

SDAFS RESERVOIR COMMITTEE

Meeting Minutes

2021 Spring (Virtual) Meeting

April 6th, 2021

8:00am– 10:45am; Recorded and submitted by Colton Dennis

Attendees – approx. 25 attendees including several students

Sean Kinney, Louisiana Department of Wildlife and Fisheries (*Chair*) (Rep)
Colton Dennis, Arkansas Game and Fish Commission (*Secretary-Treasurer*)
Jeremy Shiflet, Kentucky Department of Fish and Wildlife Resources
(*Scholarship Chair/Webmaster*) (Rep)
Lawrence Dorsey, North Carolina Wildlife Resources Commission (Rep)
Jeremy Risley, Arkansas Game and Fish Commission (Rep)
Michael Homer, Texas Parks and Wildlife Dept. (Rep)
John Hammonds, Tennessee Wildlife Resources Agency (Rep)
Dustin Smith, West Virginia Department of Natural Resources (Rep)
John Odenkirk, Virginia Department of Game and Inland Fisheries (Rep)
Dr. Mark Rogers, USGS Univ. of Tennessee Coop Unit
Shane Bush, Missouri Dept. of Conservation
Mark Fowlkes, North Carolina Wildlife Resources Commission
Gene Gilliland, B.A.S.S.
Reed Green, USGS retired – AR
Dr. Dan Shoup, Oklahoma State University
Frederick Hoogakker, TN Tech Univ. student (2021 scholarship winner)
Jason Olive, Arkansas Game and Fish Commission (SDAFS VP)

Introduction - Sean Kinney

Reservoir Committee (RC) chair Sean Kinney called the virtual Zoom meeting to order and welcomed the attendees.

Financial Report - Colton Dennis

Secretary-Treasurer Colton Dennis gave a brief report on the current finances of the RC and referenced the financial spreadsheet that was previously emailed to committee members. **The RC's mutual fund and money market account balance with Edward Jones Inc. began in January 2020 with \$18,307.48 and ended in December 2020 with \$18,519.45, a net increase of \$202.97.** Account deposits included \$508.50 and can be attributed to a scholarship donation by Fishiding.com (\$500) and an AFS book sale (\$8.50). Account withdrawals included providing two \$500 Jenkins scholarships (\$1,000), Dr. Hunt 2020 SDAFS meeting registration and room charge (\$611.20), commemorative plaque for outgoing RC Chair (\$164.05), and donation to Mike Maceina Memorial endowment at Auburn Univ. (\$1,000.00) totaling \$2,775.25 in withdraws and a negative balance (deposit – withdraws) of -\$2,266.75 for 2020. **However, positive value changes/interest in investments accounted for a gain of \$2,469.72 for 2020 (+13.7%) which left an overall net gain of \$202.97 for our RC accounts in 2020.**

2021 Jenkins Scholarship and this year's sponsor - Jeremy Shiflet

Scholarship chair Jeremy Shiflet reported to the Committee that Georgia Power Company has committed to donating \$1,000 for the 2021 Robert M. Jenkins Memorial scholarship. Thanks to

Patrick O'Rourke with Georgia Power for inquiring and making this happen. Donation is pending, but electronic payment is expected in April 2021. This will make the fourth consecutive year that the Jenkins Scholarship has been provided by sponsor donations.

Jeremy also reported that due to the 2021 spring meeting being pushed back to April and the lack of scholarship applicants by the typical Dec 1 deadline, the scholarship committee decided to extend the application deadline to Jan 1. They received a total of 9 applications (only 5 each in 2019 & 2020) and two were selected to receive this year's scholarship.

