefly updated the group on the current RC finances (see Page 12). **The beginning balance in January 2022 was \$20,357.57.** Account withdrawals included providing one \$500 Jenkins scholarship at the 2022 spring meeting, an award for outgoing Secretary/Treasurer Colton Dennis (\$122.27), and room fees for the 2022 SDAFS meeting (\$196.24). In addition, there was a \$4,430.16 decrease due to changes in mutual fund value and fees. **As a result, the RC's account balance at the end of December 2022 was \$15,143.34.** In addition, the Committee received a \$1,000 donation from the Bass Fishing Hall

of Fame, which the Committee used for the 2023 Robert M. Jenkins Memorial Reservoir Research Scholarship. The donation will show up in the following account balance. No questions were asked about the financial report. The Committee members approved the 2022 financial report with no objections.

2023 Jenkins Scholarship (Sponsored by the Bass Fishing Hall of Fame) – Jeremy Shiflet

The winner of the 2023 Robert M. Jenkins Memorial Reservoir Research Scholarship presented by the Bass Fishing Hall of Fame was Andrew Gable with Tennessee Tech University under Dr. Mark Rogers. Andrew’s research title: Characterizing Dietary Overlap Between Invasive Silver Carp (*Hypophthalmichthys molitrix*), and Native Gizzard Shad (*Dorosoma cepedianum*), in Kentucky and Barkley Reservoirs. **Andrew’s research objectives:** 1) Achieve a better understanding of contributors to habitat selectivity of Silver Carp, 2) further examine the composition of planktonic particles available for grazing in Kentucky and Barkley reservoirs, 3) identify selectivity for particle type and particle size by Silver Carp, and 4) compare the particle selectivity of Silver Carp to Gizzard Shad. Andrew provided the Committee with a short presentation on his research.



Sean Kinney (left; SDAFS RC President) presented Andrew Gable (middle) with a \$1,000 scholarship check for the 2023 Robert M. Jenkins Memorial Reservoir Research Scholarship along with Gene Gilliland (right) with Bass Fishing Hall of Fame.

Jenkins Scholarship Discussion – Sean Kinney and Jeremy Shiflet

During the 2022 summer meeting, the Committee passed a motion to open the Jenkins Scholarship nationwide with some limitations. The limitations are still being worked on at the moment. In addition, the Committee is looking into establishing an endowment to fund an annual \$1,000 scholarship with an additional \$500 travel stipend to come present at a Committee meeting. To make this work, the Committee’s accountant recommended having

\$37,000 so that the annual interest would support the scholarship without withdrawing from the principal.

Jeremy S. explained that the Committee received one qualified applicant for this year's scholarship. He has been distributing the scholarship announcement through various outlets and has streamlined the application; however, the Committee receives few applicants yearly. The discussion led to how to best get information out about the scholarship. Committee members suggested sending the announcement directly to schools, developing a directory for Universities with fisheries programs and their advisors, building a list of University researchers working on reservoirs, posting on the Texas A&M University's job board, figuring out the best media that fisheries students are using, national AFS newsletter, and developing a scholarship list server.

There was also a discussion about obtaining scholarship funding. Gene mentioned once the Committee finalizes the nationwide format, send it to him so he could pass it along to AFTCO for potential funding. Gene believed having the scholarship open nationwide and potentially having an endowment would be attractive to AFTCO. Lawrance briefly mentioned that the KVD Foundation might be the potential for scholarship funding. The foundation would give out \$15,000 during the upcoming Redcrest Bass Tournament on Lake Norman, with \$5,000 a piece going to education, habitat, and fish management. Gene mentioned the same foundation gave \$5,000 to the Oklahoma Department of Wildlife Conservation the previous year to buy F1 Bass, and after others heard about this, the funding eventually reached \$35,000. Mark mentioned reaching out to TVA for funding.

No action items were presented during this discussion.

