SDAFS RESERVOIR COMMITTEE

Meeting Minutes

2024 Spring Meeting

February 18, 2024 – 9:00 am to 2:00 pm

Asheville, North Carolina

Action Items and To-Do List:

1) Approve the fiscal report
2) Coordinate with Gene Gilliland to secure scholarship funding from the Bass Fishing Hall of Fame.
3) Create a list of all listservs for distributing scholarship information.
4) Vote on motion to set aside (earmark) $5,000 to begin the scholarship endowment.
5) Update the Committee's state representative and email list on the website.
6) Donate to the 2025 AFS Black Bass Symposium
7) Make plan for using TVA's grant for microplastic research

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) – Virtual
Aaron Gray, Georgia Department of Natural Resources (Rep) – In-person
Casey Joubert, North Carolina Wildlife Resources Commission (Rep) – In-person
Amy Chastain, South Carolina Department of Natural Resources (Rep) – In-person
Shane Bush, Missouri Department of Conservation (Rep) – Virtual
Sarah Menendez, Florida Fish and Wildlife Conservation Commission (Rep) – In-person
Michael Homer, Texas Parks and Wildlife Department (Rep) – In-person
Bobby Cope, Iowa State University – In-person
Emily Watling, Kentucky Department of Fish & Wildlife Resources - In-person
Maddy Ruble, Kentucky Department of Fish & Wildlife Resources - In-person
Spencer Phillips, Kentucky Department of Fish & Wildlife Resources - In-person
Adam Martin, Kentucky Department of Fish & Wildlife Resources - In-person
Jason Russell, Kentucky Department of Fish & Wildlife Resources - In-person
Nick Simpson, Kentucky Department of Fish & Wildlife Resources - In-person
Jack Fisk, Kentucky Department of Fish & Wildlife Resources - In-person
Alan Beach, Tennessee Wildlife Resources Agency – In-person
Vic DiCenzo, Arkansas Game and Fish Commission – In-person
Matthew Marshall, Alabama Department of Wildlife and Freshwater Fisheries – In-person
Conner Owens, South Carolina Department of Natural Resources – In-person
Shelby Richard, Louisiana Department of Wildlife and Fisheries – In-person
David Norris, Louisiana Department of Wildlife and Fisheries – In-person
Nate Hull, Oklahoma Department of Wildlife Conservation – In-person
Dan Shoup, Oklahoma State University – Virtual
Gene Gilliland, B.A.S.S. – Virtual

Shannon O'Quinn, Tennessee Valley Authority – Virtual
Tyler Ham, Missouri Department of Conservation – Virtual
Seth Mycko, North Carolina Wildlife Resources Commission – Virtual

Introduction – Sean Kinney

Reservoir Committee (RC) Chair Sean Kinney called the meeting to order at 9:00 AM and welcomed the attendees. Jeremy Risley distributed the agenda (see page 17), the sign-in sheet (see page 18), and the financial report. However, it was noted that no quorum was present for the meeting.

Financial Report – Jeremy Risley

Secretary-Treasurer Jeremy Risley provided a brief update on the current finances of the RC (see Page 19). **As of January 2024, the beginning balance was $27,507.80.** Transfers between accounts included $1,500 to cover various expenses. Withdrawals from the account comprised a $500 Jenkins scholarship awarded to Joshua Stafford during the 2024 spring meeting and a $1,000 donation to the Wisconsin DNR for the upcoming AFS crappie book. Additionally, there was a deduction of $227.24 due to account fees and an increase of $1,624.01 due to changes in mutual fund value. **Consequently, the RC's account balance at the end of December 2024 was $27,404.57. After accounting for the TVA grant earmarked, the remaining balance stood at $17,404.57.** The Committee could not approve the budget due to a lack of quorum.

2025 Jenkins Scholarship – Jeremy Shiflet

The 2025 Robert M. Jenkins Memorial Reservoir Research Scholarship winner was Bobby Cope from Iowa State University. Bobby's research title: Dispersal, Distribution, Escapement, and Survival of Fry-stocked and Advanced Fingerling Walleye in an Iowa Reservoir. **Bobby's research statement:** Stocking multiple hatchery products (e.g., fry versus fingerlings) to augment reservoir Walleye *Sander vitreus* populations is a common management practice. However, contribution of various stocked products to the adult population is variable due to losses through mortality and escapement and can differ among stocking locations and due to environmental conditions. We used acoustic telemetry to evaluate stocking success of juvenile Walleye in Rathbun Lake, Iowa to estimate temporal shifts in dispersal, distribution, escapement, and survival probability in relation to biotic (stocking product) and abiotic (stocking location, reservoir discharge, water temperature, short-term mortality, months since stocking) factors. We tagged Walleye stocked as fry during April and recaptured in October (referred to as fry-stocked Walleye; n = 59, 143-212 mm) and advanced fingerling Walleye reared entirely at Rathbun Hatchery (n = 100, 204-275 mm) during fall 2019-2021 and released them at two tributary arms either near Rathbun Dam (Buck Creek) or farther up lake near the Bridgeview Recreation Area (Bridgeview). More than half of individuals stocked at Bridgeview dispersed and entered the main reservoir body within one month of stocking, while fish stocked at Buck Creek arrived near the outlet tower within three months of stocking, and >80% of Buck Creek individuals resided near the outlet tower within four months post-stocking. Home range size varied temporally (1.84-67.5% of lake area) and advanced fingerlings used larger areas than fry. Home range overlap among individuals was lower for advanced fingerlings, but long-term spatial overlap among all individuals was high (>0.5 by six months poststocking). Fry escaped

less than advanced fingerlings and weekly escapement probability increased from <0.001 to 0.006 for fry and 0.002 to 0.070 for advanced fingerlings as discharge increased from 0.3 to 42 m3/s. Fry-stocked individuals had .017 higher survival than advanced fingerlings and both groups had lower initial survival that increased over the first six-weeks post-stocking. After six weeks, survival was inversely related to mean weekly water temperature. Information gained here may help managers better manage stocking regimes by increased stocking of fry to help combat low post-stocking survival and high post-stocking escapement of advanced fingerlings due to hatchery habituation. **See pages 20-48 for Bobby's presentation.**

Sean Kinney (right; SDAFS RC Chairman) presented Bobby Cope (left) with a $1,000 scholarship check for the 2025 Robert M. Jenkins Memorial Reservoir Research Scholarship.

<u>SDAFS EXCOM Update – Mark Rogers</u>

Mark Rogers, the Past President of the SDAFS and a member of the Reservoir Committee, provided an update to the group regarding SDAFS. He reminded Committee members that they must be members of both SDAFS and AFS to vote within the Committee. Mark noted that all SDAFS Committees face challenges in attracting applicants for their various scholarships and inquired about how both SDAFS and AFS could assist in addressing this issue. Additionally, Mark stated that if the Committee plans to submit a funding request through SDAFS, it must be presented at the EXCOM meeting rather than at the Business meeting. He also mentioned that the 2025 Black Bass Symposium is seeking contributions for the event, focusing on the scientific community's insights gained over the past 25 years since the last symposium. Furthermore, the SDAFS is looking for a new SEAWFA representative to oversee the entire division. Mark reminded the Committee to update SDAFS if there are any changes to Committee officers or positions so that they can better track these changes.

Scholarship Discussion – Sean Kinney

This year, the scholarship application period was open to candidates nationwide. To ensure broader awareness, we took additional steps to promote the scholarship, including announcements through various listservs, student databases, the SDAFS newsletter, and at least one notice in the AFS magazine. Despite these efforts and the scholarship being $1,000, the Committee received only one application. If you have suggestions for improving the applicant numbers, please contact Sean or Jeremy S. When Sean sends the announcement, he asks that the state representatives distribute it to their respective state chapters, any universities in your state, or students conducting research on reservoirs.

The Committee anticipates receiving funding from the Bass Fishing Hall of Fame. Gene is currently working on securing these funds. He also said he had sent the scholarship information to the BASS state representatives responsible for further distribution. Casey J. suggested maintaining a running list of all the listservs to ensure that news about the scholarship reaches a broader audience. Sean mentioned discussing the scholarship during the joint Reservoir Technical Committee meeting at the Midwest Fish and Wildlife Conference in January. However, since the audience primarily consisted of professionals, there was no discussion about the scholarship at that meeting.

Discussion on Endowment Funding – Sean Kinney

The Committee has worked several years to establish an endowment to fund the scholarship. Our goal is to accumulate approximately $36,000. With an interest rate of 4%, the endowment can support the scholarship relying solely on interest income. Gene has contacted several large fishing companies, including AFTCO, for donations to fund the endowment but has had little success. If you know of any company willing to contribute all or part of the funds needed for the endowment, please get in touch with Sean. The Committee would be willing to include the name of the company or person donating funds to the scholarship.

Sean proposed a motion to allocate funds from our standard budget to establish an endowment. He suggested setting aside (earmarking) $5,000 for this purpose. This motion will need to be voted on at a future date.

Website/Social Media – Jeremy Shiflet

Website chair Jeremy S. reported to the Committee that not much has changed over the past year. He emphasized the need to update the Committee's list of state representatives and their email addresses. Sean mentioned they are still seeking volunteers to help manage the Committee's Facebook account. If you have any content you'd like to share on the Committee's Facebook page, please send it to Sean or Jeremy S.

Microplastic Research Update – Sean Kinney

Sean wanted to update the Committee on the microplastic research project. The funding request of $237,000 for the project, which involved 13 states and two universities through a multi-state grant, was not approved. During the second round of reviews, they were asked to reduce the funding by $100,000 in the first year. This reduction was unfeasible, leading to their

removal from further consideration. Next year is the national assessment, so they will not take multi-state grant proposals.

At the Midwest Fish and Wildlife Conference, Sean discussed their research collaboration with Jeff Kopaska, the new AFS Director. Jeff recommended the Committee reapply for funding, with submission applications due by May 2026. Funding is anticipated to be available in 2027. Later this year, everyone can expect an email from Sean through the listserv regarding this research and the funding proposal. If any states that did not initially participate would like to join, please get in touch with Sean. He aims to secure participation from states by the end of 2025.

The Committee previously received $10,000 from TVA with the condition that one of the TVA lakes be sampled (fish, water, and sediment) within five years. Since the grant has not been funded, the Committee may need to start drafting plans to sample a TVA lake to meet its deadline.

Request for Funding – Sean Kinney

Sean has not received any funding requests so far. Mike H. highlighted the need for funding for the upcoming Black Bass Symposium. Sean mentioned that the Committee would need a formal written request. Jeremy R. inquired about the amount needed for the symposium, and Mike H. replied that they would graciously accept any contribution. However, based on the budget, they would likely request $500. Mike H. said he would likely email Sean to request that the Committee donate.

Forward-facing Sonar – Sean Kinney

Sean mentioned that Mississippi has changed its regulations regarding the effects of forward-facing sonar (see the 2024 Summer meeting notes). They have reduced the number of fishing rods allowed and the limit on the number of crappie that can be kept. The discussion then shifted to how forward-facing sonar has increased the success of those on the Committee who have used it. Sean noted that there was a lengthy discussion during the joint Reservoir Committee meeting at the Midwest Fish and Wildlife Conference. They discussed what types of regulations would be necessary or effective in reducing the impacts of forward-facing sonar. Sean highlighted the effects of catch-and-release mortality in fish, especially in larger individuals or those caught at deeper depths. Sean mentioned concerns about the impacts of forward-facing sonar on Paddlefish populations where snagging is allowed. In Kentucky, creel survey data revealed that crappie catch and harvest rates were nearly double for anglers using forward-facing sonar compared to those who were not. However, they believed it depended on the fishery whether changes to regulations may be necessary due to the impacts of forward-facing sonar. In Oklahoma, the creel survey data from Grand Lake shows that over 50% of anglers are using forward-facing sonar, with a higher percentage among bass anglers. Many states now include standard questions about forward-facing sonar in their creel survey interviews.

State and Member Reports – State Representatives

Contact the State Representatives for more detailed information on the topics provided.

Texas – Mike Homer (In-person report)

- In 2024, from January through March, they received 23 ShareLunker fish (13 pounds or more) donated to the program.
    - All stocked Florida bass fingerlings (Lonestar Bass) are legacy from Sharelunker fish or offspring.
- They have been active with the Habitat and Angler Access program.
    - They have ten ongoing projects with half occurring at reservoirs.
- They recently opened Bois D'Arc Lake, which is booming.
- They are wrapping up a couple of habitat evaluations: one on deals with microplastics and the other on the movement of structures within reservoirs.
- They have multiple projects supported by their conservation license plate. Since 2005, they have had a Largemouth Bass plate, which has raised about $40,000 for approximately nine projects. This year, they received $74,000 in funding, which they plan to fund ten projects.
- They are hosting AFS in 2025 along with the Black Bass Symposium.
- They finalized their hydrilla position paper (Click Here). This helps provide better guidance on how to communicate to various users and how they will approach their hydrilla management.

Arkansas – Jeremy Risley (In-person report)

- In January 2026, they will begin a trophy bass donation and angler recognition program called the Legacy Lunker Program.
    - They will accept ten pounds or greater Largemouth Bass from January through March for spawning purposes.
    - They have been conducting a trial run in 2025 to prepare for the official opening of the program. They ended up with five fish donated during the trail run.
    - They have worked closely with TWPD's Sharelunker Program Coordinator and staff at the TWPD's Freshwater Fisheries Center.
    - The hatchery that will be housing this program should have a completed hatchery renovation by this summer.
    - The Angler Recognition component will include Largemouth Bass weighing over 10 pounds, which were note donated or caught outside the designated donation window. It will also recognize Largemouth Bass weighing eight pounds or more, youth who catch a Largemouth Bass weighing six pounds or more, and Smallmouth or Spotted Bass that weigh more than four pounds.
- They continue to update their Arkansas Tournament Information Program (ATIP) to incorporate it into a website similar to Michigan and Alabama to find information on current and future tournaments as well as historical tournament data.

    - They developed a Tournament Committee comprising tournament directors from across the state to help deal with tournament-related issues and development of this website.
- The habitat team works on habitat projects throughout the state. Each year, there are at least two large-scale habitat projects lasting a week or longer.
- They are also continuing to work on two whole lake renovations, one of which is located on the largest state-owned lake in the U.S.
- They are on the second year of a Largemouth Bass telemetry study on Millwood Lake, using similar methods to the TPWD study on Toledo Bend Reservoir and Lake Fork.