Presentations by 2021 scholarship winners - Jeremy Shiflet

Jeremy introduced Frederick Hoogakker who was attending our Zoom meeting. Frederick is a Tennessee Tech Univ. student under Dr. Mark Rogers and provided a brief summary of his research entitled, "Exploring synchrony in black bass anger activity and management actions across TN reservoirs." Jeremy also introduced Caleb Aldridge as the other award winner who was unable to attend our Zoom meeting. Caleb is a Miss. State Univ. student under Dr. Mike Colvin and provided a brief pre-recorded power point presentation summarizing his research entitled, "Towards standardized fisheries management plans." Congratulations to both of our winners who are presenting their research in the student contributed paper section of the 2021 spring SDAFS meeting. Colton will be mailing each a \$500 scholarship award check.

Next year's scholarship sponsor - Sean Kinney

Sean asked the membership if they had any ideas for potential 2022 scholarship sponsors to let him know. He will get with Patrick later this summer who indicated that Georgia Power may be willing to be a two-year sponsor. Lawrence stated that a previous sponsor, Mossback Fish Habitat, has a new employee (Will Barrow) stationed in South Carolina that they have been doing business with and Lawrence is willing to contact him concerning future Mossback sponsorships if needed.

Website - Jeremy Shiflet

Jeremy reported that he added a bio and picture on our website of Robert Jenkins, our scholarship namesake. He thanked Gene Gilliland, Dr. Steve Sammons, and Dennis Riecke for providing information and pictures. **Jeremy asks membership if they any information or pictures of Robert Jenkins they would like see added to the bio to please send them to him.** Jeremy reminded membership to provide him with any content they want or need on website and also to provide him with any suggestions on organization of website. **Sean asked if there was a way to add a visitor counter to the website?** Jeremy will inquire about it with the SDAFS webmaster. Dr. Shoup wasn't sure but thought there may be a plug-in using Google Analytics. **Dr. Rogers suggested checking with Fisheries Information Technology (FIT's) group with AFS for assistance. He will provide the contact persons to Jeremy and Dr. Shoup.** Lawrence reminded membership that he, Jeremy, and Sean are administrators on the RC Facebook page and to provide them with any content they want posted.

SDAFS EXCOM – Jason Olive

Jason Olive introduced himself as the Asst. Chief of Fisheries Management for Arkansas Game and Fish Commission and current SDAFS Vice President. Jason expressed that one of the duties as V.P. is to conduct a review of one of the technical committees and he had chosen the RC to review over the past year. Jason reviewed the RC procedures manual which outlines the RC goals, which we are accomplishing on a yearly basis, and thanked Sean for his assistance in providing additional info as needed for his review. Jason provided the following review and recommendations to the SDAFS Excom.

The RC is an active and relevant committee and its goals, objectives, activities, and accomplishments serve its members and SDAFS well. The RC is an example of a successful model among SDAFS technical committees. But of course there is room for growth and improvement and the leadership strives for that. It is his recommendation to the SDAFS Excom to continue to support this productive committee so they may continue to achieve their goals and contribute to SDAFS and the Society. Jason went on to say how he appreciated our efforts and how we continued to work through the challenges of Covid and virtual meetings.

State and member reports

North Carolina – Lawrence Dorsey

Lawrence reported they are still dealing with Alabama Bass throughout NC. He reminded members that Dr. Steve Sammons recently requested member states affected by AL Bass to put together a manuscript for the Reservoir Symposium at AFS in Baltimore this fall. NC is also conducting a statewide assessment of black bass genetics that includes FLMB and AL Bass introgression and formulating management strategies to address these issues. They are also conducting hybrid striped bass and grass carp telemetry projects on Lake Norman.

Texas – Michael Homer

Michael reported TX has changed a lot of their catfish regulations to simplify bag limits and size restrictions for blue and channel catfish. They also have reduced their special regulations down to three regulations. They are also trying to develop an in-house grant program using some of their Fish Stamp money that's been set aside and not used. This new grant program is designed for shoreline bank fishing access and habitat enhancement. These new grants will be available to municipalities, water controlling authorities, and non-profits and will provide up to \$50K. Major research projects include a LMB telemetry study at Lake Fork and partnering with Oklahoma DNR and Texas A&M Univ. on a creel and economic impact study at Lake Texoma. TX also conducting habitat evaluations of fish catch dynamics around artificial fish habitat structures.