SDAFS ExCom Update – Mark Rogers

Mark updated the Committee about the SDAFS ExCom. Mark mentioned they plan to continue communicating with the Fish Chiefs around the SDAFS to ensure the technical committees meet their state agency's purposes. Mark asked what the SDAFS ExCom could do for the RC. Sean mentioned receiving a list of the Fish Chiefs and planned to contact them for microplastic research funding. He said states could provide staff to collect water and fish samples or provide funding for sample processing. In addition, Sean mentioned that scholarship funding is getting more challenging, and maybe ExCom could help find donors.

No action items were presented during this discussion.

Website/Social Media – Jeremy Shiflet

Website chair Jeremy Shiflet reported to the RC that not much has changed over the last year. Jeremy S. has mainly been posting meeting minutes and scholarship information. If Committee members want something posted on the website, they should contact Jeremy S.

No action items were presented during this discussion.

State and Member Reports

Auburn University – Steve Sammons

- SD and NCAFS Reservoir Symposium is officially finished
- Alabama Bass Invasion Symposium would be occurring at this meeting, with a round table discussion at the end of the symposium to figure out where to go with the invasion.
- He is about to start a statewide crappie research project on 14 reservoirs across Alabama. They will conduct an age and growth study and evaluate the nine-inch statewide minimum length limit.

Mississippi – Ryan Jones

- They are looking at the catch rates on the popular crappie fisheries in the state. In addition, they have begun regulating the number of rods used for spider rigging. They are looking into the differences between using multiple rods vs. those trolling with one rod.
- They are working on different techniques to control and manage invasive plant species (alligator weed, hydrilla, water lettuce, water hyacinth, etc.) in Ross Barnett Reservoir.

Tennessee – John Hammonds

- They are working to understand the invasive carp movements in the Cumberland and Ohio Rivers drainages. They have found no natural reproduction of invasive carp in Tennessee using techniques like larval tows and eDNA. They hope the commercial fishing industry will impact the invasive carp populations.
- They are starting to stock Walleye in the main Tennessee River.
- Data shows that Alabama Bass are now in the Cumberland system.
- Alabama Bass genetics are taking over in Watts Bar Reservoir, a main stem Tennessee River reservoir with good Largemouth and Smallmouth Bass population. They are hybridizing with the Smallmouth Bass.
- They established a Yellow Perch creel limit and are evaluating the creel limit on one of their small impoundments where Yellow Perch are popular. It takes them about five years to reach 10 inches.
- They are still stocking Florida Bass in Lake Chickamauga, Nickajack, and Watts Bar. Also, they expanded to Fort Loudoun and Tellico Lakes. Everywhere they tested bass genetics on the Tennessee River, they found Florida Bass genetics.
- They stocked Lake Boone with 50,000 F1 Bass for a four-year study. As a result, they had about a 4% stocking contribution. This stocking coincided with a large-year class of Largemouth Bass produced after a drawdown. They will be looking at growth over the next three years.
- They are working with Mark Rogers at Tennessee Tech to evaluate Walleye Stockings in Lake Douglas, the only reservoir where natural reproduction occurs in Tennessee Lakes.
- Lots of funding is coming in for the Bill Dance Fishing Trail to provide intense fisheries management efforts and improvement accesses.

Georgia – Emilia Omerberg

- The University of Georgia is helping standardize survey protocols (electrofishing and gillnetting), which have not been updated since the 1990s.
- They completed an EPA lake assessment across the state and are revamping the state contaminate analysis protocols.
- The Walton greenhouse produced over 16,000 native plants for 14 waterbodies this year.
- They are becoming interested in the microplastic issue.

South Carolina – Amy Breedlove

- They are revamping their statewide black bass genetics program and will complete their collections in 2024.
- They are working on a large-scale habitat project, Lake Hartwell, which received funding from a large contamination settlement.
- They have fish habitats projects that should be occurring on Lake Murray, Lake Greenwood, and Santee Cooper.
- They are researching using stratified random vs. long-term sampling sites on Lake Murray.

Virginia – John Odenkirk

- They are still dealing with harmful algae bloom issues.
- They are stocking Saugeye in some of their small reservoirs.
- They are in the middle of their six-year F1 Bass stocking enhancement study.
- They are looking at Alabama Bass introgression in two of their major reservoirs.
- Dan Wilson is working on the trophy Striped Bass in Smith Mountain Lake and looking at the size structure of the Gizzard Shad.

