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D-J Grant No. F-40, Segment 47

Period: 01 April 2024
through
31 March 2025

ANNUAL PERFORMANCE REPORT

for

Statewide Fisheries Investigation Project

Part III of III

Subsection III: Reservoir and Urban Fisheries Research Branch



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Department of Fish and Wildlife Resources
Fisheries Division



STATE: Kentucky

PROJECT NO: F-40-47

GRANT TYPE: Research and Survey

GRANT TITLE: Statewide Fisheries Investigations

SUBSECTION I TITLE: Urban Fisheries Branch

PERIOD COVERED: 1 April 2024 - 31 March 2025

RESEARCH AND SURVEY SECTION

Subsection III

Project I Urban Fishing Program in Kentucky

Project Objective: To develop high quality urban fisheries in Kentucky that lead to high angler use, catch rates, and satisfaction.

A. ACTIVITY

During 1 April 2024 – 31 March 2025, 96,956 catfish (channel catfish and channel catfish x blue catfish hybrids), 119,750 rainbow trout and 18,115 bluegill were stocked in the Fishing in Neighborhoods (FINs) lakes. The program currently includes 45 lakes in 28 counties. A memorandum of agreement is in place with all lake owners enrolled in the FINs program giving Kentucky Department of Fish and Wildlife Resources (KDFWR) the authority to manage fish populations and set standardized regulations for all lakes in the program. An agency policy for adding new lakes to the FINs program was drafted and approved in January 2015 and updated in 2022.

Advertising and marketing efforts were employed in a continuing attempt to raise awareness of the FINs program, increase participation, and recruit new anglers. Facebook and X (formerly Twitter) notifications were posted around stocking dates. District fisheries biologists also mentioned the FINs program and stocking schedules in their weekly fishing reports. Flyers promoting the FINs program were distributed at boat shows, the state fair and other outreach events. A one-page advertisement for the FINs program appeared in the 2024-25 Kentucky Fishing and Boating Guide. Additionally, a one-page stocking table appeared in the 2024 and 2025 Kentucky Afield calendars. Newspaper, magazine and tv interviews, as well as press releases, were issued to promote the program. All lake owners were notified prior to fish being stocked so they could contact their followers via social media. The FINs website was routinely updated to convey the latest stocking information and list of lakes enrolled in the program. Kiosk posters promoting the FINs program and KDFWR's role in fish management and stocking was displayed at 25 of the 45 lakes. Information on the kiosk posters included the FINs logo, mission statement, fish stocking dates and quantities, license requirements, fishing regulations, fish identification, poacher hotline, no littering graphic, brief overview of fishery and past sampling, basic knot tying and the location of a rod loaner program if present.

Spring electrofishing sampling was conducted at 20 FINs lakes in May 2024. Samples were conducted to gather information on species composition, catch rates, and size structure. Furthermore, tandem hoop nets were used to sample catfish populations at 16 FINs lakes in October 2024.

B. TARGET DATES FOR ACHIEVEMENT AND ACCOMPLISHMENT

Planned work achievement date- 31 March 2025

Work accomplished- 31 March 2025

C. SIGNIFICANT DEVIATIONS

None.

D. REMARKS

None.

E. RECOMMENDATIONS

Continue project as planned on the next grant segment.

Project II Evaluation of Angling Effort Using Remote Cameras

Project Objective: To assess angling effort at the FINs program lakes. This will aid in determining whether FINs lakes around the state are having similar angling pressure to FINs lakes in Central Kentucky where recent creel surveys have been conducted. This data will also aid in assessing if current stocking strategies are adequate for the amount and timing of angling effort. If certain FINs lakes are not receiving the perceived pressure, then stocking rates could be reduced or other lake(s) substituted in the FINs program.

A. ACTIVITY

Cameras were installed at 15 FINs lakes in September 2017, with counts beginning 1 October 2017 and running through 30 September 2018. Additionally, cameras were set up at Jacobson Lake in October 2018 with counts beginning 1 November 2018 and running through 31 October 2019. The final group of eight FINs lakes had cameras set up in 2019 with counts beginning 1 October 2019 and running through 30 September 2020. Cameras were checked every 6-8 weeks to exchange memory cards and batteries. Both primary and secondary FINs lakes were surveyed to get a range of fishing pressure.

Cameras were set up to take a picture every half-hour from daylight to dusk. Only images at the top of the hour were used for analysis; however, the half hour pictures helped postulate if someone was fishing as well as aided in the number of in-person visual counts that could be collected for the correction factor. Timelapse Image Analyzer was used to assist KDFWR personnel with image analysis. This free software designed by the University of Calgary speeds up image analysis and reduces errors, by automatically populating many of the fields needed for analysis and reduces data entry errors by placing the image and data entry on the same form. In a previous study, this software was found to cut image analysis time in half versus viewing images and entering data in separate spreadsheet. Images analysis by KDFWR technician staff was completed in April 2021, with final analysis of data still ongoing. Cameras were collected after the 12-month period. The first instance of vandalism occurred in June 2018 when a camera at Logan Hubble Park Lake went missing along with the security box.

B. TARGET DATES FOR ACHIEVEMENT AND ACCOMPLISHMENT

Planned work achievement date- 31 March 2026

Work accomplished, cameras collected - Analysis of images and data ongoing/delayed

C. SIGNIFICANT DEVIATIONS

None

D. REMARKS

None.

E. RECOMMENDATIONS

The analysis is being completed for 24 additional FINs lakes surveyed in 2017-18, 2018-19 and 2019-20 that will appear in Segment 48.

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Section I: Stocking Initiative

FINDINGS

The Fishing in Neighborhoods (FINs) program underwent an expansion from 6 pilot lakes in 2009 to 29 lakes in the spring of 2010. Additional lakes were added and subtracted in subsequent years, bringing the current total to 45 lakes in 28 counties statewide. Total surface acreage for lakes enrolled in the FINs program is 298 acres.

Catfish (channel catfish and channel catfish x blue catfish hybrids), rainbow trout and bluegill were the species stocked in the FINs lakes from April 2024 – March 2025. These stockings of large keeper-size catfish (15 in avg), trout (10 in avg), and bluegill (6 in avg) provide anglers with quality fishing opportunities close to home. The FINs lakes are designated as either primary or secondary lakes (Table 1), which determines stocking rates and months (Table 2).