North Carolina – Casey Joubert (In-person report and written notes)

- Their Striped Bass (SB) and Hybrid Striped Bass (HSB) Management Plan is in its final revision stage and should be completed this year.
    - Looked at almost 10,000 reservoir SB/HSB data points
    - Angler survey completed
    - Identified management goals, hatchery limitations and needs, lake habitat availability, and future research needs
- SB/HSB Social Science Survey report completed. Presented on results last year but report is now finalized, happy to share.
    - Sent to about 25,000 people. 6,528 respondents. 26% response rate, mostly online.
    - Estimated that about 18% of their anglers' fish for SB/HSB in reservoirs
    - Biggest complaint: not enough trophy size fish
- Hatchery issues for SB/HSB production for stocking reservoirs
    - Fairy and clam shrimp depleted zooplankton resources in ponds
- They are still stocking F1s into Lake Norman, Lake Jordan, and Lake Gaston.
    - They are starting to sample tournaments to see whether these stocked F1s are showing up in these events.
    - Stocking in ~June, 4.5 fish/acre
- They are continuing their vegetation habitat with a lot of plantings and they are getting a new greenhouse, which should be completed by the end of summer 2025.
- They have been dealing with a lot of issues related to hydrilla and had eel grass show up in a couple of reservoirs.
- Dealing with Lyngbya and Ultrasonic Technologies
- They are working on a Black Bass Management Plan.
- They finished up a Hybrid Striped Bass telemetry on Lake Norman.
    - Looked at summer habitat in Lake Norman.
    - Acoustic and radio (passive and active tracking)
    - HSB did not use the deep area located near the dam as much as SB did
    - HSB selected water that had higher DO (>4.8 mg/L) at the cost of higher water temperatures
    - Generally avoided the hypolimnion
    - Wider range of habitat use than SB, leading to less fish kills.

- They completed a Hybrid striped Bass Angler exploitation study on Lake Norman.
    - Project completed in November 2020, used high reward floy tags
    - 1,462 fish tagged. About 64% of fish recaptured. About 68% harvested.
    - Report in progress
    - Highest fishing mortality in Spring and Winter
- They are conducting a White Bass telemetry study on Falls Lake.

Tennessee – Alan Beach (In-person report for John Hammonds and written notes from John Hammonds)

- They are seeing enough hybridization between SMB and ALB that we have proposals to change our regulations on the mainstem TN River.
    - Basically anglers, officers, and their biologists can't identify to species black bass other than Largemouth Bass so our regulations will reflect that.
    - At Parksville Reservoir, the Largemouth Bass will have a five-fish creel and a 15-inch minimum length limit. Smallmouth, Spotted, and Alabama Bass will have no length or creel limit. There will also be no live transport from the reservoir.
    - Guntersville, Chickamauga, and Nickajack Reservoirs will have a proposed black bass combination creel. Largemouth Bass will have a 15-inch minimum length limit, while Smallmouth, Spotted, and Alabama Bass will have no length limit, but only one can be over 16 inches.
    - Ft. Loudon, Pickwick, Tellico, Watts Bar, and Chilhowee Reservoirs will have a proposed black bass creel of five fish combined with a 15-inch minimum length limit.
- They are addressing issues related to lake clean-up after Hurricane Helene. Some individuals are removing all debris from the lake, including beneficial stuff.
- Their western region received a Friends of Reservoir Fish Habitat Grant, which they much appreciated.
- They are currently working on the Bill Dance Signature Series of lakes, which consists of 14 reservoirs: 10 larger ones and 4 smaller ones.
- They are now working with Tennessee Tech University to conduct all their bass genetic analysis, including Alabama Bass.

Kentucky – Adam Martin (In-person report for Jeremy Shiflet)

- They will continue to monitor the genetics of Largemouth Bass while looking for Florida and Alabama Bass. They have no evidence of Alabama Bass in the state but haven't tested everywhere.
- They continue to resist or oppose F1 stockings in the state.
    - There is an angler group that is strongly advocating for F1 stockings in a reservoir in eastern Kentucky.
    - Their Commission will vote on whether to approve this request.
    - States may receive requests from the angler group on information regarding F1 stockings.

- They are working on a trophy marker project for Largemouth Bass in Kentucky, similar to the one at Red Hills Hatchery.
- They are launching an educational campaign on quality bass management to explain genetic and habitat efforts.
- They are considering starting forage stockings. If you have expertise in this area or forage sampling, please get in touch with Adam.
- They have a large Invasive Carp crew working all over the state.
- They have expanded their habitat division by adding more staff and equipment, which allows them to plan for large habitat projects.

Louisiana – Sean Kinney (In-person report)

- They are developing a new Black Bass Management Plan, which should be finalized by mid-2026.
- They are developing statewide standard operating procedures for all sampling gear for reservoirs and rivers. They do not know of any state with a comprehensive statewide sampling plan. Once it is completed, they will share it with all the states.
- They are dealing with statewide bass regulations and their state's Legislature.
    - The Legislature is focused on the Atchafalaya Basin and wants to implement changes regarding the bass regulations.
    - They are dealing with mortality and recruitment issues in that system.
- They will be hosting SDAFS next year in New Orleans.

Florida – Sarah Menendez (In-person report)

- Dealing with the name change of the Florida Bass.
    - They are keeping the same regulations for them and Largemouth Bass.
    - Anyone bringing bass into Florida must be genetically tested beforehand to ensure no Largemouth Bass alleles are present.
- They continue battling invasive aquatic plants like Hydrilla, Water Lettuce, and Water Hyacinth.
- They are conducting a delayed mortality study on Florida Bass.
    - They did find higher mortality in the summer months.
    - They closed or restricted tournaments at Orange Lake during the summer months (June 15 through September 15). If they held a tournament, they followed the statewide limit of one over 16 inches.
    - They are considering the potential adoption of statewide summer tournament regulations. However, more data is needed.
- Their TrophyCatch Program, a trophy bass angler recognition program, is now in its 13th year.
    - Citizen science program for bass caught over eight pounds.
    - It runs from October 1 through September 30.
    - They had just under 1,000 approved TrophyCatch submissions.
    - They are looking for ways to increase angler participation in the program.

    - They now allow hiding the location of the waterbody where the TrophyCatch was caught to improve participation.
    - Orange Lake continues to be the best trophy bass lake in Florida.
- They are continuing their research on trophy bass through two initiatives.
    - They are conducting a diet study to see what forage produces optimum growth rates.
    - They are investigating female-only fisheries using fish from Red Hills Hatchery and wild-caught fish to assess trophy bass potential.
- They reviewed the new water regulations for Lake Okeechobee, set by the USACE and Water District. These regulations were triggered by a 90% reduction in submerged aquatic vegetation.
- They encountered a winter in Florida during which several invasive fish die-offs.

Oklahoma – Nate Hull (In-person report for Cliff Sager)

- They are continuing to evaluate their Florida bass stocking program. This six-year project examines genetic integration across water bodies to assess stocking success.
- They are stocking Grand Lake with F1s, which began in 2020.
    - They started by stocking age-1 fish and retired brood stock.
    - In 2024, they received a donation of F1 fingerlings from Kevin VanDam, which encouraged other groups and government bodies to contribute funds to continue F1 production from American Sportfish for the next ten years.
    - They are also making a more concerted effort to collect genetic material from Grand Lake.
- They are conducting more creel surveys in the state.
    - Developing a creel analysis tool and a survey input template using Survey 123.
- They are dealing with some issues with Hydrilla in the south-central part of the state.
    - Ardmore City Lake is the current trouble lake. It is a small city-owned reservoir, which historically had native aquatic vegetation.
    - In June, the whole lake was treated with Aquathol at once. It worked out okay. No fish kill occurred, but it did result in a large plankton bloom.
    - They are also battling Zebra Mussels in this reservoir.
- They are stocking Threadfin Shad in the state but do not have standard stocking procedures.
    - They have some reservoirs that produce high numbers of shad.
    - When conducting spring black bass electrofishing in a reservoir, if they observe low numbers of shad, they will visit reservoirs with high shad populations that are either free of ANS or located upstream. They will then collect shad from these reservoirs through electrofishing and transport them to the reservoirs that need more shad. At most, they have 10,000 to 12,000 individuals.
    - When hauling, they add salt and make sure the microbubbles from the aeration are not breaking the surface.

    - In the state, there is a reservoir with a Nursery Pond maintained by the USACE and a local lake association. There, they raised Threadfin Shad and released them into the lake. This initiative has proven to be very productive.
- They have a habitat initiative, which they have been active in with many local municipalities.

South Carolina – Amy Chastain (In-person report)

- They have several large habitat projects occurring on Lake Hartwell and Greenwood.
- They completed a habitat project on Lake Wateree, a Duke Energy habitat enhancement project.
- They have a Reef Ball habitat project on Lake Murray.
    - They have put out 23 reef balls so far.
- On Santee Cooper Lake, a shoreline habitat restoration project is being conducted using Water Willow.
- They hope to complete their statewide black bass genetics project by the end of the year.
    - Most of their reservoirs are heavily influenced by Florida bass genes.
    - They are doing in-house analysis.

Missouri – Shane Bush (In-person report and written notes from him and Tyler Ham)

- Flathead Catfish Population Assessments in Several of Missouri's Large Reservoirs and Small Impoundments
    - Using low frequency electrofishing (15 Hz/30% duty cycle pulsed DC) to collect flathead catfish for population demographic and age and growth analysis.
    - Just completed year 4 of sampling, aging of hard structures (pectoral spines) is ongoing.
- Post-regulation evaluation of a protected slot-length limit for Blue Catfish at Harry S Truman Reservoir and Lake of the Ozarks
    - Evaluating changes in length distributions and age structure of Blue Catfish populations that have occurred since the regulation change (26-34" protected slot, 10/day creel with 2 over 34") in 2014.
    - Characterize current angler satisfaction and support for the regulations.
- Crappie regulation changes at Wapapello, Mozingo, and Smithville lakes
    - Changed regulation to 30 crappie/day with only 15 over 9" to encourage angler harvest of slow growing black crappie while protecting larger white crappie.
    - Regulation is working at Smithville Lake where anglers are willing to harvest smaller black crappie <9". Smithville black crappie averaged only 2% over 9" for 30 years prior to the regulation change, It is now averaging 25% over 9" post regulation change and is currently sitting at 36% in 2024. Black crappie went from averaging 0.43% over 10" prior to the reg change to now averaging 5% post regulation change and is currently sitting at 11% in 2024.
- Understanding population demographics and angling impacts for Missouri's paddlefish fisheries

    - Using gillnets to capture and jaw band 1,000 paddlefish per reservoir (N=3) to update exploitation information from previous study in 2014 and characterize population demographics.
    - Angler creel surveys planned for snagging season (March 15-April 30) to help determine harvest rates and impacts of FFS to the population.
- Fish habitat projects
    - Completed Bass Pro Shops grant funded project at Table Rock Lake and Bull Shoals Lake in 2024.
    - Reservoir Fish Habitat Partnership (RFHP) funding approved for Truman and Mark Twain lakes in 2025.
    - Grant applications submitted for Stockton and Smithville lakes in 2026.
- Habitat Evaluation Project
    - Inform planning, installation, and maintenance of reservoir habitat enhancement projects in Ozark reservoirs (Bull Shoals, Harry S. Truman, and Table Rock)
        - Define the current condition and physical longevity fish habitat structures in Ozark reservoirs.
        - Define seasonal and annual fish use of cedar and hardwood fish habitat structures in Ozark reservoirs.
        - Use this information to inform statewide installation and maintenance planning
    - Initial results: Modeling replacement probability shows that cedar brush piles reach a 50% replacement probability in ~12 yrs. and hardwoods in ~10 yrs. Ultimately depends on what the lake manager wants to use as a replacement threshold.
- Bull Shoals Striped Bass Trophy Fishery
    - Doctoral project w/ University of Missouri Coop
        - Stocking dispersal- currently stock in two locations on Bull Shoals. Looking at post stocking dispersal (6”-9” fish), differences were found in initial dispersal between the two sites which evened out over time.
        - Trophic overlap- stable isotope analyses showed that STB did not show signs of persistent predation on sport fish, which is a major concern of bass and crappie anglers. Prey utilization results showed the greatest potential for competition with other Striped Bass, White Bass, and Walleye.
        - Modeled multiple minimum length limit and stocking rate combos. Found that Bull Shoals could support a trophy fishery, conversations ongoing on path forward
- Updating statewide species management plans including: Paddlefish, Smallmouth Bass & Rock Bass, and Trout
- Fisheries Information Network System (FINS) Revision
    - FINS is the central repository for all fisheries data in MO. Originally built in-house in the mid-2000s, the system is beginning to become obsolete and buggy.
    - MDC is working with Real Time Research, a private company, to design a new database. Currently we are designing a desktop portal and an Android-based

mobile app and will be rolling out for wider implementation soon. A public dashboard and age structure component are planned.
    - RTR will provide long-term tech support.
    - Database will generate graphs and tables for reporting.
- Table Rock Lake spotted bass regulation change
    - Reducing spotted bass minimum length limit from 15" to 12".
    - Stakeholder and communication plan developed and public comment period opening in March. If approved regulation will go into effect in 2026.
- Grass carp and brown trout acoustic telemetry study on Lake Taneycomo
    - Testing three different tagging methods for Vemco V13 tags in 11-13" fish, including internal, internal stuture, and external tagging. Monitoring fish in hatchery setting for 12 months to determine tag retention rates.
    - Using best tag retention method, stock approximately 225 tagged grass carp and brown trout into Lake Taneycomo and monitor movement, emigration, and habitat preferences for 3 years.

Georgia – Aaron Gray (In-person report)

- They are introducing a Black Bass license plate to tie in with the bass slam initiative.
- The Walton greenhouse remains productive, planting at 20 different waterbodies with 8 to 10 vegetation types.
- Three planting days were held at Clarks Hill Reservoir with the USACE, local bass clubs, and environmental groups.
- They have plenty of new shoreline habitat from Hurricane Helene.
- They conducted surveys for Hydrilla on Clarks Hill Reservoir. The reservoir was overrun with this invasive plant in the past, but recent annual surveys have shown no detections. Unfortunately, this past summer, they found Hydrilla in the upper end of the reservoir. The USACE will conduct their survey next year.
- They plan to refresh seven of their 14 offshore habitat sites on Clarks Hill Reservoir by adding 20 to 30 hardwood trees at each site.
- They are encouraging Spotted Bass harvest in the state. They have made some headway with local fishing groups, bass clubs, and other groups.
- They are helping with two Master's study research projects. One is on crappie population dynamics and habitat use in five reservoirs. The other is conducting a gear comparison study between AFS experimental gill nets and their Agency standard gill nets.
- Lake Hartwell receives Hybrid Striped Bass from both Georgia and South Carolina. Georgia stocks the Sunshine Bass (reciprocal cross), while South Carolina stocks the Palmetto Bass (original cross). They are looking for meaningful differences in growth and mortality among these two hybrids.
- They are trying to standard reservoir reports across the Agency.