Louisiana – Sean Kinney

- They switch from allozymes (livers) to microsatellites (fin clips) for genetics, giving them a better idea of their Florida Bass genetics. All the data is going through LSU.
- They have begun genetically selecting their hatchery Florida Bass broodstock. They plan to continue for consecutive years to maximize fish growth.
- They spend six million dollars annually on aquatic plant management and control.
- They have collected larval invasive carp during tows. The numbers were so high that they had to subsample them; however, they had not found any juvenile fish.
- They have placed transmitters in invasive carp along the coast to see if adults use the intercostal waterway.

North Carolina – Lawrence Dorsey and Casey Joubert

- They continue to work on the Alabama Bass invasion and are helping neighboring states with the same issue.

- They are about 95% complete with the statewide black bass genetics survey. They are looking at Florida vs. Largemouth Bass alleles and genetic typing (for example: is a Smallmouth Bass really a Smallmouth Bass, etc.)
- They continue to research F1 Bass stockings on a couple of their reservoirs. They plan five years of stockings and then five years of evaluations.
- They received a significant grant from AFTCO and Fish America Foundation to build a greenhouse to increase their growing capacity.
- They finished a three-year study on Hybrid Striped Bass in Lake Norman. They looked at movement and habitat use and compared it to the previously stocked Striped Bass. They have found that Hybrid Striped Bass did avoid the forebay area that the Striped Bass like to inhabit in the summer.
- They are working on a Monorid management plan and currently have an anglers survey to understand better the anglers fishing for them

Arkansas – Jeremy Risley

- They wrapped up our state reservoir black bass management plan. They used a stakeholder advisory committee to develop the key areas and goals during the plan's development.
- They will be completing our five-year statewide angler survey this year.
- They are wrapping up a year-long exploitation study on the state's three major Striped Bass fisheries.
- They have contracted the USACE-Lewisville Aquatic Ecosystem Research Facility to help develop the best methods for establishing native aquatic vegetation in three USACE reservoirs in the state.
- This year, they will complete habitat work on Beaver, Bull Shoals, and Norfork Lakes for the Bass Pro Shop/NFHP grant.
- They currently have an ongoing Bull Shoals Lake Walleye telemetry study that they are cooperatively working with Missouri to complete.
- The Arkansas Health Department has issued a mercury consumption advisory on Walleye over 18 inches for Bull Shoals and Norfork Lakes.

Kentucky – Jeremy Shiflet and Adam Martin

- They are working on habitat projects, with a couple funded through the National Fish Habitat Partnership. For example, they collaborated with the USACE on a large habitat project on Kentucky Lake and Lake Barkley.
- They have been working on updating their habitat equipment to be more efficient with their efforts and do bigger projects with fewer people
- They continue to use reef balls for fish habitat and shoreline stabilization. In addition, the USACE is developing a BMP model based on shoreline conditions to determine how to stabilize it best and prevent erosion while providing fish habitat.
- They are working on a statewide assessment of their Largemouth Bass genetics.
- They have been experimenting with bass and other centrarchids spawning habitats in Lake Barkley.

- They are still seeing a high commercial harvest of invasive carp in Kentucky Lake, and they believe it adds 13% to total mortality. They think commercial fishing may be unimportant in their long-term control efforts due to natural mortality if barriers are added

B.A.S.S. – Gene Gilliland

- 2023 Noreen Clough Memorial Scholarship for Females in Fisheries and Bass Fishing Hall of Fame Scholarship, who are fishermen and want to be practicing fisheries biologists, are available.
- Habitat grants (\$25,000) are available through AFTCO, which goes through B.A.S.S. Bass clubs and state chapters apply for these grants but must work with state agencies.
- The Bass Fishing Hall of Fame has a similar grant (\$25,000) for habitat that can be used to improve habitat for bass fishing, improve access, education, and fight invasive species.
- The Aquatic Plant Management Society has small grants (\$3,000) for projects for introducing native aquatic plants, controlling invasives, and educational programs about clean, drain, and dry.