In 2024-25, primary lakes received four stockings of catfish (12.0 – 20.0 in) occurring in April, May, June 2024, and March 2025; secondary FINs lakes received two annual stockings of catfish in April and June (Tables 2-3). Pfeiffer Fish Hatchery supplies all the catfish for the FINs program, with a total of 96,956 catfish stocked from 1 April 2024 – 31 March 2025 (Table 4). The 96,956 catfish stocked during this period was less than the 120,800 catfish in the production plan, due to issues with survival and growth of catfish at the hatchery.

Trout stocking numbers were reduced by roughly 25% in 2017 to produce larger trout for the FINs program. The overall total weight of stocked trout remained the same for the FINs program; however, average size of fish increased from roughly 9.0 in and 0.3 lbs to 10.3 in and 0.4 lbs. All rainbow trout for the FINs program are produced at Wolf Creek National Fish Hatchery. In total, 120,750 rainbow trout were stocked from 1 April 2024 – 31 March 2025 (Table 4). Rainbow trout are stocked at a standardized rate in the FINs lakes (Table 2), with most lakes receiving three trout stockings annually: October or November, February, and March. Due to a shortage of trout, some of lakes scheduled to be stocked in November 2024 were delayed until December 2024. Carlson Lake at Ft. Knox does not get stocked with rainbow trout because concerns were raised of trout swimming up into Grahampton Cave, which feeds Carlson Lake, and feeding upon northern cavefish (*Amblyopsis spelaea*) which are listed as threatened and ghost crayfish (*Orconectes inermis inermis*). Both species are ill-adapted to avoiding trout predation. Waymond Morris Park Lake, Kentucky Horse Park Rolex Lake, Flemingsburg Old Reservoir, Brickyard Pond, and Maysville-Mason County Rec Park Lake do not receive the March trout stocking. These lakes had lower utilization of trout and high numbers of trout were seen while sampling in May of previous years.

In total, 18,115 bluegill (5.0 – 10.0 in) were stocked in June 2024 (Tables 3-4) in lakes that had poor sunfish populations, heavy fishing pressure, or free fishing weekend events. In previous years, hybrid sunfish were stocked at FINs lakes. However, these hybrid sunfish stockings were replaced with bluegill starting in 2022. While the hybrid sunfish stockings worked well for improving short-term angling success, the stockings did not improve sunfish angling opportunities over an extended period as most fish were quickly harvested. By stocking high densities of larger bluegill, we hope to improve short-term angling success in addition to potentially shifting the size structure of bluegill in impoundments where stocked. A total of 20,000 bluegill annually will be in the production plan to cover the needs of the FINs program.

Fish stocking rates at the FINs lakes are much higher than at larger reservoirs or streams around the state. Utilization of these stocked fish is being assessed through routine electrofishing and tandem hoop net samples. Furthermore, exploitation studies, creel surveys, and use of time-lapse cameras to assess fishing pressure have been used to assess angling pressure at FINs lakes.

Table 1. Lakes enrolled in the Fishing in Neighborhoods program for 2024-25.

Lake	County	Lake designation
Anderson County Community Park Lake	Anderson	Primary
Camp Ernst Lake	Boone	Primary
Millennium Park Pond	Boyle	Primary
Alexandria Community Park Lake	Campbell	Primary
Robert J. Barth Park Lake	Campbell	Primary
Panther Creek Park Lake	Daviess	Primary
Waymond Morris Park Lake	Daviess	Primary
Yellow Creek Park Lake	Daviess	Primary
Jacobson Park Lake	Fayette	Primary
Lower Sportsman's Lake	Franklin	Primary
Upper Sportsman's Lake	Franklin	Primary
Kess Creek Park Lake	Graves	Primary
James D. Beville Park Lake	Grayson	Primary
Rotary Park Lake	Hickman	Primary
Tom Wallace Park Lake	Jefferson	Primary
Waverly Park Lake	Jefferson	Primary
William F. Miles Angler Lake	Jefferson	Primary
William F. Miles Green Heron Lake	Jefferson	Primary
Lake Mingo	Jessamine	Primary
Southland Church Lake	Jessamine	Primary
Middleton Mills Long Pond	Kenton	Primary
Middleton Mills Shelterhouse Pond	Kenton	Primary
Brickyard Pond	Knox	Primary
Whitehall Park Lake	Madison	Primary
Lake Montgomery	McCracken	Primary
Carlson Lake (Ft. Knox)	Meade	Primary
Easy Walker Park Pond	Montgomery	Primary
Lusby Lake	Scott	Primary
Scott County Park Lake	Scott	Primary
Jesse W. Thornton Lake	Warren	Primary
Southgate Lake	Campbell	Secondary
Kentucky Horse Park Rolex Lake	Fayette	Secondary
Flemingsburg Old Reservoir	Fleming	Secondary
Lake Pollywog	Grant	Secondary
Leary Lake	Grant	Secondary
Kingdom Come State Park Lake	Harlan	Secondary
Madisonville City Park Lake South	Hopkins	Secondary
Cherokee Park Lake	Jefferson	Secondary
Fisherman's Park Lake # 3	Jefferson	Secondary
Fisherman's Park Lake # 4	Jefferson	Secondary
Prisoners Lake	Kenton	Secondary
Logan Hubble Park Lake	Lincoln	Secondary
Mike Miller Park Lake	Marshall	Secondary
Maysville-Mason County Recreation Park Lake	Mason	Secondary
Bloomfield Park Lake	Nelson	Secondary

Table 2. Fishing in Neighborhoods lakes fish stocking rates and schedule for 2024-25.

Lake designation	Fish species	Stocking rate (fish/acre)	Months stocked
Primary	Catfish	1-10 acres 200/acre 10-20 acres 100/acre > 20 acres 50/acre	Apr, May, Jun, Mar 25
Secondary	Catfish	1-10 acres 200/acre 10-20 acres 100/acre > 20 acres 50/acre	Apr, Jun
Primary/Secondary	Rainbow trout	1-2.9 acres 500 fish 3.0-4.4 acres 750 fish 4.5-30 acres 1,500 fish > 30 acres 3,000 fish	Oct or Nov, Feb, Mar 25
Primary/Secondary	Bluegill	1-3.4 acres 500 fish/acre 3.5-10 acres 300 fish/acre > 10 acres 3,000 fish	Jun

Table 3. Number of fish stocked in Fishing in Neighborhood lakes from 1 April 2024 – 31 March 2025. Asterisk (*) denotes deviation from stocking plan.