- They ran into an issue with verifying a Spotted Bass state record. They doubt it was a pure Spotted Bass. Unfortunately, it went sideways on social media. Moving forward, they are considering developing a SOP for verifying records with several checks.

Virginia – John Odenkirk (Provided written notes)

- F1 bass stocking evaluation
    - LMB F1 supplemental stocking study in VA. 5 Reservoirs. Began in 2015 w/ Smith Mtn Lake (thru 2023, 9 years total stocking) – other lakes 6 years total stocking – Claytor began in 2018, others in 2020. This year (2025) final year. 3 stocking rates based on unique CPUE of juvenile fish for each lake – "low, medium and high" – each lake received 2 stockings of each rate (hence 6 stocking years). Most lakes received stockings only in a portion. Stocking rates light (1-4/acre) on a "whole lake" rate.
    - SML = most complete data to date due to earlier start. Five of past 8 years recruitment at record levels. Increasing trends in EF CPE and tournament catch of trophy bass. 30 lb. bag in 2024=heaviest known from lake. Average F1 % contribution to EF samples = 6.2%, based on whole lake samples. Age 9 F1> TL over wild fish by 4". Contact Dan Wilson.
    - Anna = mid-lake stocked w/ F1s. Max (heavy) year was 35K fish. Overall contribution to mid lake EF survey in 2024 was > 17% w/ 4 cohorts, but biased due to only pulling samples from stocking area. Medium stocking density (~2.5/ac or about 23K fish) best returns so far – persistent over multiple years. 31 lb. bag in 2024=heaviest known from lake. F1 fish began appearing in tournament bags in spring 2024. Contact John Odenkirk.
- Saugeye stockings phenomenally successful
    - Changed from WAE to SAE in many lakes and seeing very high survival rates, fast growth and good return to creel – still early, but looks very encouraging. Making own fish "in house". For example, Lake Anna, stocked several years with 5/acre resulted in GN CPE of 10 fish/net night. Age 2+ fish averaged 534 mm – easily past 18" min. size.
- Morone parentage-based tagging
    - Working with Heather Evans et al. to develop system to mark stocked cohorts to help answer a variety of management questions. PCR-based assay with 120-130 markers. STB ready, but still working of HSB. VA one of several states pooling resources - Scott Smith primary contact w/ DWR.
- Largest phosphorous Inactivation attempt on Mutliuse Reservoir
    - Lake Anna Advisory Committee (LAAC) with directed funding from state legislators in 2024 attempted to reduce legacy P and P inflow via direct application of EutroSORB G and drip of EutroSORB WC using a lanthanum modified bentonite compound. 44 tons applied to one arm of reservoir. Poor study design – basically 3 arms of reservoir – one received this treatment, one another (even more sketchy treatment) and one arm for control. LAAC claimed success (determined as at least a 10% drop in P samples), but drought year, and

control was reduced as well. Very poor study design! LAAC trying to get more funding as we speak. Big issue is what will happen to phytoplankton in upper arm where all productivity occurs and what impact to 3 clupeids that drive the fishery which is currently at all-time highs in many categories. Contact Odenkirk.

- Submerged Aquatic Vegetation planting continues in some lakes
    - Water Willow and Eelgrass beds were established in Claytor Lake in SW VA in 2024. This effort joins many others primarily in the southern portion of the state. Luckily, many lakes in central and northern VA have been blessed with vibrant Water Willow beds through natural processes which have been credited with helping boost bass recruitment. Contact Kristen Chestnut-Faull.

Open Discussion –

Midwest Fish and Wildlife Conference Joint Reservoir Committee Meeting – Sean Kinney
Sean had three main points to share with the Committee during the meeting, which included four presentations. One presentation from Iowa highlighted the use of sediment traps intentionally created at the upper ends of small reservoirs. These traps prevent sediment from entering the lake and create a habitat for young fish. Additionally, some states are constructing shoreline protection just offshore. Essentially, a dyke extends out to a levee, which safeguards the shoreline while also providing more bank fishing access. Lastly, certain states are acquiring concrete blocks at little to no cost to establish fish habitats, and they are sourcing damaged or rejected blocks for this purpose.

Summer Committee Meeting – Sean Kinney/Shane Bush
Sean is considering holding an in-person summer committee meeting at Truman Lake in Missouri. The meeting will include a field component using low-pulse electrofishing to study catfish. The tentative plan is to host the meeting at Sean's property adjacent to the lake in late May or early June. If you cannot attend, please consider sending someone from your staff to represent you. Sean will be sending more details soon.

Lakes and Reservoirs Spatial data Review with MLI and SECAS – Emily Granstaff
Emily is collaborating with the USFWS on the Southeast Conservation Adaptation Strategy (SECAS). They need assistance reviewing the "Lakes and Reservoirs" spatial data layer. This data layer is used as input for the Midwest and Southeast Conservation Blueprints to identify priority areas for a connected network of lands and waters in their respective regions. The meeting was held on March 27, 2025, but here is a link for more information on their efforts (Click Here).

Lyngbya Control in Reservoirs – Casey Joubert
If anyone has succeeded in controlling Lyngbya in reservoirs, please contact Casey. Mike Homer said they had used water IQ units. Aaron Gray and Nathan Hull both commented that their Agencies where using similar technologies.

Search for New Chairman – Sean Kinney

Traditionally, there is no voting process for the Chair position; instead, a successor is designated. Sean's tenure is expected to conclude after the SDAFS meeting in New Orleans. He has not yet decided whether he will step down, as he will have served as Chair for six years. He encouraged anyone interested in taking over the position to reach out to him. Jeremy R. expressed his intention to put his name forward for the Chair position whenever Sean is ready to step down.

The RC meeting was concluded at 01:07 pm.

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

2025 SDAFS Reservoir Technical Committee Meeting

February 18, 2025 from 9:00 – 16:00 Eastern time

Zoom Link for those attending remotely

Meeting ID: 923 6477 8946 Passcode: 937938

1. Introduction – Sean Kinney
2. Financial report – Jeremy Risley
3. Jenkins Scholarship award – Jeremy Shiflet
4. Presentation by 2025 scholarship winner
5. SDAFS EXCOM
6. Discussion on Endowment Funding
7. Website –Jeremy Shiflet
8. Update on micro plastic research/plans/grant
9. Request/s for funding
10. Forward Facing Sonar
11. State Updates
12. Open Discussion
13. Search for new Chairman
14. Adjourn

Name	Affiliation	Email	In-person/Virtual	State Rep.
Matthew Marshall	Alabama Wildlife and Freshwater Fisheries	matthew.marshall@dcnr.alabama.gov	In-person	
Jeremy Risley	Arkansas Game and Fish Commission	jeremy.risley@agfc.ar.gov	In-person	X
Vic DiCenzo	Arkansas Game and Fish Commission	vic.dicenzo@agfc.ar.gov	In-person	
Sara Menendez	Florida Fish and Wildlife Conservation Commission	sara.menendez@myfwc.com	In-person	X
Aaron Gray	Georgia Department of Natural Resources	aarongray1@dnr.ga.gov	In-person	X
Bobby Cope	Iowa State University	wrcope@iastate.edu	In-person	
Jack Fisk	Kentucky Department of Fish & Wildlife Resources	jack.fisk@ky.gov	In-person	
Adam Martin	Kentucky Department of Fish & Wildlife Resources	adam.martin@ky.gov	In-person	
Emily Watling	Kentucky Department of Fish & Wildlife Resources	emily.watling@ky.gov	In-person	
Jason Russell	Kentucky Department of Fish & Wildlife Resources	jason.russell@ky.gov	In-person	
Maddy Ruble	Kentucky Department of Fish & Wildlife Resources	madelyn.ruble@ky.gov	In-person	
Nick Simpson	Kentucky Department of Fish & Wildlife Resources	nick.simpson@ky.gov	In-person	
Spencer Phillips	Kentucky Department of Fish & Wildlife Resources	spencer.phillips@ky.gov	In-person	
Davis Norris	Louisiana Department of Wildlife and Fisheries	dnorris@wlf.la.gov	In-person	
Sean Kinney	Louisiana Department of Wildlife and Fisheries	skinney@wlf.la.gov	In-person	X
Shelby Richard	Louisiana Department of Wildlife and Fisheries	srichard@wlf.la.gov	In-person	
Casey Joubert	North Carolina Wildlife Resources Commission	casey.joubert@ncwildlife.org	In-person	X
Nate Hull	Oklahoma Department of Wildlife Conservation	nathanael.hull@odwc.ok.gov	In-person	
Amy Chastain	South Carolina Department of Natural Reseoruces	breedlovea@dnr.sc.gov	In-person	X
Conner Owens	South Carolina Department of Natural Reseoruces	owensc@dnr.sc.gov	In-person	
Alan Beach	Tennessee Wildlife Resources Agency	alan.beach@tn.gov	In-person	
Michael Homer	Texas Parks and Wildlife Department	michael.homer@tpwd.texas.gov	In-person	X
Gene Gilliland	B.A.S.S	ggilliland@bassmaster.com	Virtual	
Jeremy Shiflet	Kentucky Department of Fish & Wildlife Resources	jeremy.shiflet@ky.gov	Virtual	X
Shane Bush	Missouri Department of Conservation	shane.bush@mdc.mo.gov	Virtual	X
Tyler Ham	Missouri Department of Conseservation	tyler.ham@mdc.mo.gov	Virtual	
Seth Mycko	North Carolina Wildlife Resources Commission	seth.mycko@ncwildlife.org	Virtual	
Dan Shoup	Oklahoma State University	daniel.shoup@okstate.edu	Virtual	
Shannon O'Quinn	Tennesse Valley Authory	tsoquinn@tva.gov	Virtual	

SDAFS Reservoir Committee Edward Jones Mutual Fund Account Balance ending January 2025							
Prepared on 02/12/2025 by Jeremy Risley - Sec/Treasurer							
Date	**Beginning Balance**	**Deposits**	**Withdrawals**	**Fees**	**Change in Value**	**Ending Balance**	**Comment**
Jan-24	$27,507.80			-$19.09	$64.31	$27,553.02	
Feb-24	$27,553.02	$500.00	-$1,000.00	-$19.24	$435.25	$27,469.03	$500 transferred between accounts (01/29_30), $500 scholarship (Joshua Stafford, 02/01)
Mar-24	$27,469.03	$1,000.00	-$2,000.00	-$17.98	$293.57	$26,744.62	$1,000 transferred between accounts (03/07), $1,000 to Wisconsin DNR for Crappie Book (02/19)
Apr-24	$26,744.62			-$18.62	-$472.36	$26,253.64	
May-24	$26,253.64			-$17.47	$301.92	$26,538.09	
Jun-24	$26,538.09			-$18.27	$385.82	$26,905.64	
Jul-24	$26,905.64			-$18.63	$53.01	$26,940.02	
Aug-24	$26,940.02			-$19.47	$469.03	$27,389.58	
Sep-24	$27,389.58			-$19.61	$331.10	$27,701.07	
Oct-24	$27,701.07			-$19.36	-$225.06	$27,456.65	
Nov-24	$27,456.65			-$20.07	$347.89	$27,784.47	
Dec-24	$27,784.47			-$19.43	-$360.47	$27,404.57	
Jan - Dec 2024	$27,507.80	**$1,500.00**	**-$3,000.00**	**-$227.24**	**$1,624.01**	**$27,404.57**	**2024 Assets deposited to acct / 2024 Assets withdrawn from acct**
						($103.23)	**0.38% decrease**
						$17,404.57	**Account balance without TVA Grant**
Jan-25	$27,404.57	$1,500.00	-$1,500.00	-$20.19	$346.98	$27,731.36	$1,500 transferred between accounts (01/29_30)

DISPERSAL, DISTRIBUTION, ESCAPEMENT, AND SURVIVAL OF FRY-STOCKED AND ADVANCED FINGERLING WALLEYE IN AN IOWA RESERVOIR

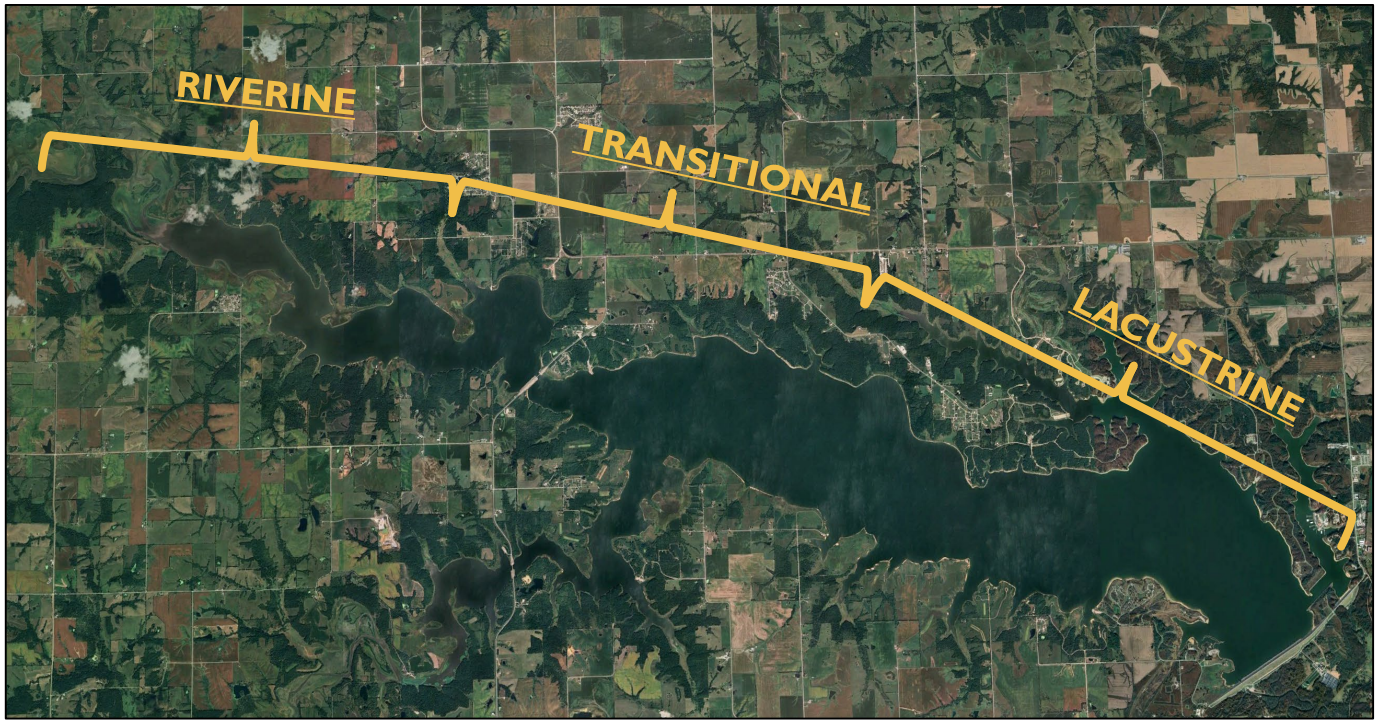
W. ROBERT COPE[1], MARK. K FLAMMANG[2], MICHAEL J. WEBER[1]