Alabama – Matthew Marshall

- They are still monitoring for invasive carp in the Alabama River.
- They have an invasive species program working on the Tennessee River.
- They do not do any stockings of black bass in their public reservoirs.
- They are determining whether they want to continue conducting access point creel surveys moving forward after Auburn University evaluated the state's protocol.
- They found growth overfishing of Skipjack Herring on Lake Wilson.

Oklahoma State University – Dan Shoup

- Oklahoma's new black bass regulations are now in effect to encourage the harvest of smaller fish and increase the growth of larger fish.
- They are still working with Arkansas Game and Fish Commission to determine forage abundance using hydroacoustic and develop a hydroacoustic sampling protocol for sampling forage in large reservoirs in Arkansas. They are particularly interested in sampling day vs. night due to Chaoborous.

Kansas – Brett Miller

- They are spending significant efforts on Blue Catfish and evaluating their regulations.
- They are looking at crappie populations around the state and evaluating their population characteristics and regulations.

West Virginia – Dustin Smith

- They continue to work on habitat and recently purchased a habitat barge; however, staffing remains an issue, so the biologists are doing this work in January and February during drawdowns.

- They are trying to evaluate their habitat structures, utilizing underwater cameras and forward-facing sonar.
- They are looking at the genetics of black bass, Walleye, and Muskellunge. They are having increased pressure to stock F1 Bass. They are also monitoring for Alabama Bass.

Microplastic Research Update – Sean Kinney

Sean provided an update on the microplastic research conducted by LSU occurring on Toledo Bend Reservoir. In addition, Sean passed out a handout (see Page 13) to the Committee. They found microplastics in four fish species. They wanted to include more fish species, but they were harder to collect. They tried to sample the substrate and invertebrates. There were no differences among seasons. The plastic the researchers are finding is not from artificial fish habitat structures. The plastics from these fish habitat structures are not buoyant and sink to the bottom.

Sean mentioned they are looking for more money to fund microplastic research across the Southeast from states, fishing groups, artificial habitat companies, etc. Tentatively, this larger project would be housed at LSU. They would look at different types of plastics and where the plastic is coming from. From a state perspective, Gene mentioned what happens when they sink an artificial fish habitat structure. Lawrence said his biggest questions are whether the artificial fish habitat structures fall apart and whether they are causing harm as they degrade over time. Adam pondered where the fish were getting the plastic from compared to where they were actively feeding on a trophic scale. Sean mentioned that the study should look at reservoirs with and without significant human populations nearby. Lawrence stated that this research needs to be focused on artificial fish habitat structures and just microplastics in general. Sean mentioned once this research was completed, the Committee should rewrite our position statement on microplastics.

No action items were presented during this discussion.

Research Funding – Sean Kinney

Sean asked Steve what the overhead cost of a research grant comes from outside a University vs. from within a University. Steve responded that the off-campus project is approximately 26%, whereas the on-campus project is around 51%. States can use overhead costs as SFR funds match. The USFWS has a flat rate of 15%, and NPS has a rate of 17.5%.

Discussions led to whether we should pass a motion to limit the contribution percentage to overhead costs. **Lawrence motioned, “The SDAFS Reservoir Committee will pay no more than 10% overhead towards research grants.” John Odenkirk seconded the motion. All members favored the motion; thus, the motion passed.** There was no further discussion on this topic.

Reservoir Symposium Update – Sean Kinney

Sean provided an update from Rebecca Krogman about the 2021 Reservoir Symposium. From Rebecca: “The symposium proceedings include ten papers which will be published together as a Special Section in the North American Journal of Fisheries Management. Major themes included reservoir aging and fish habitat degradation, loss of connectivity, water-level and outflow management, and economic importance and valuation of fisheries. Thus, the proceedings are tentatively introduced by co-editors Steve Sammons and Rebecca Krogman as “Old Reservoirs, Old and New Challenges” in their brief overview.