Lake	County	Acreage	Rainbow trout				Catfish (channel/hybrid)				Bluegill
			Oct 24	Nov 24	Feb 25	Mar 25	Apr 24	May 24	Jun 24	Mar 25	Jun 24
Anderson County Community Park Lake	Anderson	1.0		500*	500	500	200	200	200	200	
Camp Ernst Lake	Boone	25.0		1,500*	1,500	1,500	1,250	1,080*	1,250	600*	
Millennium Park Pond	Boyle	2.2		500*	500	500	400	400	400	300*	
Alexandria Community Park Lake	Campbell	7.0		1,500*	1,500	1,500	1,400	800*	1,260*	700*	2,100
Robert J. Barth Park Lake	Campbell	3.7		750	750	750	700	700	700	400*	1,125
Southgate Lake	Campbell	1.8		500*	500	500	400		400		730
Panther Creek Park Lake	Daviess	3.8	750		750	750	800	600*	800	560*	1,400
Waymond Morris Park Lake	Daviess	4.8	1,500		1,500		1,000	700*	1,000	560*	
Yellow Creek Park Lake	Daviess	3.1	750		750	750	600	300*	600	560*	
Jacobson Park Lake	Fayette	46.3	3,000		3,000	3,000	2,300	1,400*	1,100*	1,200*	
Kentucky Horse Park Rolex Lake	Fayette	5.6		1,500	1,500		600*		600*		
Flemingsburg Old Reservoir	Fleming	10.8		1,500*	1,500		800*		1,250*		
Lower Sportsman's Lake	Franklin	2.7	500		500	500	600	600	600	300*	
Upper Sportsman's Lake	Franklin	6.2	1,500		1,500	1,500	1,200	1,200	1,200	600*	1,800
Lake Pollywog	Grant	3.5		750	750	750	500*		770*		
Leary Lake	Grant	4.6		1,500*	1,500	1,500	600*		900		
Kess Creek Park Lake	Graves	2.1	500		500	500	400	400	400	400	
James D. Beville Park Lake	Grayson	3.1	750		750	750	300*	300*	300*	300*	
Kingdom Come State Park Lake	Harlan	2.5	500		500	750*	500		500		
Rotary Park Lake	Hickman	1.0	500		500	500	200	200	200	200	
Madisonville City Park Lake South	Hopkins	25.9	1,500		1,500	1,500	1,250		650*		
Cherokee Park Lake	Jefferson	4.2	750		750	750	770*		800		
Fisherman's Park Lake # 3	Jefferson	1.8	500		500	500	415*		400		
Fisherman's Park Lake # 4	Jefferson	2.4	500		500	500	400		400		
Tom Wallace Park Lake	Jefferson	4.8	1,500		1,500	1,500	*	*	*	1,000	
Waverly Park Lake	Jefferson	4.5	1,500		1,500	1,500	900	900	900	900	1,350
William F. Miles Angler Lake	Jefferson	3.6	750		750	750	700	500*	700	700	1,100
William F. Miles Green Heron Lake	Jefferson	1.1	500		500	500	200	200	200	200	500
Lake Mingo	Jessamine	2.5	500		500	500	500	500	500	500	
Southland Church Lake	Jessamine	2.6	500		500	750*	500	300*	500	500	1,305
Middleton Mills Long Pond	Kenton	1.2	500		500	500	300	300	300	300	
Middleton Mills Shelterhouse Pond	Kenton	1.2	500		500	500	300	300	300	300	500
Prisoners Lake	Kenton	3.8	750		750	750	601*		600*		1,150
Brickyard Pond	Knox	9.5		1,500*	1,500		1,200*	2,000	1,200*	1,080*	
Logan Hubble Park Lake	Lincoln	9.2		1,500*	*	1,500	800*		1,800		
Whitehall Park Lake	Madison	6.0	1,500		1,500	1,500	1,200	1,200	1,200	700*	1,605
Mike Miller Park Lake	Marshall	3.9	750		750	750	350*		350*		
Maysville-Mason County Rec Park Lake	Mason	11.6		1,500*	1,500		700*		1,150		
Lake Montgomery	McCracken	5.5	1,500		1,500	1,500	1,000*	900*	1,000*	1,000*	1,650
Carlson Lake (Ft. Knox)	Meade	14.0					1,000*		1,320*		
Easy Walker Park Pond	Montgomery	1.6		500*	500	500	400	400	400	400	800
Bloomfield Park Lake	Nelson	2.4		500	500	500	300*		500		
Lusby Lake	Scott	2.3		500	500	500	500	300*	500	400*	
Scott County Park Lake	Scott	2.5		500	500	500	500	300*	500	400*	1,000
Jesse W. Thornton Lake	Warren	28.9		1,500*	1,500	1,500	1,450	1,080*	1,450	600*	

Table 4. Total number and weight of fish stocked in the FINs lakes in 2024-25.

	Fish species	Number of fish stocked	Number of pounds
45 FINs lakes	Catfish	96,956	96,240
	Rainbow trout	119,750	51,493
	Bluegill	18,115	3,577

Section II: Advertisement for the FINs Program

FINDINGS

Advertising and marketing efforts were employed in a continuing attempt to raise awareness of the Fishing in Neighborhoods (FINs) program, increase participation, and recruit new anglers. Facebook and X (formerly Twitter) notifications were posted around stocking dates. District fisheries biologists also mentioned the FINs program and stocking schedules in their weekly fishing reports. Several local newspapers and news stations reached out when fish were stocked, so they could help promote and make the public aware of our efforts. All lake owners were notified prior to fish being stocked so they could contact their followers via social media.

An 8.5x11 in flyer was distributed at boat shows, the state fair and other outreach events (Figure 1). Additionally, a FINs banner was displayed at the KDFWR booth at these shows (Figure 2). A one-page advertisement for the FINs program appeared in the 2024-25 Kentucky Fishing and Boating Guide. Additionally, a one-page stocking table appeared in the 2024 and 2025 Kentucky Afield calendars (Figure 3). Care was taken to keep the FINs graphics and message consistent across various media outlets.

The FINs website was routinely updated to convey the latest stocking information and list of lakes enrolled in the program. The website also features detailed maps of lakes enrolled in the program, fish stocking dates and quantities, regulations, basics of how-to fish, and a link to purchase a license.