[1]DEPARTMENT OF NATURAL RESOURCE ECOLOGY & MANAGEMENT, IOWA STATE UNIVERSITY, AMES, IOWA 50011, USA

[2]IOWA DEPARTMENT OF NATURAL RESOURCES, 15053 HATCHERY PLACE, MORAVIA, IOWA 52571, USA

RESERVOIRS AND FISHERIES MANAGEMENT

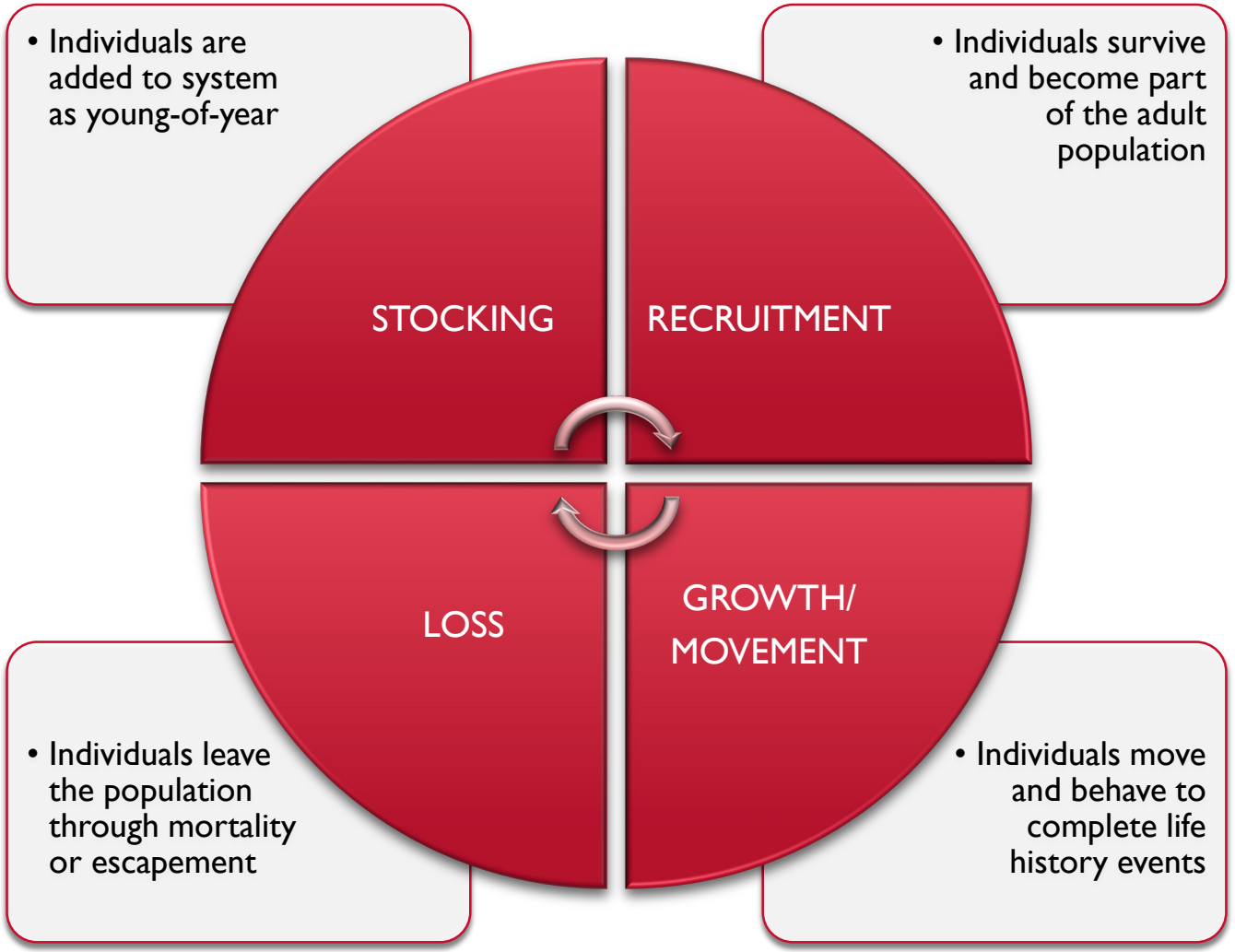
- Man-made impoundments
- Altered habitat with different characteristics
  - Riverine, transitional, lacustrine
- Altered fish communities
  - Introduction of non-native sportfishes
- Many different purposes and stakeholders



STOCKING FISHES IN RESERVOIRS

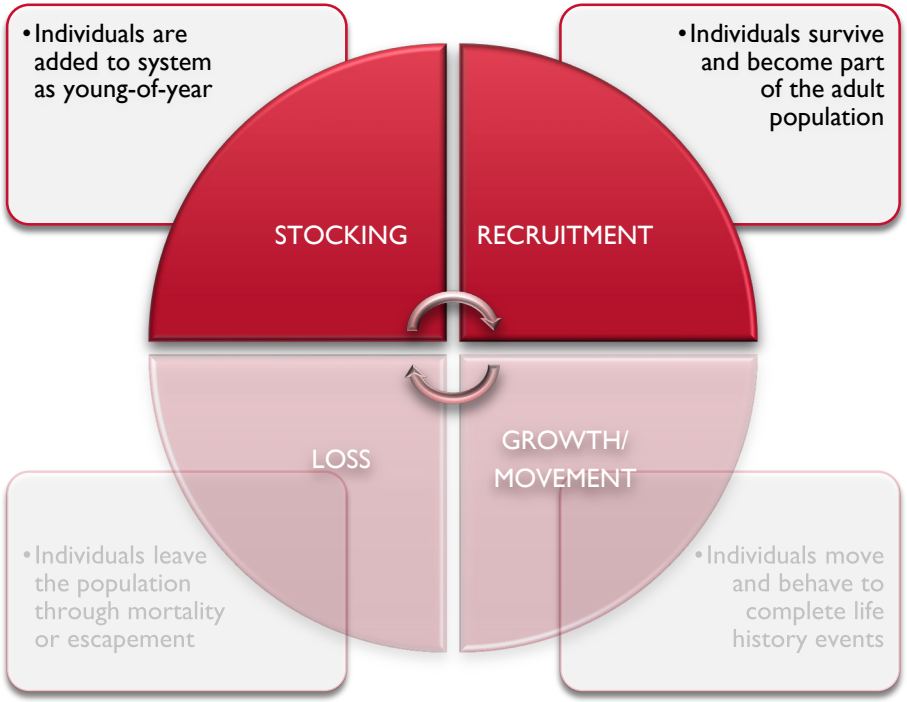
- Used to introduce, supplement, and maintain populations
- Aid natural reproducing populations
- Source of total recruitment from non-reproducing populations
- Important to success and strength of year-classes
- Highly variable
- Different stocking products
  - Time, effort, economic benefits and drawbacks

POPULATION DYNAMICS IN RESERVOIR FISHERIES



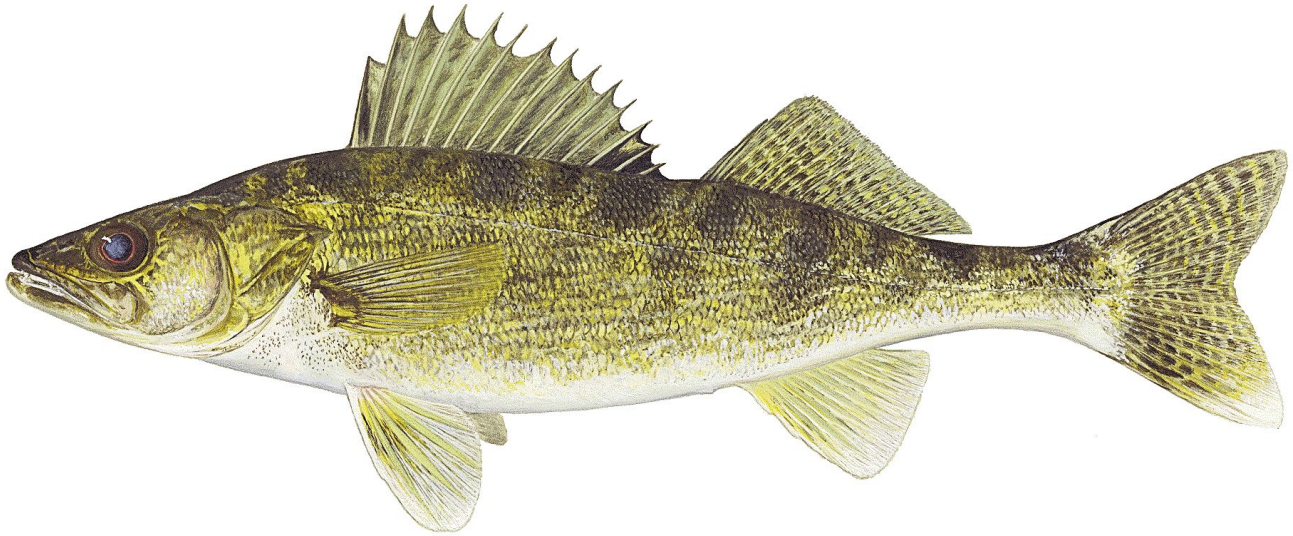
FACTORS INFLUENCING STOCKING AND RECRUITMENT

- Stocking product
  - Fry vs. Fingerlings
- Stocking location
- Stocking conditions
  - System acclimation
- Post-stocking dispersal and mortality
  - Hatchery habituation
- Reservoir escapement
  - Permanent loss of individuals



WALLEYE (*Sander vitreus*)

- Successfully introduced in many man-made lakes/impoundments
- Important recreational sportfish
- Migratory species
- Large home ranges
- Prone to reservoir escapement
  - Adult: 13.6%; Weber et al. 2013
  - Adult: 2–26%; Weber and Flammang 2019



OBJECTIVES

1. Compare post-stocking dispersal, reservoir use, and movement behaviors of fry-stocked and advanced fingerling Walleye released at two locations in Rathbun Lake.

OBJECTIVES

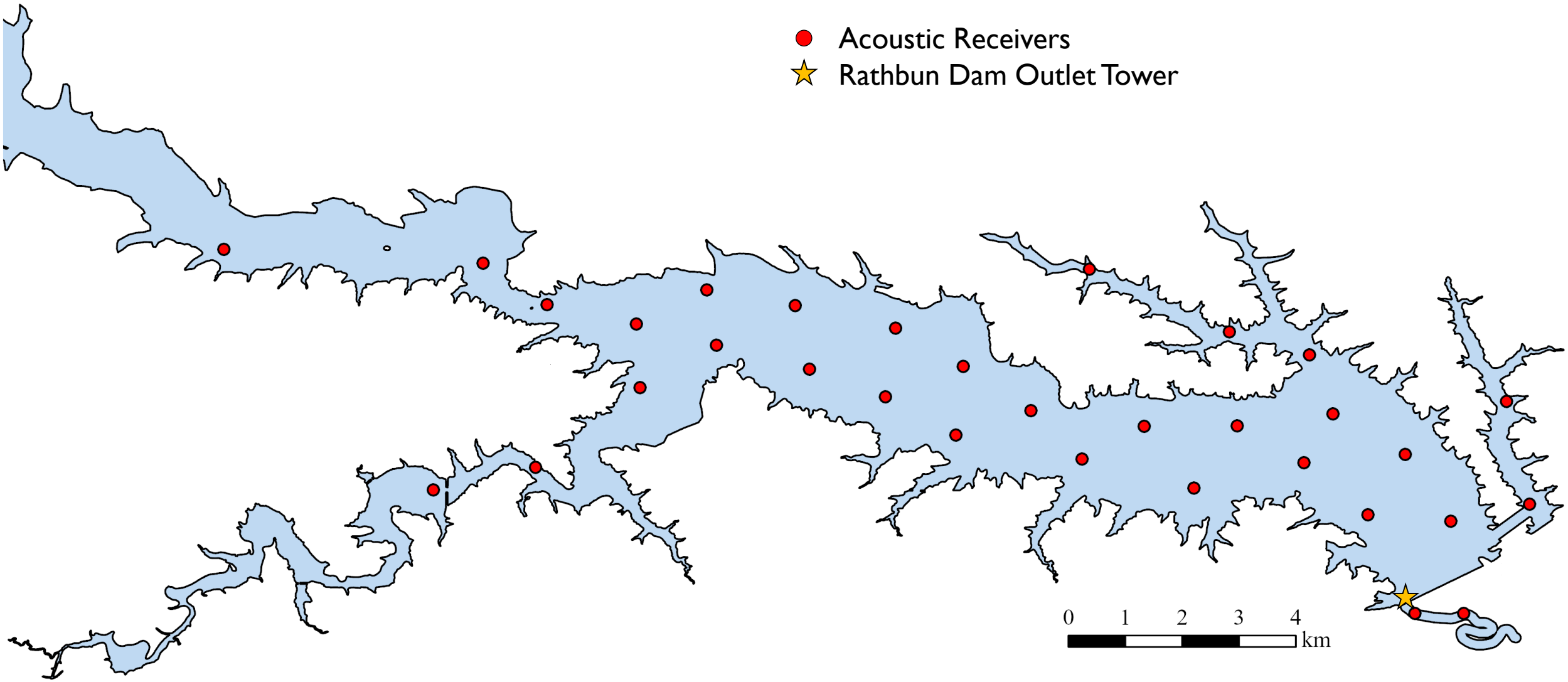
1. Compare post-stocking dispersal, reservoir use, and movement behaviors of fry-stocked and advanced fingerling Walleye released at two locations in Rathbun Lake.
2. Quantify weekly escapement and survival probabilities between fry-stocked and advanced fingerling Walleye in relation to length at stocking, short-term mortality trend, water temperature, and reservoir discharge.