The 5th National Reservoir Symposium occurred in person on November 9, 2021, during the American Fisheries Society (AFS) Annual Meeting in Baltimore, Maryland. Hosted jointly by the AFS Southern Division’s Reservoir Management Technical Committee and the North Central Division’s Reservoir Technical Committee, the symposium provided an outlet for both overviews of salient challenges and recent findings for reservoir-oriented research conducted across the U.S. Thanks to the planning of both reservoir committees of the SD and NCO, the symposium featured over twenty presentations and a full room of avid listeners. We were very proud to hear it was one of the best-organized events at the meeting and are glad to furnish some of the featured papers in the Special Section.”

SDAFS President/State Fish Chiefs Survey and Results – Sean Kinney

Sean presented the Committee with the survey SDAFS President Jason Olive sent to all nine Technical Committees. The RC questions and our response to the survey are on Pages 14 through 18.

There was a short discussion about whether the Committee was not doing a good job of getting the information out to the state agencies. Then there was a discussion on how to get the information from the Committee to the state agencies and from state to state. **Sean mentioned that he would be looking for volunteers to help develop a reply to Fish Chiefs about reservoir research addressing issues mentioned in the RC survey results.** The discussion ended after a short conversation about professional development and workshop needs that RC should address from a Fish Chief’s perspective. There was no consensus on what workshop should occur next.

Black Bass Fizzing – Sean Kinney

A bass angler approached John Odenkirk for information on fizzing bass; however, Virginia did not have any educational material on how to fizz a bass. John mentioned that states have a high degree of variability in whether they actively promote or provide information on the fizzing of bass. John was curious about the Committee member’s thoughts on promoting fizzing. Gene provided the Committee with information about the large research project conducted on Lake Amistad for Largemouth Bass and Lake Ontario for Smallmouth Bass, looking at the impacts of the fizzing of Largemouth and Smallmouth Bass. Unfortunately, the report for the Lake Amistad

study results was never published. Jeremy R. mentioned that Arkansas is actively promoting flogging of bass through social media, Constant Contacts emails, and how-to cards. Adam asked about the use of fin clips instead of flogging. Gene replied that fin clips do not help fish that are experiencing barotrauma.

No action items were presented during this discussion.

Developing of BMP for Reservoir Habitat Enhancement and SOP/JSAs for using Large Habitat Barges – Sean Kinney

The Committee was unaware of states with BMPs for Reservoir Habitat Enhancement or SOPs for using large habitat barges. However, Jeremy S. mentioned that the Reservoir Fish Habitat Partnership was starting to work on developing some BMPs with Jeremy Crossland of the USACE.

Open Discussion

Sean Kinney offered to continue to be the Committee's Chair after next year. His offer had no objections. Therefore, he will remain the Committee's chair until 2026.

Gene asked the Committee why states differ in allowing angler groups to buy or provide money for stocking black bass in public waters. Sean mentioned that they try to steer groups towards spending money on other efforts besides purchasing fish. Maddy asked whether states are enabling group ownership of these fish because they bought them. Most members mentioned that angler groups could not stock fish in their states without a permit or approval.

The RC meeting was concluded at 2:00 pm

Minutes recorded and submitted by Jeremy Risley (*Secretary-Treasurer*)



2023 SDAFS Reservoir Technical Committee Meeting

February 2, 2023 from 9:00 – 14:00 **Eastern time**

Zoom Link for those attending remotely

<https://okstate-edu.zoom.us/j/98845844130?pwd=cE50amplajU1OVZjM09YZnlWQzJFZz09>

1. Introduction – Sean Kinney
2. Financial report – Jeremy Risley
3. Jenkins Scholarship award – Jeremy Shiflet
4. Presentation by 2022 scholarship winner
5. Next year’s scholarship sponsor/s and discussion on nationwide opening/ Endowment
6. Website –Jeremy Shiflet
7. State and member reports
8. SDAFS EXCOM
9. Update on micro plastic research and discussion on additional research
10. Discussion on research overhead costs funded through SDAFSRC
11. AFS Baltimore Reservoir Symposium update
12. SDAFS President/Chief Survey Results
13. Fizzing bass (LMB vs SMB)
14. Development of BMP for Reservoir Habitat enhancement
15. SOP/JSAs for use of large habitat barges
16. Open Discussion
17. Adjourn