All lakes enrolled in the FINs program have a memorandum of agreement (MOA) giving KDFWR the authority to manage fish populations and set standardized regulations. The standard set of regulations at the lakes is four catfish, five rainbow trout, 15 bluegill or other sunfish, and one largemouth bass over 15.0 in. Metal 4 ft x 4 ft regulation signs and smaller yellow plastic regulation signs are posted around the lakes. A QR code sticker was affixed to all the signs in 2021 that directed anglers to the online Fishing and Boating Guide in English or Spanish. Stocking dates and fish quantities were emailed to the conservation officers in advance of the stockings for enforcement purposes. All lake owners enrolled in the FINs program agree to assist through maintaining access to the fishing areas including trash pick-up, mowing, cleaning restrooms, and assisting with fishing events.

Information kiosks are installed at 23 of the 45 lakes to inform the public of the FINs program and make anglers and park-goers aware of KDFWR's role in fish management and stocking. The kiosk posters are specific to each lake and updated annually. Information in the kiosk included the FINs logo, mission statement, fish stocking dates and quantities, license requirements, fishing regulations, fish identification, poacher hotline, no littering graphic, brief overview of fishery and past sampling, basic knot tying and the location of a rod loaner program if present. Kiosk posters were printed on vinyl banners in 2024 to help prevent water damage from leaking kiosks and prolong the life of the posters.



GOOD FISHING. CLOSE TO HOME.



STOCKED LAKES

COUNTY	LAKE
Anderson	Anderson County Community Park Lake
Boone	Camp Ernst Lake
Boyle	Millennium Park Pond
Campbell	Alexandria Community Park Lake Robert J. Barth Lake Southgate Lake
Daviess	Panther Creek Park Lake Waymond Morris Park Lake Yellow Creek Park Lake
Fayette	Kentucky Horse Park Rolex Lake Jacobson Park Lake
Fleming	Flemingsburg Old Reservoir
Franklin	Lower Sportsman's Lake Upper Sportsman's Lake
Grant	Lake Pollywog Leary Lake
Graves	Kess Creek Park Lake
Grayson	James D. Beville Park Lake
Harlan	Kingdom Come State Park Lake
Hickman	Rotary Park Lake
Hopkins	Madisonville City Park Lake South
Jefferson	Cherokee Park Lake Fisherman's Park Lake #3 Fisherman's Park Lake #4 Tom Wallace Park Lake Waverly Park Lake William F. Miles Angler Lake William F. Miles Green Heron Lake
Jessamine	Lake Mingo Southland Church Lake
Kenton	Middleton Mills Long Pond Middleton Mills Shelterhouse Pond Prisoners Lake
Knox	Brickyard Pond
Lincoln	Logan Hubble Park Lake
Madison	Whitehall Park Lake
Marshall	Mike Miller Park Lake
Mason	Maysville-Mason County Recreation Park Lake
McCracken	Lake Montgomery
Meade	Carlson Lake (Fort Knox)
Montgomery	Easy Walker Park Pond
Nelson	Bloomfield Park Lake
Scott	Lusby Lake Scott County Park Lake
Warren	Jesse W. Thornton Lake

STOCKED FISH

FISH	TIME
Trout	October - March
Catfish	March - June

Buy a Fishing License today to support the FINs program!

Check our website fw.ky.gov for stocking dates and regulations or call 1-800-858-1549 for updates.





Figure 1. Flyer used to advertise the Fishing in Neighborhoods program in 2024-25.



Figure 2. Banner used to advertise the Fishing in the Neighborhoods program in 2024-25.

FINs LAKES 2025 STOCKINGS

Fishing in Neighborhoods (FINs)

FISHING IN NEIGHBORHOODS is a program started by the Kentucky Department of Fish and Wildlife Resources to bring good fishing closer to your home. The thought is you shouldn't have to drive 2-3 hours just to find a spot to fish with your family or simply wet a line after a long day of work.

The FINs program takes advantage of park lakes all over the state. You'll discover FINs lakes offer not only a place to fish, but locations where you can spread out a blanket and enjoy time fishing with your whole family.

Naturally, the more people fish a lake, the fewer the fish you'll find in it. That's why Kentucky Fish and Wildlife stocks these lakes several times a year with catfish and trout, two of the most highly sought fish species by anglers.

Use this chart to find a FINs lake in the county nearest you. This handy chart also shows you what month each lake is stocked and what kind of fish are being put in the water.

This year, take advantage of the FINs program and enjoy some time fishing with your family. You'll be glad you did. ■