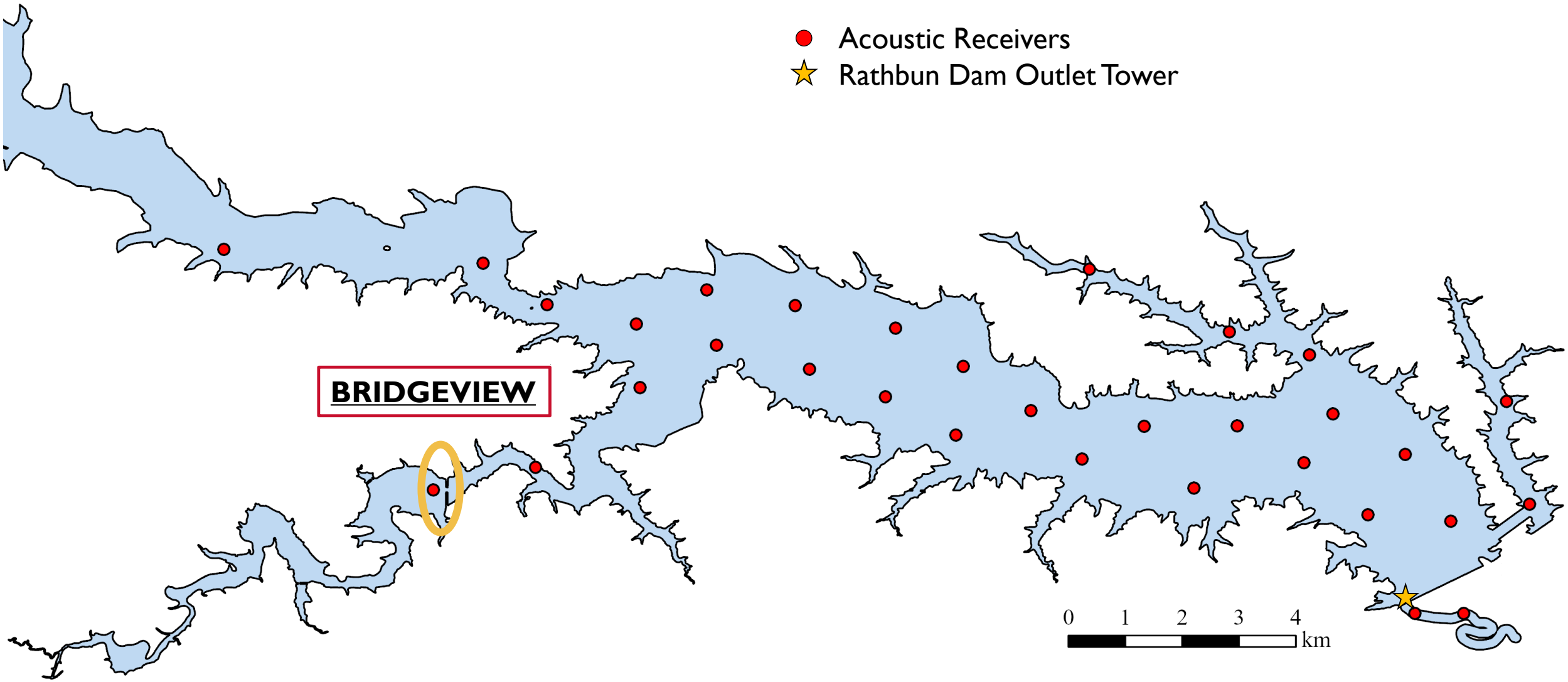
RATHBUN LAKE, IOWA

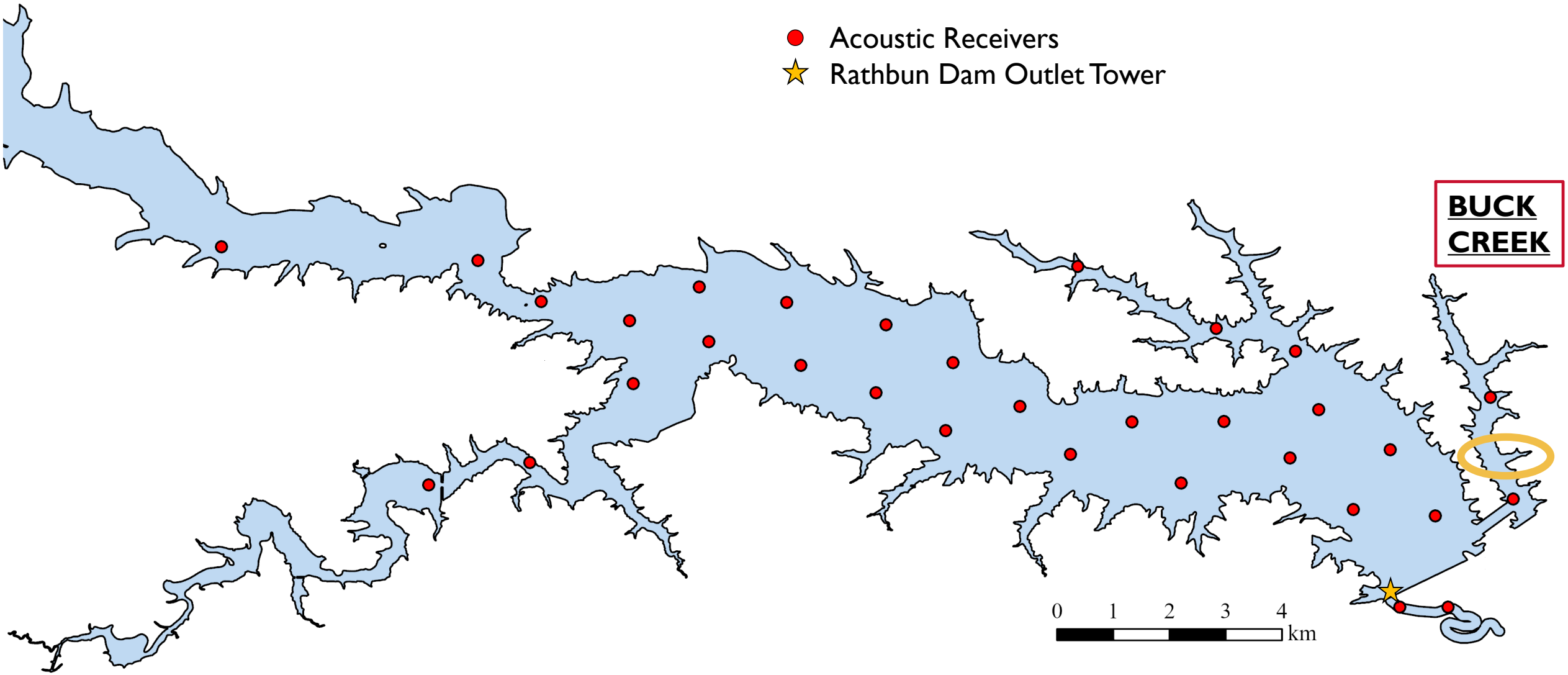
- 4,672 ha reservoir with earthen dam
  - bottom-draw control structure with outlet tower
- No natural reproduction of Walleye
- Large downstream discharges (>60 m^3/s)
- Juvenile Walleye escapement never studied

RECEIVERS AND TRANSMITTER IMPLANTATION

- Innovasea VR2W and VR2Tx receivers
  - Thirty in-lake and three downstream
  - Downloaded bi-annually 2019 – 2021
- Innovasea V7 coded transmitters
  - 158 V7 transmitters
- Fry-stocked juveniles collected during fall electrofishing
- Advanced fingerlings provided by hatchery personnel
- Surgeries in Rathbun Hatchery
- Released in multiple locations
  - November 2019 – 2021


Acoustic Receivers
Rathbun Dam Outlet Tower
0 1 2 3 4
km

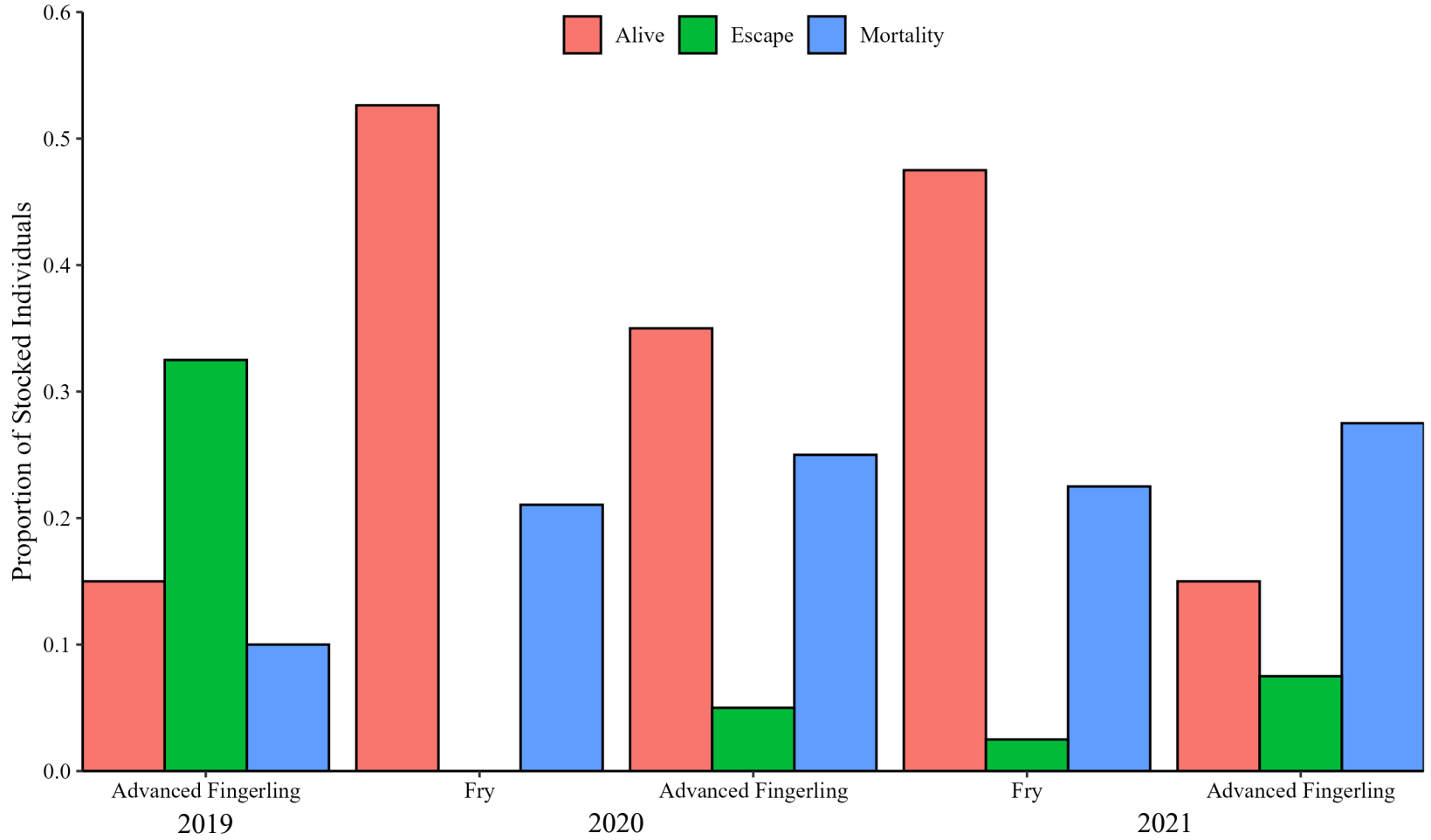

Acoustic Receivers
Rathbun Dam Outlet Tower
BRIDGEVIEW
0 1 2 3 4
km


Acoustic Receivers
Rathbun Dam Outlet Tower
BUCK CREEK
0 1 2 3 4
km

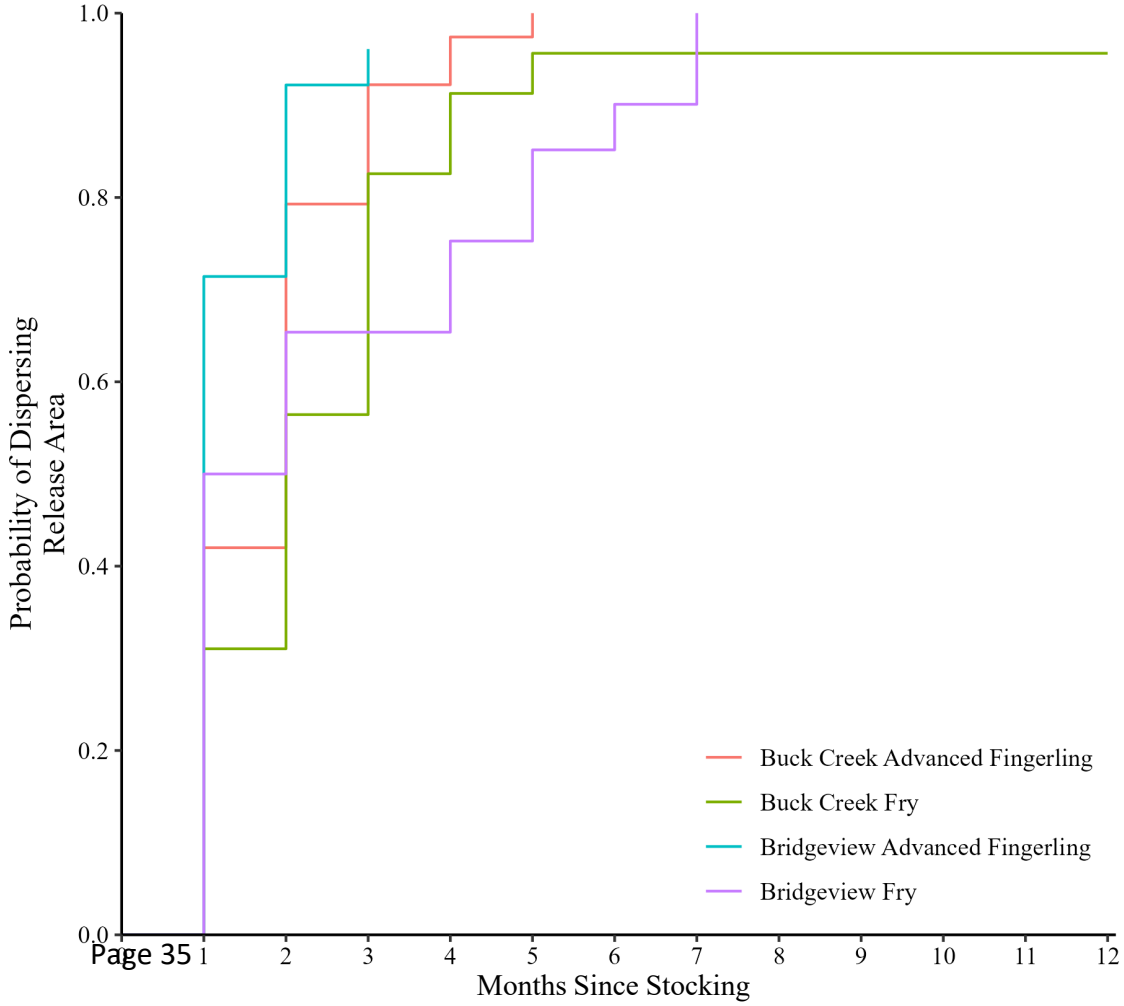
ANALYSES

- Time-to-event dispersal comparisons
- Kernel Utilization Distribution (KUD) estimation
  home range (95%) areas
- Proportion overlap of core and home range areas among individuals
- Residency near outlet tower
- Multi-state live-recapture model
  - Two states – Alive in-lake; Escaped from Rathbun Lake
  - Weekly survival and escapement probabilities