Name	Affiliation	Email	In-person/Virtual
Sean Kinney	Louisiana Department of Wildlife and Fisheries	skinney@wlf.la.gov	In-person
Jeremy Risley	Arkansas Game and Fish Commission	jeremy.risley@agfc.ar.gov	In-person
John Odenkirk	Virginia Department of Wildlife Resources	john.odenkirk@dwr.virginia.gov	In-person
Emilia Omerberg	Georgia Department of Natural Resources	emilia.omerberg@dnr.ga.gov	In-person
Lawrence Dorsey	North Carolina Wildlife Resources Commission	lawrance.dorsey@ncwildlife.org	In-person
John Hammonds	Tennessee Wildlife Resources Agency	john.hammonds@tn.gov	In-person
Gene Gilliland	B.A.S.S	ggilliland@bassmaster.com	In-person
Steve Sammons	Auburn University	samosm@auburn.edu	In-person
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Dave Dreves	Kentucky Department of Fish & Wildlife Resources	dave.dreves@ky.gov	In-person
Matthew Marshall	Alabama Department of Wildlife and Freshwater Fisheries	matthew.marshall@dcnr.alabama.gov	In-person
Amy Breedlove	South Carolina Department of Natural Resources	breedlovea@dnr.sc.gov	In-person
Maddy Ruble	Kentucky Department of Fish & Wildlife Resources	madelyn.ruble@ky.gov	In-person
Ryan Jones	Mississippi Department of Wildlife, Fisheries, and Parks	ryan.jones@wfp.ms.gov	In-person
Dustin Smith	West Virginia Department of Natural Resources	dustin.m.smith@wv.gov	Virtual
Dan Shoup	Oklahoma State University	daniel.shoup@okstate.edu	Virtual
Brett Miller	Kansas Department Wildlife and Parks	brett.miller@ks.gov	Virtual
Jim Garavaglia	Illinois Department of Natural Resources	james.garavaglia@illinois.gov	Virtual
Casey Joubert	North Carolina Wildlife Resources Commission	casey.joubert@ncwildlife.org	Virtual

SDAFS Reservoir Committee Edward Jones Mutual Fund Account Balance ending December 2022							
Prepared on 01/31/2023 by Jeremy Risley - Sec/Treasurer							
<u>Date</u>	<u>Beginning Balance</u>	<u>Deposits</u>	<u>Withdrawals</u>	<u>Fees</u>	<u>Change in Value</u>	<u>Ending Balance</u>	<u>Comment</u>
Jan-22	\$20,357.57		-\$122.27	-\$23.14	-\$1,558.69	\$18,653.47	Heirloom Awards (01/13)
Feb-22	\$18,653.47		-\$500.00	-\$21.51	-\$192.41	\$17,939.55	One \$500 scholarships (Doug Zentner)
Mar-22	\$17,939.55			-\$18.35	-\$246.75	\$17,674.45	
Apr-22	\$17,674.45		-\$196.24	-\$19.77	-\$1,134.28	\$16,324.16	SC Chapter of AFS (02/15)
May-22	\$16,324.16			-\$18.66	-\$36.79	\$16,268.71	
Jun-22	\$16,268.71	\$34.00		-\$18.09	-\$596.51	\$15,688.11	Book sales of Reservoir Fisheries Management: Strategies for the 80s (Check #1722)
Jul-22	\$15,688.11	\$0.02		-\$17.08	\$624.80	\$16,295.85	
Aug-22	\$16,295.85			-\$17.79	-\$278.16	\$15,999.90	
Sep-22	\$15,999.90	\$0.09		-\$18.44	-\$1,265.32	\$14,716.23	
Oct-22	\$14,716.23			-\$16.84	\$282.01	\$14,981.40	
Nov-22	\$14,981.40	\$0.09		-\$16.67	\$446.36	\$15,411.18	
Dec-22	\$15,411.18	\$0.24		-\$19.55	-\$248.53	\$15,143.34	
Jan-Dec 22	\$20,357.57	\$34.44	-\$818.51	-\$225.89	-\$4,204.27	\$15,143.34	2022 Assets deposited to acct / 2022 Assets withdrawn from acct
						(\$5,214.23)	25.6% decrease