Virginia – John Odenkirk

Their F1 experimental stocking study on Smith Mtn. Lake has had encouraging results and they have expanded the F1 stocking study to four other reservoirs. Project goal is to use F1 potential to create larger fish (double digit) and add a trophy component to the reservoirs. They have just completed a *morone* management plan for reservoirs. Snakeheads are spreading to other systems including reservoirs by anglers who like to fish for them, but they haven't documented any snakehead impacts so far. Still conducting reservoir fish habitat projects using water willow, vallisneria, and artificial structures and harmful algal blooms continue to be an issue.

Arkansas – Jeremy Risley

AR continues to fine tune their large scale reservoir habitat projects where approx. 20 biologists from around the state will travel with equipment and work on a selected reservoir for a week. Completed large scale habitat project on Greers Ferry which involved building 60 sites in December. Also completed one on Lake Greeson in March that included cutting and sinking over 1,000 hardwood and cedar trees from around the shoreline with help from the local USCOE project office and state park to build 101 brush piles. Have a team of biologists evaluating artificial habitat vs. cedar trees using electrofishing and angling techniques. Just completed most expensive multi-year reservoir restoration/renovation project in Agency history at over \$3 million at Lake Poinsett. Univ. of Ark at Pine Bluff is finishing up a hybrid bass population characteristics study on Lake DeGray and they are also finishing up developing a reservoir habitat assessment to be used by biologists on AR reservoirs.

Currently conducting a reservoir walleye stocking study using otolith microchemistry to evaluate natural spawn vs hatchery stocked fish. Also working with Missouri State Univ. to evaluate impacts of extended high water events in a highland reservoir that is causing striped bass die-offs. Still trying to get hydroacoustic program off the ground. Have all equipment but no sampling or equipment protocols are in place yet. Biologists still using Constant Contact service to keep angling public informed of district fishery activities around the state. Currently looking at LMB and SpB genetics statewide to determine presence of AL bass. No presence of AL bass in AR at this time. Will start statewide bank angler survey this spring.

Louisiana – Sean Kinney

They have submitted a License Legislative Package designed to reduce number of licenses by consolidating and increasing their costs. Provided a brief update on hurricane damage to the fisheries he manages which includes three reservoirs and one impounded marsh. They thought they had a complete fish kill due to oxygen depletion in a reservoir closest to coast (about 60 miles). However, recent electrofishing sampling resulted in an average LMB CPUE of 7, which is well below the long-term average of 50. Sean also showed series of graphs of stock assessments and growth curves for some LA reservoirs. LA is still actively conducting their artificial reef program.

Kentucky – Jeremy Shiflet

See appendix 1 for Jeremy's report.

Tennessee – John Hammonds/ Dr. Mark Rogers

Mark provided an Asian carp update. More funding for Asian carp management, removal, and research in SE is being made available. He understands that there has been an approval, but not the appropriation of \$25 million. He served on a panel this fall and into spring with TVA and USCOE personnel that went through a structured decision making process discussing if funding for electric barriers were provided, where on TN River they would be employed. The TVA will have to go through NEPA process for this project. AL, MS, TN, and KY are all working on this Asian carp issue in the TN/Cumberland system. KY and TN are providing extra funds for Asian carp commercial harvest.

See appendix 2 for John's report.