SUMMARY

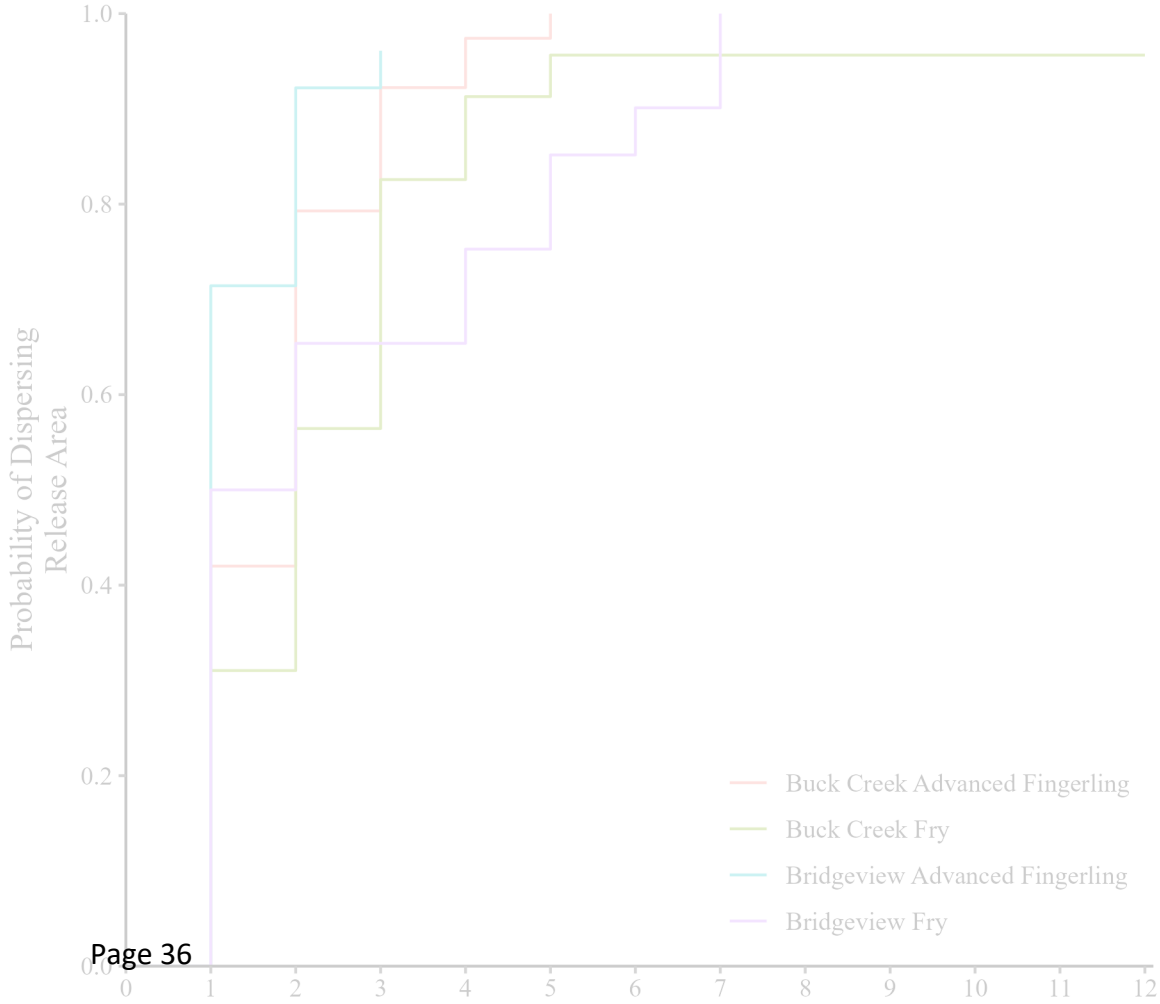

Alive
Escape
Mortality
Proportion of Stocked Individuals
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Advanced Fingerling
Fry
Advanced Fingerling
Fry
Advanced Fingerling
2019
2020
2021

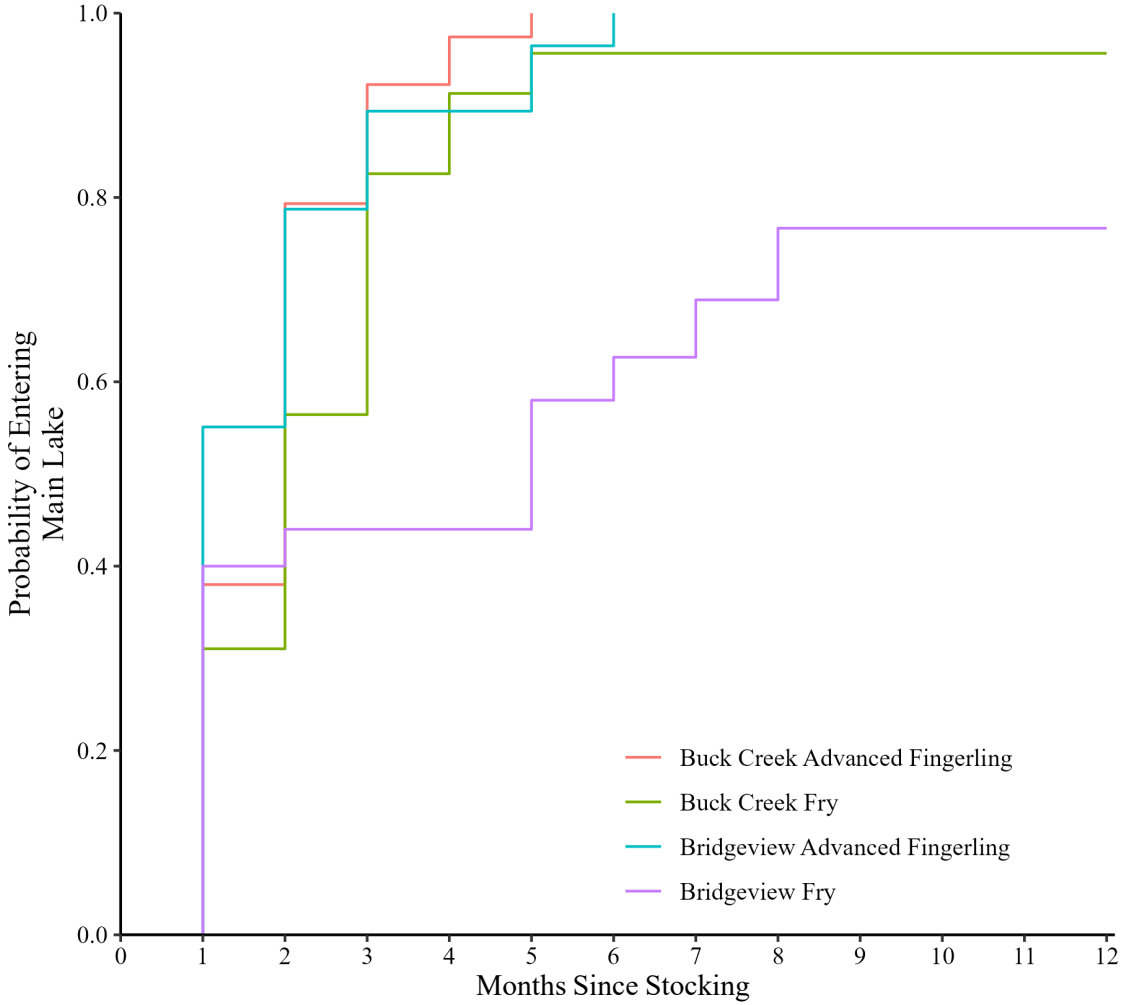
DISPERSAL


Probability of Dispersing
Release Area
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
Months Since Stocking
Buck Creek Advanced Fingerling
Buck Creek Fry
Bridgeview Advanced Fingerling
Bridgeview Fry

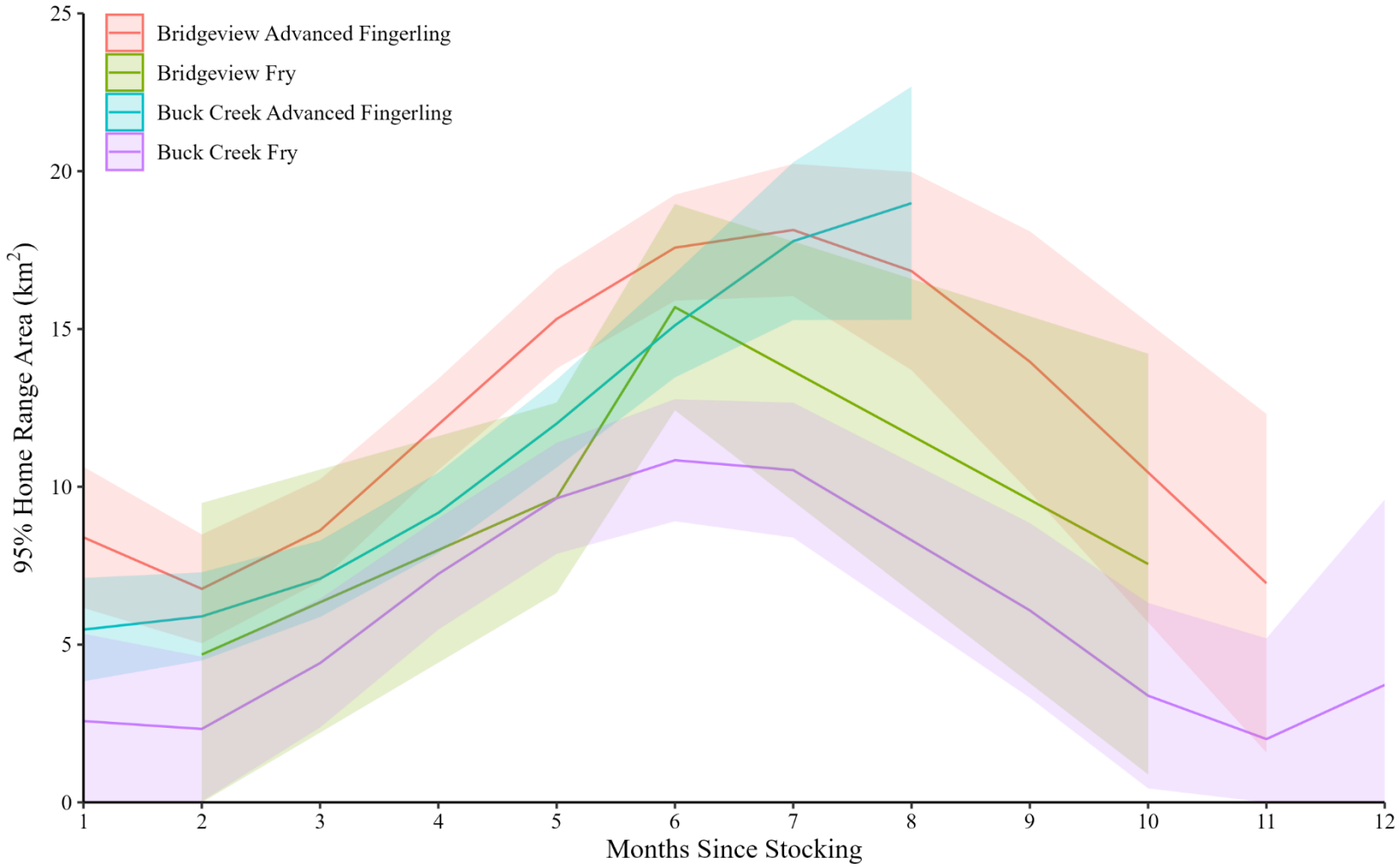
Probability of Entering
Main Lake
1.0
0.8
0.6
0.4
0.2
0.0
0
1
2
3
4
5
6
7
8
9
10
11
12
Buck Creek Advanced Fingerling
Buck Creek Fry
Bridgeview Advanced Fingerling
Bridgeview Fry

DISPERSAL

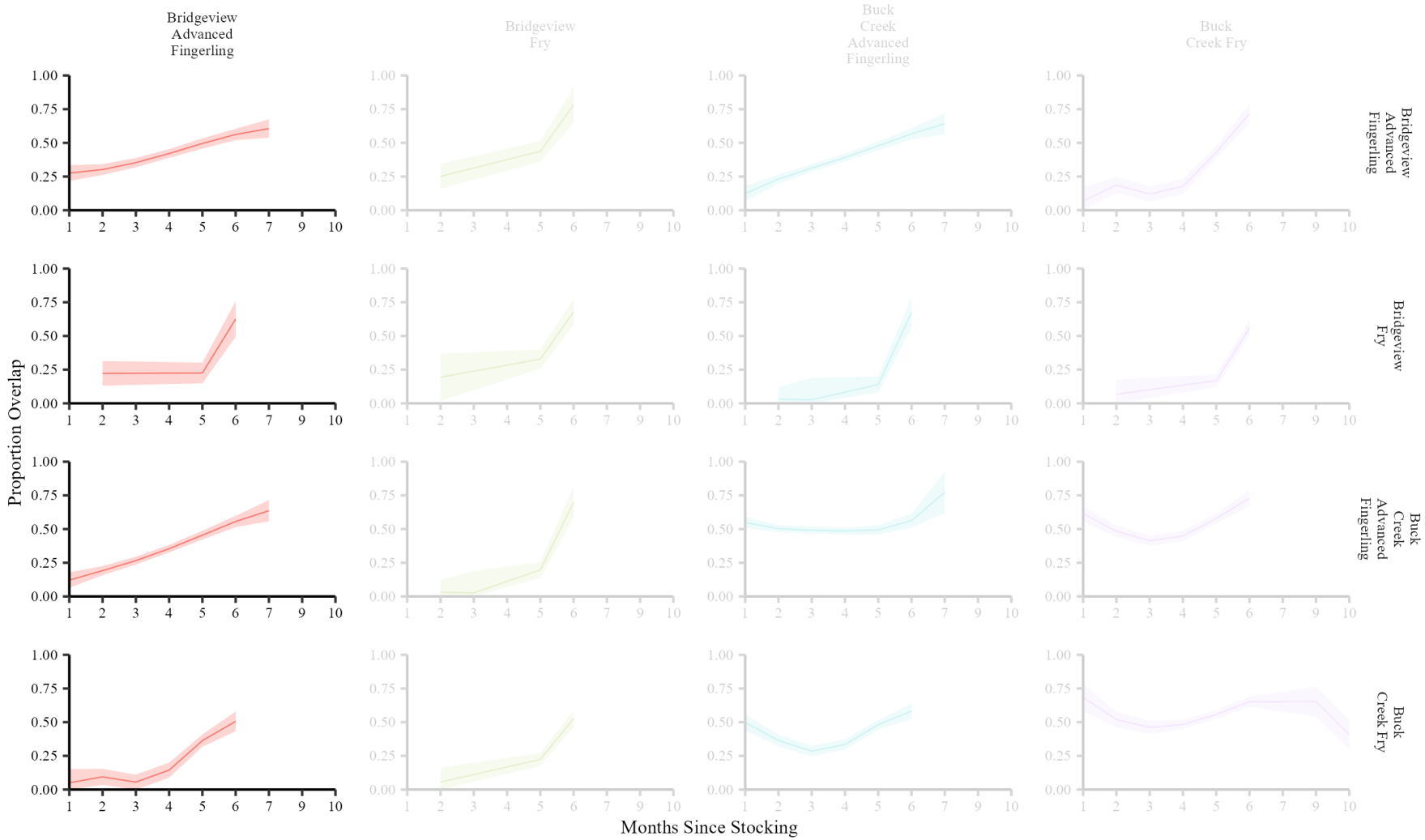

Probability of Dispersing Release Area
1.0
0.8
0.6
0.4
0.2
0.0
0
1
2
3
4
5
6
7
8
9
10
11
12
Buck Creek Advanced Fingerling
Buck Creek Fry
Bridgeview Advanced Fingerling
Bridgeview Fry