Microplastics in Toledo Bend Reservoir Fish Species

Lyric Buxton, Sean Kinney, Steve Midway

BACKGROUND

- Microplastics (plastic particles < 5mm) may be produced or broken down from larger plastics
- Microplastics are ubiquitous pollutants and can cause physical and chemical harm to organisms
- Toledo Bend Reservoir (spanning the LA–TX border) has 36 plastic artificial reefs
- We divided the reservoir into two sections: the upper (no artificial reefs) and lower (artificial reefs) and seasonally sampled four fish species for microplastics in 2021–2022

RESULTS

- Microplastics were found in all species during at least one season
- The mean number of microplastics per individual: Black Crappie = 0.40, Bluegill = 0.66, American Gizzard Shad = 0.80, and Largemouth Bass = 1.47
- No significant regional or seasonal differences in microplastics (based on ANOVA)
- Microplastics counts per species did differ significantly (based on ANOVA)

DISCUSSION

- Each region and fish species contained putative microplastics, and the presence of microplastics in the upper region (without artificial reefs) suggest that microplastics are not sourced locally
- Little is known about any possible effect microplastics may be having on any fish species in Toledo Bend Reservoir
- Next steps involve identifying the polymer types to further describe potential sources of microplastics

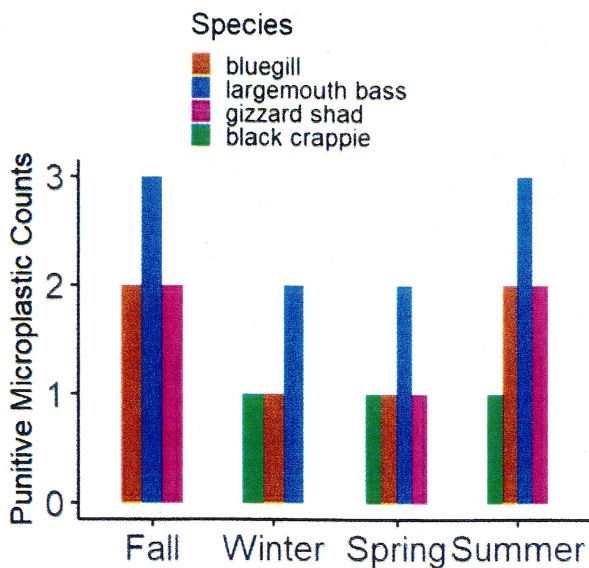


Figure 1. The count of putative microplastics particles found per fish ($n=47$) and per species (regions are combined) in each sampling season

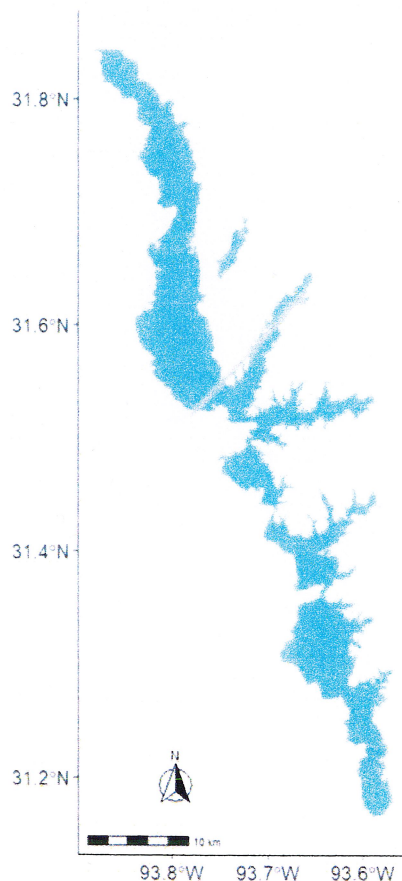


Figure 2. Map of Toledo Bend Reservoir with division of shown with a grey line. Locations below the line have plastic artificial reefs on both the Texas and Louisiana sides.