LAKE	COUNTY	TROUT				CATFISH			
		Feb.	Mar.	Oct.	Nov.	Mar.	Apr.	May	June
Anderson County Community Park Lake	Anderson	500	500		500	200	200	200	200
Camp Ernst Lake	Boone	1,500	1,500		1,500	1,250	1,250	1,250	1,250
Millennium Park Pond	Boyle	500	500		500	400	400	400	400
Alexandria Community Park Lake	Campbell	1,500	1,500		1,500	1,400	1,400	1,400	1,400
Robert J. Barth Park Lake	Campbell	750	750		750	700	700	700	700
Southgate Lake	Campbell	500	500		500		400		400
Panther Creek Park Lake	Daviess	750	750	750		800	800	800	800
Waymond Morris Park Lake	Daviess	1,500		1,500		1,000	1,000	1,000	1,000
Yellow Creek Park Lake	Daviess	750	750	750		600	600	600	600
Jacobson Park Lake	Fayette	3,000	3,000	3,000		2,300	2,300	2,300	2,300
Kentucky Horse Park Rolex Lake	Fayette	1,500			1,500		1,100		1,100
Flemingsburg Old Reservoir	Fleming	1,500			1,500		1,100		1,100
Lower Sportsman's Lake	Franklin	500	500	500		600	600	600	600
Upper Sportsman's Lake	Franklin	1,500	1,500	1,500		1,200	1,200	1,200	1,200
Lake Pollyvog	Grant	750	750		750		700		700
Leary Lake	Grant	1,500	1,500		1,500		900		900
Kess Creek Park Lake	Graves	500	500	500		400	400	400	400
James D. Beville Park Lake	Grayson	750	750	750		600	600	600	600
Kingdom Come State Park Lake	Harlan	500	500	500			500		500
Rotary Park Lake	Hickman	500	500	500		200	200	200	200
Madisonville City Park Lake South	Hopkins	1,500	1,500	1,500			1,250		1,250
Cherokee Park Lake	Jefferson	750	750	750			800		800
Fisherman's Park Lake #3	Jefferson	500	500	500			400		400
Fisherman's Park Lake #4	Jefferson	500	500	500			400		400
Tom Wallace Park Lake	Jefferson	1,500	1,500	1,500		1,000	1,000	1,000	1,000
Waverly Park Lake	Jefferson	1,500	1,500	1,500		900	900	900	900
William F. Miles Angler Lake	Jefferson	750	750	750		700	700	700	700
William F. Miles Green Heron Lake	Jefferson	500	500	500		200	200	200	200
Lake Mingo	Jessamine	500	500	500		500	500	500	500
Southland Church Lake	Jessamine	500	500	500		500	500	500	500
Middleton Mills Long Pond	Kenton	500	500	500		300	300	300	300
Middleton Mills Shelterhouse Pond	Kenton	500	500	500		300	300	300	300
Prisoners Lake	Kenton	750	750	750			800		800
Brickyard Pond	Knox	1,500			1,500	2,000	2,000	2,000	2,000
Logan Hubble Park Lake	Lincoln	1,500	1,500		1,500		1,800		1,800
Whitehall Park Lake	Madison	1,500	1,500	1,500		1,200	1,200	1,200	1,200
Mike Miller Park Lake	Marshall	750	750	750			800		800
Maysville-Mason County Rec. Park Lake	Mason	1,500			1,500		1,150		1,150
Lake Montgomery	McCracken	1,500	1,500	1,500		1,100	1,100	1,100	1,100
Carlson Lake (Ft. Knox)	Meade						1,400		1,400
Easy Walker Park Pond	Montgomery	500	500		500	400	400	400	400
Bloomfield Park Lake	Nelson	500	500		500		500		500
Lusby Lake	Scott	500	500		500	500	500	500	500
Scott County Park Lake	Scott	500	500		500	500	500	500	500
Jesse W. Thornton Lake	Warren	1,500	1,500		1,500	1,450	1,450	1,450	1,450

Figure 3. Stocking table advertising Fishing in Neighborhoods program that appeared in 2025 Kentucky Afield calendar.

Section III: Fish Sampling

FINDINGS

Fish sampling was completed at 20 Fishing in Neighborhoods (FINs) lakes in May 2024. Samples were conducted with 10-min electrofishing runs using 60-pps direct current. All species that surfaced during the runs were netted and measured to the nearest 0.1 in except for gizzard shad, common carp, grass carp and rainbow trout. Multiple runs were conducted at most FINs lakes to allow measures of variability but were not possible at smaller lakes due to limited shoreline. Sampling conditions by waterbody and date are noted in Table 1. A proportional stock density (PSD) index (Figure 1) was used to determine balance or lack thereof of sunfish and largemouth bass populations. The PSD index is calculated as the percentage of fish of a quality size (total length) that is longer than a minimum stock size. Minimum stock and quality sizes (20 – 26% and 36 – 41% of world record length, respectively) are defined for: largemouth bass (8 and 12 in); bluegill (3 and 6 in); and redear sunfish (4 and 7 in). Where bluegill and redear sunfish populations were both present within a lake the sunfish PSD value was weighted according to relative abundance of each species. Sequential sampling methods were used to determine when a reliable PSD value (90% confidence) was within a defined interval (Weithman et al. 1980). If the sample size was inadequate to classify the fish population, the deficiency was noted with a superscript.

Alexandria Community Park Lake (Campbell County)

Bluegill up to the 7 in class and redear sunfish up to the 8 in class were present in the 2024 sample at Alexandria Community Park Lake (7.0 acres; Table 2). The catch rates were moderate for both bluegill and redear sunfish in 2024. The bluegill catch rate (416.2 fish/hr) was above the long-term average (313.5 fish/hr), with fish in the 6.0 – 7.9 in length group (191.6 fish/hr) well above the long-term average (73.7 fish/hr; Table 3). The redear sunfish catch rate (224.6 fish/hr) was well above the long-term average (101.8 fish/hr), with most fish in the 6.0 – 7.9 in length group. The 2024 overall largemouth bass catch rate (257.5 fish/hr) was slightly below the long-term average (296.5 fish/hr; Table 4). The catch rate of bass in the < 8.0 in length group (38.9 fish/hr) in 2024 was less than half the long-term mean (87.7 fish/hr), while the catch rate for the ≥ 15.0 in length group (18.0 fish/hr) was over double the long-term average (8.5 fish/hr). A total of 327 bass ranging in size from 4 – 13 in were removed from the lake and relocated in 2021 and 2022. This appears to have helped the crowded bass population temporarily in the 2022 survey as there were less stock size bass sampled, but the bass population continues to be crowded and could use additional removals (Figure 2). The sunfish population has plentiful large fish with low recruitment similar to the 2018-20 samples. A gizzard shad was sampled in 2024 for the first time in the lake and measured over 17 in. Additionally, two large common carp were sampled and removed from the lake along with the shad.

Robert J. Barth Park Lake (Campbell County)

The size structure of bluegill was poor at Robert J. Barth Park Lake (3.7 acres) with bluegill up to the 5 in class sampled in 2024 (Table 5). Bluegill in the 3.0 – 5.9 in length group made up almost the entirety of the catch (Table 6). Fingerling redear sunfish were stocked in fall 2021 to bolster the sunfish population and add additional forage to the lake. However, the 2024 redear sunfish catch rate was low at 18.0 fish/hr, with fish up to 7 in class sampled. The largemouth bass catch rate was low in 2024, with the majority of fish sampled in the 12.0 – 14.9 in length group (Table 7). The 2024 PSD index indicated few large sunfish and low bass recruitment (Figure 3). It appeared pond dye was used, likely hindering lake productivity. A recommendation was made to the lake owner to stop using pond dye to improve fish growth and lake productivity. The standard FINs creel and length limits went into effect in fall 2021, with fish stockings beginning at that time.