Probability of Entering Main Lake
1.0
0.8
0.6
0.4
0.2
0.0
0
1
2
3
4
5
6
7
8
9
10
11
12
Months Since Stocking
Buck Creek Advanced Fingerling
Buck Creek Fry
Bridgeview Advanced Fingerling
Bridgeview Fry

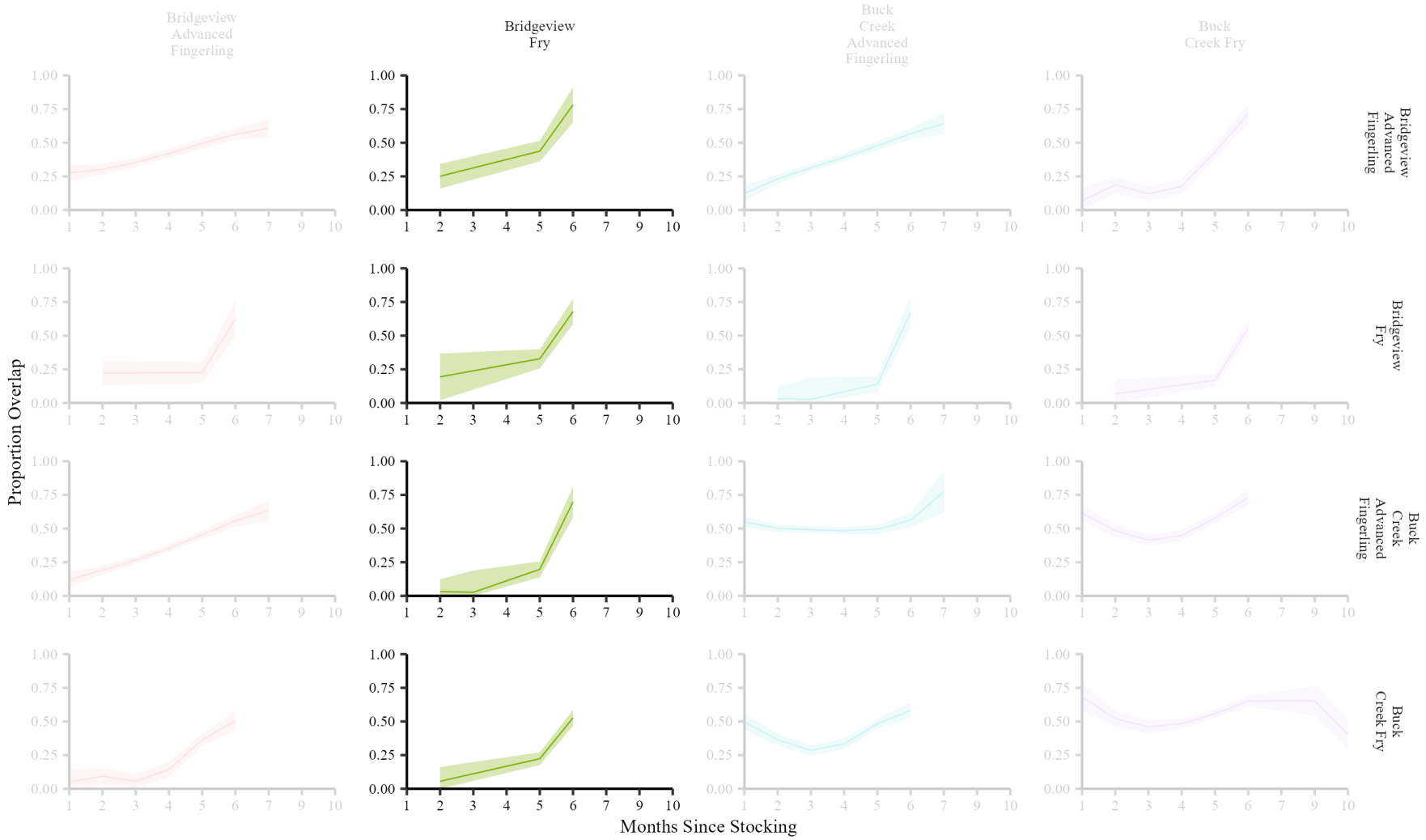
HOME RANGE SIZE



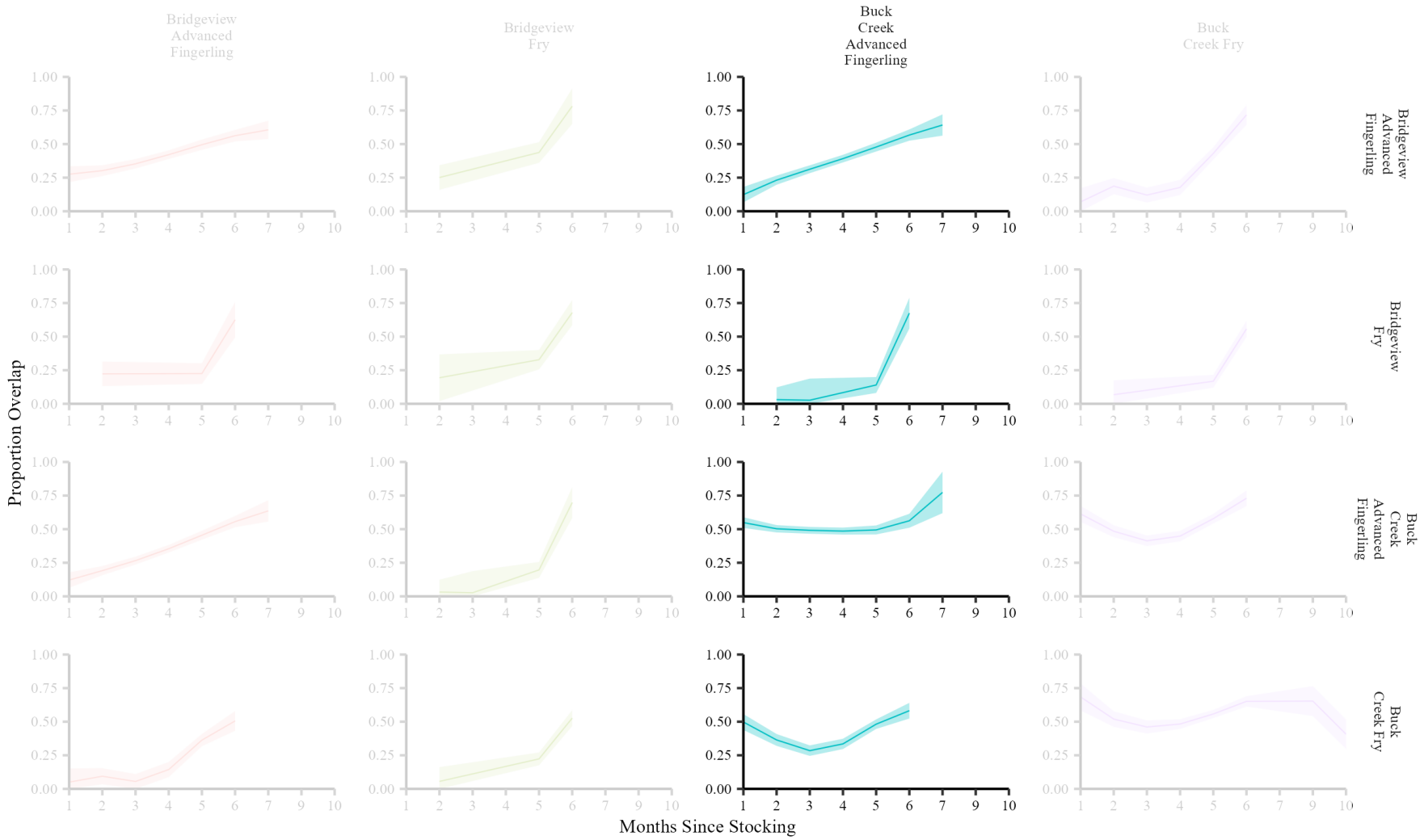
HOME RANGE OVERLAP



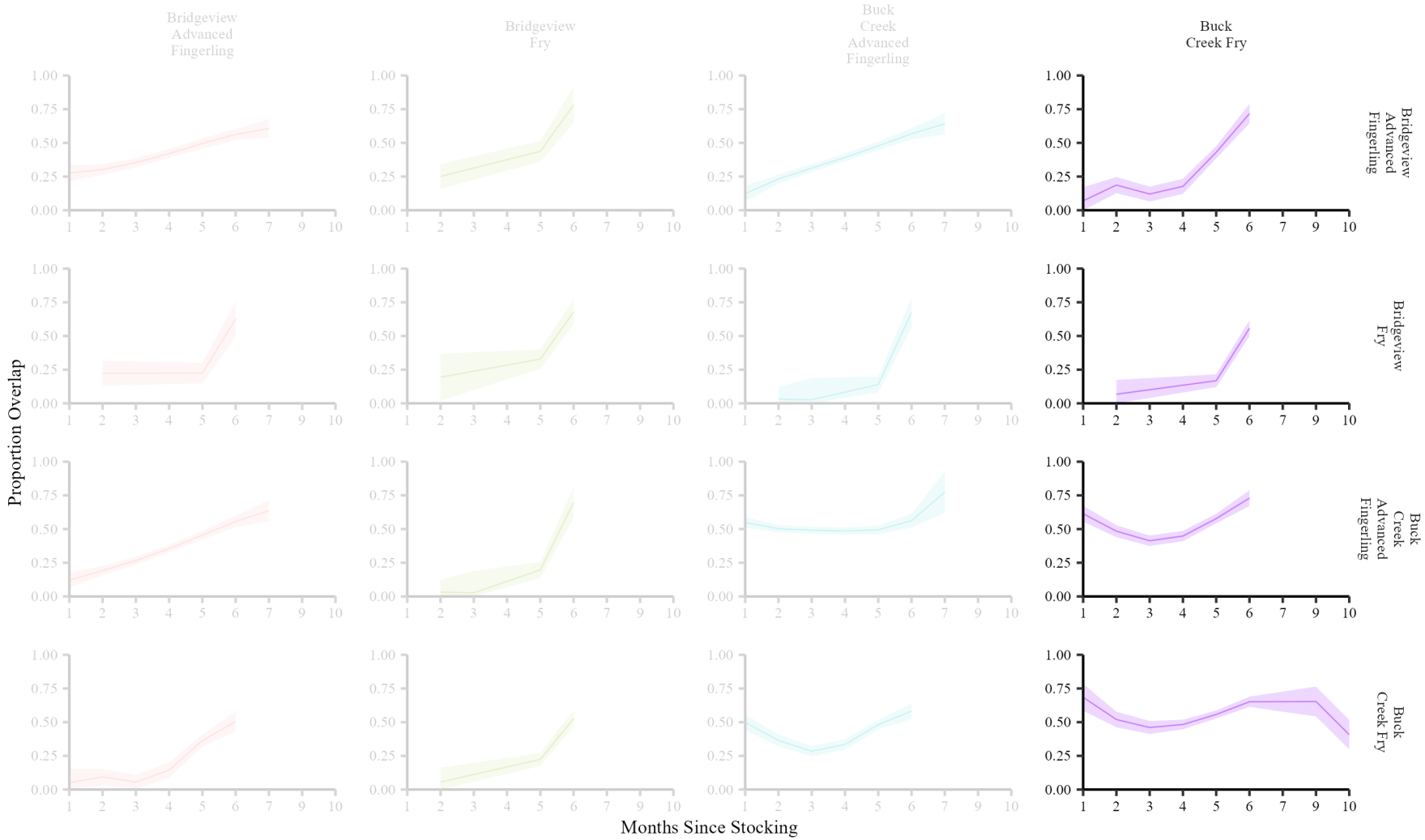
HOME RANGE OVERLAP



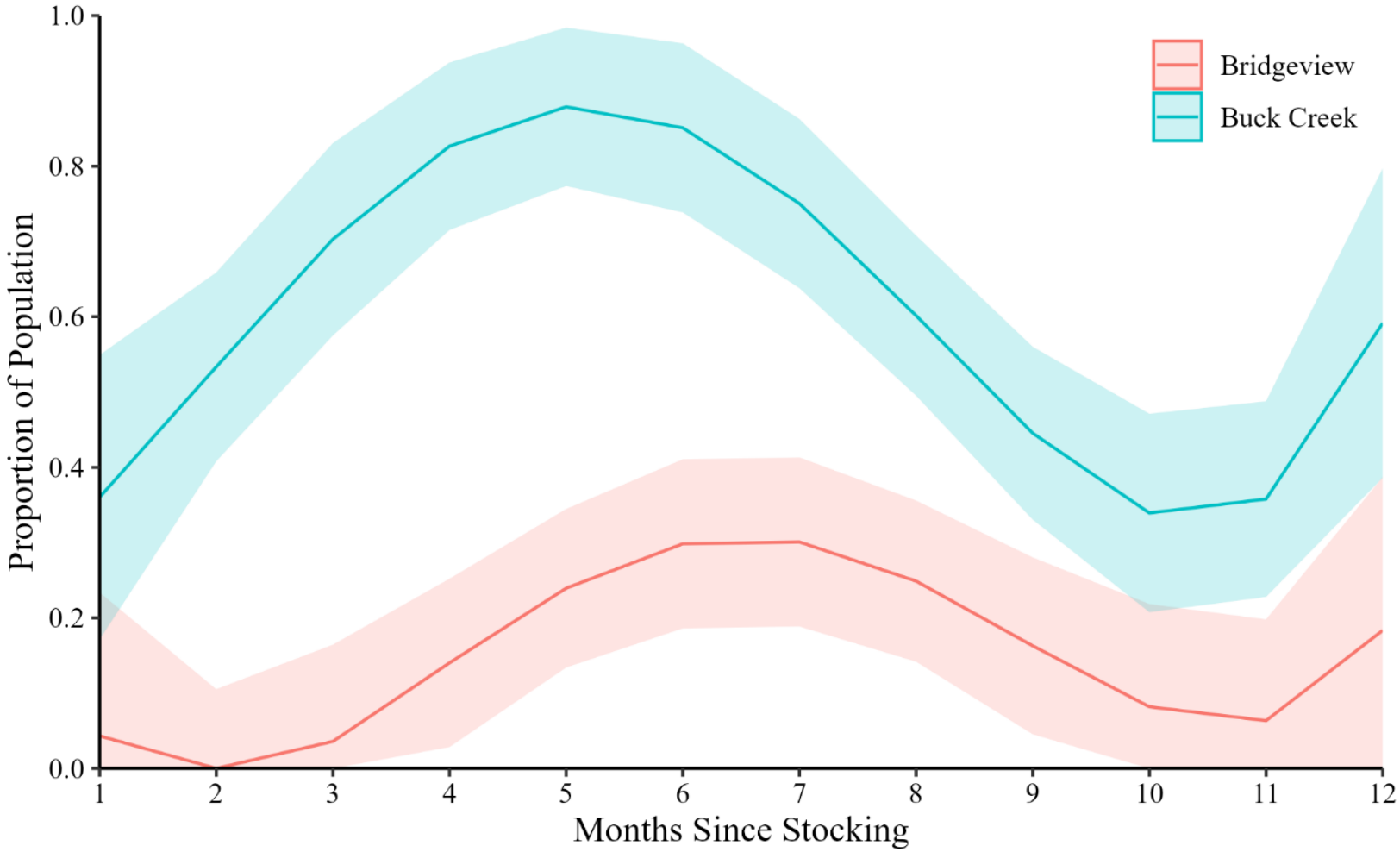
HOME RANGE OVERLAP



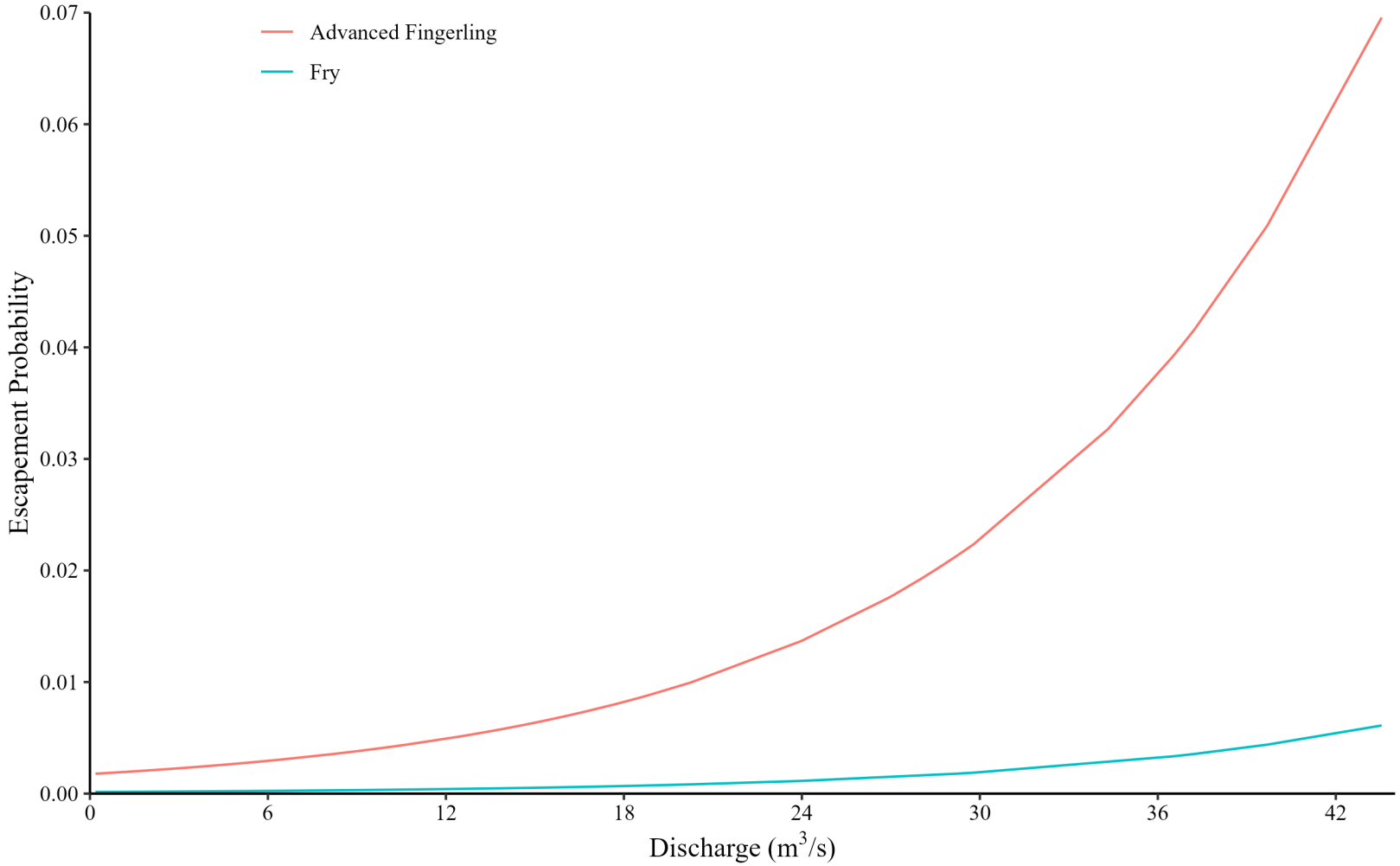
HOME RANGE OVERLAP



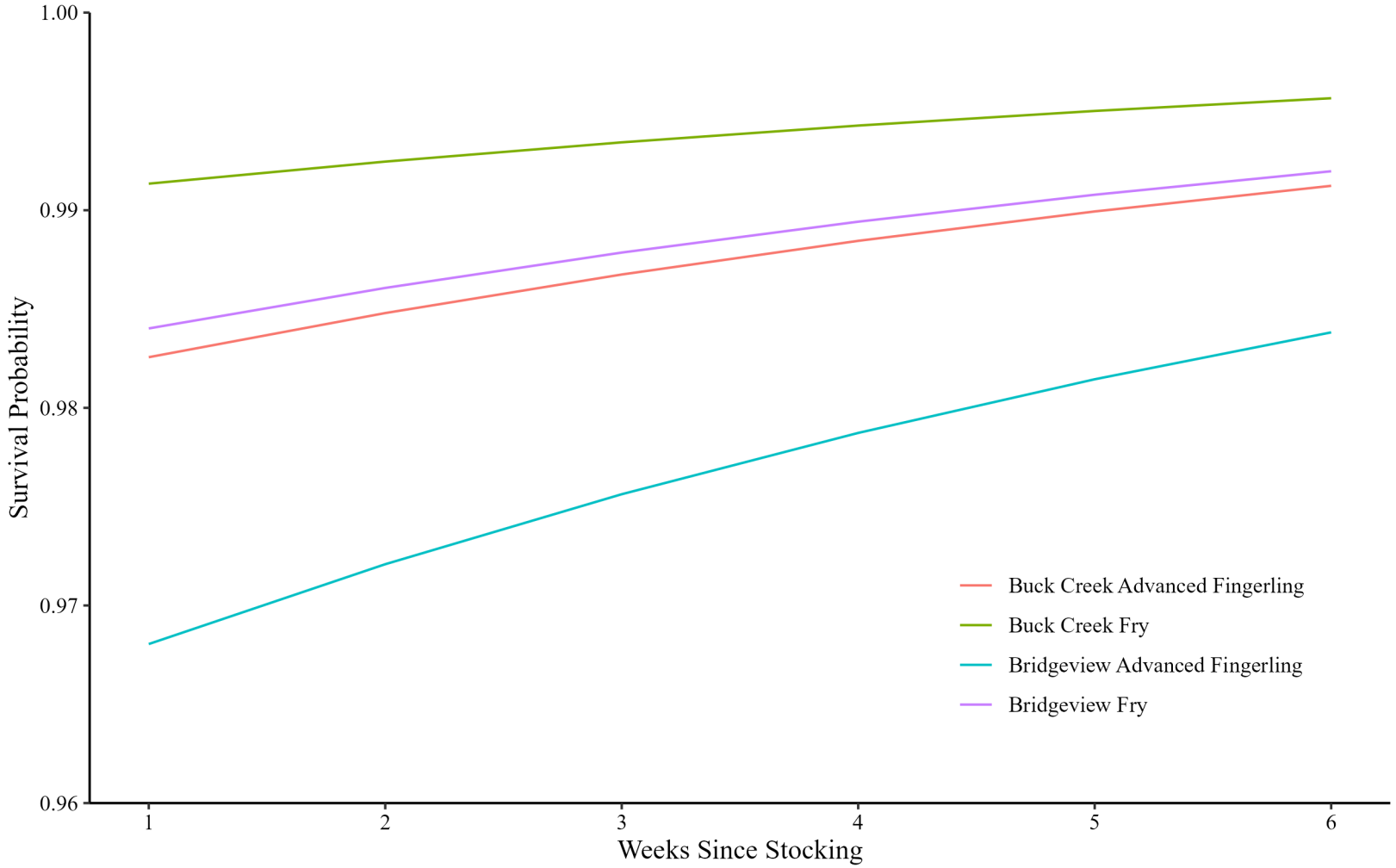
OUTLET TOWER RESIDENCY