Missouri – Shane Bush

MO is getting ready to start this spring a large scale evaluation of fish habitat structures that they have placed in Table Rock and Bull Shoals lakes from 2007 to present. Will be looking at evaluating longevity of the different habitat types (hardwoods vs cedars). Will be using Garmin Livescope system to measure size of brush piles and fish use. Hope to determine how long before there is a need to start replenishing the different types of structures. Also doing a large scale evaluation of Flathead populations in Table Rock, Bull Shoals, and other large reservoirs which do not have any population info. Effort will help develop long-term SSP and help assess Flathead regulations to determine if they are working or need to be changed. Just completed paddlefish exploitation study in rivers and lakes. Exploitation was found to be really low (8% in reservoirs and 2.5% in rivers). Telemetry data showed a great amount of movement within reservoir systems and tremendous movement if paddlefish got out of reservoir during flood events to the extent of moving into other river systems states' away.

West Virginia – Dustin Smith

Working with BASS Nation and their Conservation Director who worked with one of the national veteran cemeteries who receive over 5,000 Christmas tree wreaths annually. BASS Nation decided to use them

in habitat projects to build "wreath cubes" which is basically a pallet structure with PVC pipes and the wreaths. Can build 40-50 structures using the 5,000 wreaths and will be evaluating their effectiveness in the future. Recently purchased habitat barge with dump bed capability. Hope to have full time crew to operate and to travel from reservoir to reservoir placing habitat. Just finished study with WVU looking at the use of artificial vegetation to supplement yellow perch spawning habitat in a hydropower reservoir. Yellow perch need artificial vegetation placed in up to 25ft of water for egg laying in the highly fluctuating reservoir. Getting ready to start statewide LMB genetics study to collect baseline data and start testing SpB and SMB to determine if AL bass are present. Also will be looking at muskie and walleye genetics. Conducting delayed mortality study on tagged muskie in reservoirs using acoustic transmitters.

Microplastic position statement and research - Sean Kinney

Been working with three professors at LSU to develop research on microplastics and how it relates to biologists using plastic material to build artificial reefs in reservoirs. Hopefully research will show that our habitat projects using high density plastics is not contributing to the overall amount of microplastics found in reservoir waters or fish. One of the professors has agreed to write a sampling plan and research proposal to start requesting grant funding. He currently has a student who is willing to take on added duty of working on this project. The professor is looking for \$7K in funding to process the samples. Sean is going to check on getting funding through the RFHP grant or a local organization that funds fish research projects on Toledo Bend. Goal is to conduct this preliminary research in-state and eventually scale up to include multiple SE states and get findings published.

Lawrence mentioned that in talking with his local Mossback rep and mentioning this microplastic issue that he expressed interest in the concept. Lawrence added that it is probably in the best interest of some of these artificial habitat vendors to assist with an independently conducted research study as it will likely benefit them and they could be a potential microplastic study funding source. Lawrence also suggested that if only a couple of thousand dollars were needed to meet the \$7K requested to process samples, then it might be a good topic for RC members to discuss and determine if the RC should provide the funding. Sean mentioned that in discussions with the professors about a multi-state study that they advised that an MS student for two years would cost about \$100K. John Hammonds mentioned that the TN River was supposedly one of the highest polluted rivers in the world for microplastics. TVA manages the system and they have some funding sources for research. John knows someone at TVA that he has worked with in the past and that has provided grant funding.

National meeting Reservoir Symposium - Sean Kinney

Sean informed those who were not aware that the RC was contacted by the AFS North Central Division who were interested in coordinating a reservoir symposium which has been accepted at the Parent Society AFS meeting in Baltimore this fall. They will soon be accepting abstracts for the reservoir symposium and presentations will be published as a special printing in NAJFM like the Catfish 2020 symposium presentations. **Sean encouraged all RC members who have reservoir habitat research to consider submitting abstract for consideration.** At this time, the meeting is being set up to be a hybrid in-person and remote presentations meeting.

Open Discussion

Lawrence provided a brief update on the status of the on-line habitat survey in which he and Jeremy Shiflet are still in the process of writing up and submitting for publication in the SEAFWA proceedings. He and Jeremy have not gotten as far as they had hoped after the spring meeting due to Covid issues and their state agencies shutting down for a period of time and then playing catch up this fall. Their

plan moving forward is to finish drafting a report and provide to Dr. Hunt who has agreed to review and edit and then submit for publication to SEAFWA.