Panther Creek Park Lake (Davies County)

Bluegill up to the 7 in class and redear sunfish up to the 9 in class were present in the 2024 sample at Panther Creek Park Lake (3.8 acres; Table 8). A gizzard shad eradication was conducted with a light dose of rotenone during March 2014, to improve the fishery. No gizzard shad were observed in the 2014-

16 samples. However, the lake was inundated by a nearby creek in early 2018 and gizzard shad reappeared in the 2018 sample and were observed again in 2020. Another gizzard shad eradication was conducted in January 2022 with a light dose of rotenone, with no shad observed in the spring 2022-24 samples. The bluegill catch rate in 2024 (604.8 fish/hr) was nearly identical to the 2020 and 2022 samples (589.9 and 598.8 fish/hr respectively), and well above the long-term mean (392.0 fish/hr; Table 9). The vast majority of bluegill sampled in 2024 were in the 3.0 – 5.9 in length group which was a shift in size structure from the 2022 sample where most fish were in the 6.0 – 7.9 in length group. The catch rate of redear sunfish in 2024 (194.6 fish/hr) was much lower than the 2020 and 2022 samples (509.0 and 982.0 fish/hr respectively). Redear sunfish sampled in 2024 were nearly evenly split between fish in the 6.0 – 7.9 and ≥ 8.0 in length groups. The largemouth bass catch rate in 2024 (167.7 fish/hr) was nearly double the 2022 catch rate (86.8 fish/hr), but still below the long-term average (283.9 fish/hr; Table 10). The catch rate for the < 8.0 in length group of largemouth bass was well below the long-term average, with the majority of the catch in the 8.0 – 11.9 in length group. The PSD index shifted from a bass crowded population and abundant large sunfish in 2016-18 closer to a balanced fishery in 2020, with abundant large sunfish again in the 2022 sample (Figure 4). In 2024 the bass population shifted back to a crowded population with a balanced sunfish fishery. The shift in the sunfish PSD can be attributed to a drastic increase in catch rates of sunfish in the 3.0 – 5.9 in length group in 2020, which moved into the 6.0 – 7.9 in length group in 2022. The largemouth bass PSD shift can be attributed to the dramatic decline in the number of stock size fish in the 8.0 – 11.9 in length group sampled in 2020-22, with catch rates increasing again in 2024 for this length group.

Waymond Morris Park Lake (Daviess County)

A gizzard shad eradication was conducted with a light dose of rotenone during March 2014 at Waymond Morris Park Lake (4.8 acres); however, shad were discovered in the 2016 sample. Another shad eradication was completed in January 2017, with no gizzard shad observed in the 2018 sample. However, shad reappeared in the 2020 sample. Due to an abundance of riverine fish and few sportfish a complete renovation was conducted in September 2021 with rotenone. The lake was restocked with bluegill and largemouth bass in spring 2022, in addition to regular stockings of trout and catfish. The bluegill catch rate in 2024 was high with fish up to the 7 in class observed (Table 11). The overwhelming majority of bluegill sampled were in the 3.0 – 5.9 in length group (Table 12). The largemouth bass catch rate in 2024 (209.6 fish/hr) was above the long-term mean (136.47 fish/hr), prior to the fish population renovation, with bass in the 12.0 – 14.9 in length group making up the majority of the catch (Table 13). Unfortunately, the lake flooded again in early 2024, with buffalo, shad, gar, shiners, and carp all observed in the 2024 sample. Future fish population renovations are not recommended as the lake is prone to flooding and reintroductions of undesirable fish species likely. The PSD index in 2024 indicates few adult sunfish, with some larger bass present with low recruitment (Figure 5).

Yellow Creek Park Lake (Daviess County)

The catch rate for bluegill was low at Yellow Creek Park Lake in 2024 (3.1 acres; Table 14). The overall catch rate of bluegill in 2024 (119.8 fish/hr) was less than half the long-term mean (266.0 fish/hr), with fish in the 6.0 – 7.9 in length group making up the majority of the catch (Table 15). Redear sunfish were stocked in the fall of 2018 and 2019 to establish a population, with all redear sunfish sampled in 2024 in the ≥ 8.0 in length group. The largemouth bass population still appears crowded, with all bass sampled in 2024 in the < 8.0 and 8.0 – 11.9 in length groups (Table 16). The PSD index continues to indicate the bass population is stunted with few large individuals, while the sunfish value has bounced around from abundant large sunfish to a balanced sunfish population (Figure 6).

Kentucky Horse Park Rolex Lake (Fayette County)

Kentucky Horse Park Rolex Lake (5.6 acres) had bluegill up to the 8 in class, redear sunfish up to the 10 in class and largemouth bass up to the 20 in class present in the 2024 sample (Table 17). The catch rate for bluegill continues to increase, with nearly half the fish sampled in 2024 in the 6.0 – 7.9 in length group and over double the long-term mean (Table 18). Redear sunfish were stocked in 2018 and 2019 to establish a population, with good numbers of fish sampled in 2024 in both the 6.0 – 7.9 and ≥ 8 in length

groups. The largemouth bass catch rate in 2024 (164.7 fish/hr) was similar to the 2018 and 2022 samples (167.7 and 173.7 fish/hr respectively; Table 19). Bass in the ≥ 15 in length group made up nearly half of the catch in 2024 (77.8 fish/hr) and was three times the long-term average (24.6 fish/hr). A total of 275 largemouth bass (7 – 15 in) were stocked into Rolex Lake in 2016 and 2017 from nearby lakes with crowded bass populations after the spring 2016 sample revealed Rolex Lake had multiple year classes of largemouth bass missing. An additional 71 bass (5 – 12 in) were stocked in May 2021. The 2017 fall catfish sample revealed an extremely high abundance of small channel catfish < 12 in. It was unclear whether the high catfish abundance was due to overstocking by local Horse Park staff (no stocking records available and changes in staff) prior to becoming a FINs lake in 2016 or due to natural reproduction. With the additional information from catfish sampling, we hypothesized the overabundance of small catfish were likely hindering bass spawning and recruitment. Nearly 1,700 small channel catfish (< 12 in) were moved to nearby FINs lakes in 2017, 2018 and 2021 to improve condition and growth of remaining catfish and improve bass recruitment. The fishery at Rolex Lake was out of balance prior to enrollment in the FINs program in 2016. Through fish stockings and removals, the fish population is being actively managing to balance the fishery and improve angling opportunities. The PSD index indicates a bass balanced population with abundant large sunfish (Figure 7).