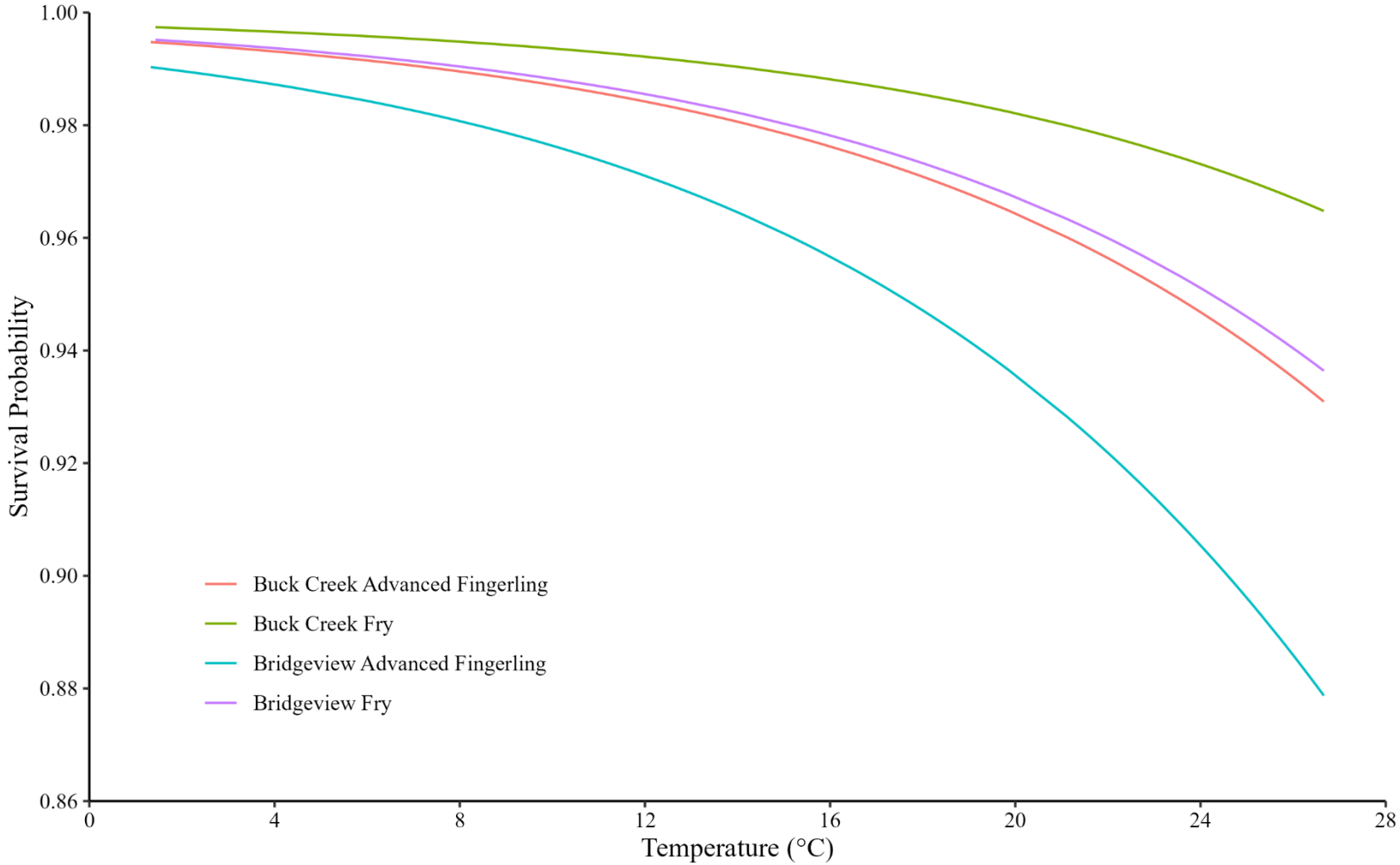
MULTI-STATE WEEKLY ESCAPEMENT BY DISCHARGE



MULTI-STATE WEEKLY SHORT-TERM SURVIVAL



MULTI-STATE WEEKLY SURVIVAL VS TEMPERATURE



CONCLUSIONS

- Advanced fingerlings quick to disperse from stocking locations
- Large areas of reservoir use
- Low initial spatial overlap; higher long-term
- Advanced fingerlings have higher escapement and lower survival
- Acclimation period during first six weeks post-stocking
- Temperature negatively affects survival

SUMMARY AND MANAGEMENT IMPLICATIONS


DANGER
CHEMICAL
STORAGE
OXIDIZER
2
W
DOOR MUST
REMAIN OPEN
WHILE
OCCUPIED
Cabela's