Shane asked Sean about his thoughts on a summer RC meeting? Sean responded that he would like to have an in-person meeting possibly at Toledo Bend. Members could meet one day for topic discussion and another day to go out and observe some of LA's 10+ year old artificial reefs placed throughout the reservoir.

Sean mentioned that he would send out the F1 and FX growth reports for LA reservoirs and an MS student study on modeling different variables on lakes that will support FLMB.

Mark asked about timeframe of Sean's current tenure as RC Chairman as he is recently become reengaged with the group. Sean responded that his term runs until 2024. Lawrence mentioned that when Sean had accepted the position as Chairman that he advised him to lock in to serving two years, but expect to serve 4 years for continuity purposes. Lawrence also shared with the membership that the chairman serving 4 years has been a longstanding practice going back to the mid 2000's to provide enough time for chairman to provide meaningful leadership and help with continuity within the RC. The same has been the case with the Secretary/Treasurer position which has the task of managing the RC's finances and has been beneficial to the RC and Chairman to have someone in that position for at least 4 years.

Sean concluded meeting at 10:45am.

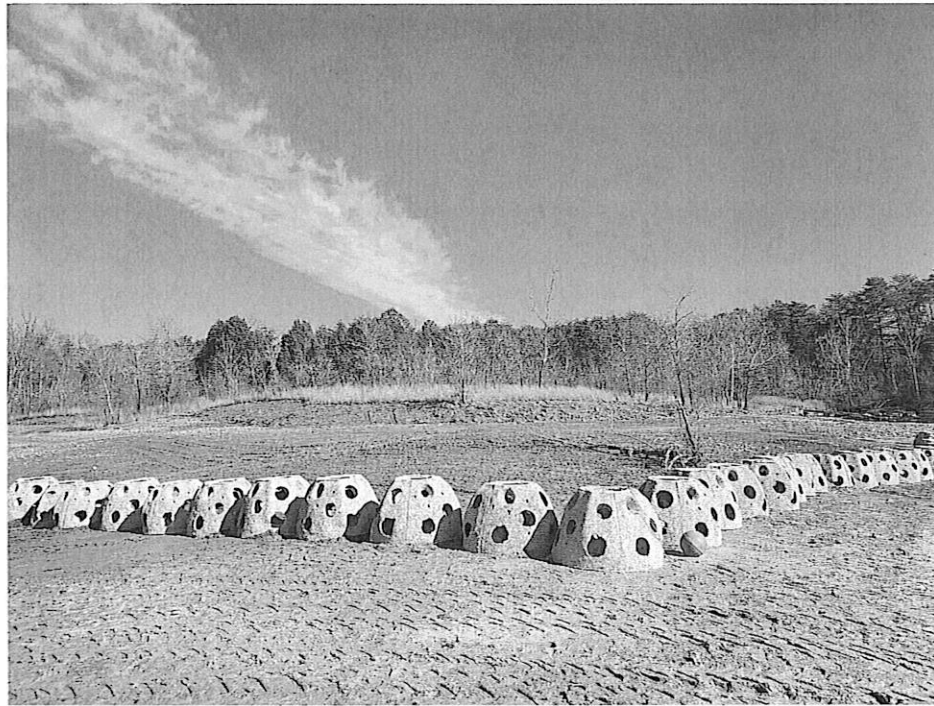
Kentucky

Recently, biologists in Kentucky have been working on statewide management plans for several species and species groups. Teams were established to review existing management strategies and regulations and establish, or revamp existing, management plans. Multiple Teams were created including; Morone, Percid, Trout, Catfish, Musky, Black Bass, and ANS. Statewide management plans will be created for the major species that are produced by our hatchery system. The other Teams may create management guidelines as opposed to a full-blown management plan.