Lower Sportsman's Lake (Franklin County)

The catch rate was moderate for bluegill at Lower Sportsman's Lake (2.7 acres) while the catch rate was low for all other species in 2024 (Table 20). The bluegill catch rate in 2024 (371.3 fish/hr) was below the long-term mean (610.8 fish/hr), with the majority of fish sampled in the 6.0 – 7.9 in length group (Table 21). Redear sunfish were stocked in 2018 and 2019 to establish a population, with low numbers of fish sampled in 2024. The 2024 overall catch rate for largemouth bass (113.8 fish/hr) was nearly half the long-term mean (223.1 fish/hr) with fish in the 8.0 – 11.9 in length group making up the majority of the catch (Table 22). The PSD value has been high for sunfish (2016-24), while the PSD value has been lower than desired for largemouth bass (2018-24; Figure 8). Currently there are few large bass present, while large sunfish are present with low recruitment. However, the sample size is lacking in several years to precisely estimate PSD categories for bass or sunfish.

Upper Sportsman's Lake (Franklin County)

There was an abundance of yellow bass in the 2024 sample (341.3 fish/hr) at Upper Sportsman's Lake (6.2 acres; Table 23). The bluegill catch rate was considerably higher in 2024 (562.9 fish/hr), compared to the 2018, 2020 and 2022 surveys (281.4, 107.8 and 137.7 fish/hr respectively) and above the long-term mean (366.1 fish/hr; Table 24). The majority of bluegill sampled in 2024 were in the 6.0 – 7.9 in length group. Redear sunfish were stocked in 2018 and 2019 to establish a population, with low catch rates in 2024 and no small redear sunfish observed. The largemouth bass total catch rate (194.6 fish/hr) was similar to the 2022 catch rate (185.6 fish/hr), but lower than the long-term mean (292.2 fish/hr), with bass well distributed through all length groups (Table 25). The PSD index hovered around a balanced fishery in most years, with the largemouth bass PSD slightly lower than desired in the 2018-22 samples (Figure 9). The bluegill PSD has been elevated in the 2022-24 samples with too many large sunfish present with low recruitment.

Kess Creek Park Lake (Graves County)

The catch rates were low for all species of fish sampled at Kess Creek Park Lake (2.1 acres) in 2024 (Table 26). The lake was constructed and stocked in fall 2015 and added to the FINs program in 2017. Bluegill in the 3.0 – 5.9 in length group made up the majority of the catch, with a continued low overall catch rate in 2024 (83.8 fish/hr; Table 27). Redear sunfish were stocked in 2018 to establish a population, with 7 – 8 in class fish sampled in 2024 in low abundance. The bass catch rate continued to be low in 2024 (83.8 fish/hr), with no fish sampled in the 12.0 – 14.9 in length group (Table 28). A total of 75 bass (4 – 10 in) were stocked after the 2022 sample to bolster the population, but did not increase catch rates in 2024. The PSD index shifted in 2024 but lacked sufficient numbers of bass and bluegill sampled to estimate with 90% confidence the category of too many large bass and sunfish with low

recruitment (Figure 8). This was a shift from few large sunfish present, with bass having a high PSD value with low recruitment in 2018-22 samples.

James D. Beville Park Lake (Grayson County)

The catch rate was moderate for bluegill in 2024 at James D. Beville Park Lake (3.1 acres), with fish up to the 7 in class sampled (Table 29). Bluegill in the 6.0 – 7.9 in length group made up the majority of the catch in 2024 (Table 30). Redear sunfish were stocked in 2019 to bolster the population, with fish in the 3.0 – 5.9 in length group making up the majority of the catch in 2024. Largemouth bass up to the 22 in class were sampled in 2024. Largemouth bass in the 8.0 – 11.9 in length group made up the highest proportion of the catch in 2024, with the catch rate of fish in the 12.0 – 14.9 and ≥ 15.0 in length groups both above the long-term means (Table 31). The overall catch rate for bass in 2024 (158.7 fish/hr), was slightly below the long-term average (204.1 fish/hr). However, filamentous algae was covering nearly 20% of the lake surface and made sampling the shoreline difficult which may have impacted catch rates. The PSD index in 2024 continued to indicate a sunfish population with lots of large fish, with a stunted bass population. The PSD index has been similar since sampling began in 2013, indicating the fish population balance and size structure has remained stable.

Rotary Park Lake (Hickman County)

The catch rates were low for all species of fish sampled at Rotary Park Lake (1.0 acre) in 2024 (Table 32). The overall bluegill catch rate in 2024 (149.7 fish/hr) was below the long-term mean (234.7 fish/hr; Table 33). Redear sunfish were stocked in 2018 to establish a population, with low numbers of fish sampled in 2024 and all in the ≥ 8.0 in length group. Largemouth bass in the 8.0 – 11.9 in length group made up the majority of the catch, similar to the 2016-22 samples (Table 34). The lake was added to the FINs program in 2017. The bass population has consistently had a low PSD and appears stunted or overfished, with the sunfish PSD typically having some large sunfish with low recruitment (Figure 12).

Madisonville City Park Lake South (Hopkins County)

Bluegill up to the 8 in class and redear sunfish up to the 9 in class were sampled in 2024 at Madisonville City Park Lake South (25.0 acres); however, the largest bass sampled was only in the 13 in class (Table 35). The overall bluegill catch rate in 2024 (173.7 fish/hr) was slightly below the long-term average (252.1 fish/hr), while the catch rate of ≥ 8.0 in length group (69.9 fish/hr) was well above the long-term mean (16.8 fish/hr; Table 36). The redear sunfish catch rate in 2024 (255.5 fish/hr) was near the long-term mean (223.6 fish/hr) with the catch rate of the ≥ 8.0 in length group (239.5 fish/hr) also well above the long-term mean (92.7 fish/hr). The largemouth bass catch rate in 2024 (151.7 fish/hr) was near the long-term mean (180.2 fish/hr), with the vast majority of bass in the 8.0 – 11.9 in length group (Table 37). It appears there is bass crowding occurring as catch rates of bass in the 12.0 – 14.9 in length group have continued to be low and no fish in the ≥ 15.0 in length group have ever been sampled. The PSD index confirms a bass crowded lake, with large sunfish present with low recruitment (Figure 13). The PSD index has been very stable since 2014. Grass carp were stocked in 2011, 2014, 2016 and 2020 to reduce submerged aquatic vegetation.