Aligning SDAFS Technical Committee Priorities with State Agency Needs

The SDAFS has nine Technical Committees (TC). This survey is divided into sections with questions related to each TC, and then a tenth section with a few questions about your thoughts and desires related to SDAFS TC's.

* Required

Reservoir Technical Committee

18. Please describe any staff professional development needs related to pollution and/or fish kill investigations.

19. Are there any policy issues related to pollution and/or fish kill investigations on which this committee could provide helpful resources?

Please list relevant conservation/management issues and/or desired resources. Some examples of resources that could be provided by a TC include spreadsheets containing each state's regulations, or white papers summarizing research findings that could be used to support decisions on regulations.

20. Do you have any other needs or suggestions for the Pollution Technical Committee?

This could be anything, including but not limited to: database development or administration, communication/technology issues, or suggestions for future symposia that would be useful to you and/or your staff.

21. Does your agency have high priority research needs related to reservoir fisheries management? *

Mark only one oval.

YES

NO

22. If you answered YES to Question 1, please describe **up to** three of your highest priority research needs related to reservoir fisheries management.

NOTE: A follow up to this question regarding potential for multi-state collaboration could be developed if there is overlap in research needs among multiple states.

23. Please describe any staff professional development needs related to reservoir fisheries management.

24. Are there any policy issues related to reservoir fisheries management on which this committee could provide helpful resources?

Please list relevant conservation/management issues and/or desired resources. Some examples of resources that could be provided by a TC include spreadsheets containing each state's regulations, or white papers summarizing research findings that could be used to support decisions on regulations.

25. Do you have any other needs or suggestions for the Reservoir Technical Committee?

This could be anything, including but not limited to: database development or administration, communication/technology issues, or suggestions for future symposia that would be useful to you and/or your staff.

FISH CHIEFS SURVEY RESPONSES FOR RESERVOIR TECHNICAL COMMITTEE

RESEARCH

- 1) Impacts of increasing technological advancements among anglers (e.g. live sonar)
- 2) Bass genetics- especially related to AL Bass
- 3) How do we measure the success of FLMB stocking?
- 4) Habitat BMP's for aging reservoirs
- 5) Evaluation of fish habitat structures
- 6) Increased understanding of impacts of water level manipulations (e.g., flood control, hydropower, etc.) on reservoir fish populations with particular emphasis on recruitment success and growth
- 7) Issues related to reservoir watershed management- fisheries responses to restoration projects
- 8) Evaluation of harvest regulations
- 9) Invasive species impacts
- 10) Classification/categorization schemes for reservoir habitat
- 11) Microplastics issues related to fish habitat structures
- 12) Aquatic vegetation control strategies

PROFESSIONAL DEVELOPMENT

- 1) How to assess and interpret bass genetics
- 2) Where to place fish habitat structures to attain maximum benefit for anglers
- 3) Habitat structure building techniques
- 4) Application of new technologies such as live sonar for evaluating fish habitat use
- 5) Standardized sampling techniques
- 6) Habitat quantification techniques
- 7) "How to" on watershed management- where do we start and how do we do it?
- 8) BMPs for habitat enhancement on aging reservoirs
- 9) ANS control methods
- 10) Training on permit requirements for conducting habitat work

OTHER (e.g. symposia, white papers, data summaries, etc.)

- 1) Summary of state policies on water level manipulations (and rule curves) for hydropower or flood control relative to fisheries and mitigation measures implemented to conserve/enhance fish populations
- 2) A summary of how fishing tournaments are managed in each state.
- 3) A reservoir management white paper series that compiled research findings from the Southeast on "hot topics" that managers face with elected officials and the public would be extremely helpful, including, but not limited to:
 - a) White papers summarizing study designs, data analysis, results, and management implications relative to fish habitat enhancement and sampling of fish habitat enhancement success;
 - b) White papers on issues like closed seasons or closed zones, supplemental stocking of bass, crappie, etc.