A major area of reservoir resource expenditure focuses on fish habitat. KDFWR Habitat Program Coordinator, Joseph Zimmerman, plans and executes 1-3 major fish habitat projects annually. Once a lake is selected, JZ contacts local stakeholders and creates a Fish Habitat Committee to provide general information, help select materials/locations, and solicit volunteers. At times, a large lake project is broken down into multiple phases and executed over several years. JZ is also working on evaluating the effectiveness of different materials, configurations and locations. He is currently working on design and implementation of multiple research projects that should begin in 2021.

Another interesting topic to address is the use of reef balls in reservoirs. TWRA has been constructing reef balls for several years and KDFWR was finally able to jump into the game. A RFHP grant was awarded to Nolin River Lake USACE that was used to purchase \$30k worth of reef ball molds and accessories. Staff from Reef Innovations traveled to KY at the end of September 2020 to conduct training for USACE and KDFWR staff. Initially, the plan was to use the structures solely for fish habitat. However, after further discussion with Reef Innovations and USACE, there are plans to use the structures in erosion control/shoreline stabilization projects as well. The NRL USACE has applied for several additional internal grants to initiate research projects evaluating the use of reef balls in this capacity. KDFWR will be evaluating fish use of the reef balls using boat electrofishing and by asking anglers to provide feedback. One downside to purchasing molds and constructing yourself is the level of time involvement. However, constructing your own, even with staff time included, is cheaper than purchasing and shipping pre-made reef balls. Another logistical issue to address is movement and deployment. Reef balls range in size and weight depending on project. The pallet ball weights 1,500-2,000 pounds (~3'x4').

There is a not for profit group called No Shoes Reefs that KY and TN have partnered with to provide assistance for freshwater reef ball projects. This is a pretty cool partnership that has potential to generate a lot of visibility, interest, and funding for future reef ball projects within the state.





Habitat Work

Region 1 – Mostly deploying plastic structures – utilizing no cost surplus natural gas plastic pipe to build various styles of habitat units – hosted several outreach events, utilizing high school and college students – awarded a habitat grant in cooperation with KY and will be placing spawning structures and other shallow water structures in Barkley and KY reservoirs – should be over 200 individual structures when complete.

Region 2 – Been working with several TN BASS Nation high school groups – supplied over 20,000 stakes to make 215 stake beds on 2 reservoirs as well as 1650 Christmas trees on 3 reservoirs – didn't utilize as many plastic structures as years past

Region 3 – Targeted bank fishing areas with about 275 structures – 5-gallon buckets with various types of pipe and wooden forms concreted into them – also installed around 125 various structures to evaluate most effective type of structure in Chickamauga.

Region 4 – Deployed over 150 reef balls and tied brush to over 100 of them – also sank about 350 cedar trees to make about 25 large brush piles – brush on top of reef balls to elevate the material off the bottom of the reservoir, this improves longevity as well as effectiveness

Fisheries management work

Region 1 – Dealing with Asian Carp – hired a standalone carp crew – looking for reproduction as well as testing barriers in lower TN and Cumberland River dams

Region 2 – Dealing with Asian Carp as well – Statewide Asian Carp coordinator hired

Region 3 – Proposing Yellow Perch regulations – going away from sauger and walleye stocking to walleye stocking only in most reservoirs – experimenting again with white crappie from hatchery and also experimenting with Yellow Perch – dealing with Alabama Bass invasion in Watts Bar Reservoir

Region 4 – Proposing Yellow Perch regulations – stocking Lake Sturgeon in headwater reservoirs – researching lowering crappie creel limits – walleye stocking evaluation using DNA – collecting SMB baseline DNA to evaluate AL bass genetics – going to stock F1 FL Bass in Boone Reservoir – found FL bass survival in Ft. Loudoun and also found individual F1 fish from natural backcross