Lake Mingo (Jessamine County)

The catch rate of bluegill at Lake Mingo (2.5 acres) was moderate with fish up to the 6 in class sampled in 2024 (Table 38). The redear sunfish catch rate was also moderate in 2024, with fish up to the 9 in class sampled. Redear sunfish were stocked in 2019 to bolster the population. Bluegill in the 3.0 – 5.9 in length group made up half the catch in 2024; with a significant decrease in the catch rate of fish in the 6.0 – 7.9 in length group compared to the 2022 sample (Table 39). The majority of largemouth bass were in the < 8.0 in length group in 2024, with the overall catch rate (179.6 fish/hr) similar to the long-term mean (177.4 fish/hr; Table 40). The PSD index has shifted in recent years with the largemouth bass PSD decreasing in 2020-22, while the sunfish PSD has typically been low and indicated few large fish (Figure 14). However, the sample size is lacking in 2020-24 to precisely estimate PSD categories for bass. Three hundred largemouth bass (3 – 11 in) were stocked in September 2020, with another 216

largemouth bass (3 – 13 in) stocked in 2022 after the spring sample to bolster the bass population, reduce sunfish numbers and balance the fishery.

Southland Church Lake (Jessamine County)

The catch rate was moderate for bluegill at Southland Church Lake (2.6 acres) with fish up to the 7 in class sampled in 2024 (Table 41). The bluegill catch rate was predominantly fish in the 3.0 – 5.9 in length group, similar to past samples (2018-22), with the overall catch rate slightly below the long-term mean (Table 42). The bluegill catch rate of 6.0 – 7.9 in length group in 2024 (131.7 fish/hr) was the highest observed since sampling began in 2018. Redear sunfish were stocked in 2018 and 2019 to establish a population. The redear sunfish catch rate in 2024 consisted primarily of fish in the 6.0 – 7.9 in length group. The catch rate for largemouth bass has continued to increase with bass in the 8.0 – 11.9 in length group making up the majority of the catch in 2024 (Table 43). Two hundred and fifty bass (5 – 11 in) were stocked in October 2020 to reduce crowded sunfish numbers and bolster the bass population. Southland Church Lake was added to the FINs program in 2018. An abundance of gizzard shad was observed in the 2020 sample that were not seen in 2018. A gizzard shad eradication was conducted with a light dose of rotenone during January 2022 to improve the fishery with no gizzard shad observed in the 2022 sample. The PSD index lacks a sufficient sample size for assessing bass in the 2018-24 samples due to low abundance, with the PSD value for sunfish increasing after the shad eradication (Figure 15).

Mike Miller Park Lake (Marshall County)

Bluegill up to the 7 in class and redear sunfish up to the 8 in class were sampled in 2024; however, the largest bass sampled was only in the 10 in class at Mike Miller Park Lake (3.9 acres; Table 44). The 2024 overall bluegill catch rate (320.4 fish/hr) was near the long-term mean (273.2 fish/hr) with fish in the 3.0 – 5.9 in length group accounting for the majority of the catch (Table 45). The redear sunfish catch rate in 2024 (320.4 fish/hr), was above the long-term mean (192.0 fish/hr). The redear sunfish catch was split near evenly between fish in the 3.0 – 5.9 and 6.0 – 7.9 in length groups, with a noticeable decrease in the catch of ≥ 8.0 in length group compared to 2022. The largemouth bass size structure continued to indicate a crowded bass population with no fish sampled ≥ 12 in (Table 46). The overall catch rate for largemouth bass of 107.8 fish/hr was well below the long-term mean of 329.3 fish/hr. The PSD index has consistently indicated a stunted bass population with some larger sunfish available with low recruitment (Figure 14). Seventy-five largemouth bass (4 – 10 in) were removed after the 2022 sample and relocated to a nearby FINs lake.

Lake Montgomery (McCracken County)

Bluegill up to the 7 in class and redear sunfish up to the 9 in class were sampled in 2024 at Lake Montgomery (5.5 acres; Table 47). A successful gizzard shad eradication was conducted with a light dose of rotenone during February 2017. The bluegill sampled in 2024 were split near evenly between fish in the 3.0 – 5.9 and 6.0 – 7.9 in length groups (Table 48). The 2024 catch rate of bluegill (323.4 fish/hr) was slightly below the long-term mean (419.9 fish/hr). Redear sunfish were stocked in 2018 to establish a population, with 7 – 9 in class fish sampled in 2024 in low abundance. The largemouth bass overall catch rate (110.8 fish/hr) continues to be low, with fish in the 8.0 – 11.9 in length group making up the majority of the catch in 2024 (Table 49). The PSD index has been highly variable between years, with the bass sample size lacking in several years to make a precise estimate (Figure 17). In 2022-24, the sunfish PSD indicated plenty of large fish present with low recruitment, while the largemouth bass PSD value in 2024 was the lowest observed since sampling began in 2010.

Bloomfield Park Lake (Nelson County)

The catch rate was moderate for both largemouth bass and bluegill in 2024 at Bloomfield Park Lake (2.4 acres; Table 50). The overall bluegill catch rate (197.6 fish/hr) was below the long-term mean (297.4 fish/hr), with fish in the 6.0 – 7.9 in length group making up the majority of the catch (Table 51). Redear sunfish were stocked in 2018 and 2019 to establish a population, with the catch rate continuing to decline in 2024. The largemouth bass catch rate in 2024 was below the long-term mean for all length groups

except fish in the < 8.0 in length group, which made up the majority of the catch (Table 52). The PSD index has consistently indicated a stunted bass population (2012-24) with plentiful large sunfish available to anglers (2014-24; Figure 18). A total of 116 largemouth bass ranging from the 3 – 13 in classes were removed and relocated to nearby FINs lake in November 2022.

Lusby Lake (Scott County)

The catch rates were low for all species of fish sampled at Lusby Lake (2.3 acres) in 2024 (Table 53). Bluegill up to the 7 in class, redear sunfish up to the 10 in class and largemouth bass up to the 20 in class were all sampled in 2024 but in low abundance. A gizzard shad eradication was conducted with a light dose of rotenone during February 2017. No gizzard shad were observed in the 2018-20 samples. However, gizzard shad reappeared in the 2022 sample. Another gizzard shad eradication was conducted in January 2023 with a light dose of rotenone. While there was not a lot of incidental sunfish mortality observed after the shad removal, it appears the rotenone application may have greatly reduced the sunfish population. All bluegill sampled in 2024 were in the 6.0 – 7.9 in length group, with the overall catch rate of 29.9 fish/hr, greatly reduced from the long-term mean of 667.7 fish/hr (Table 54). Redear sunfish were stocked in 2018 and 2019 to establish a population, with all fish sampled in 2024 in the ≥ 8.0 in length group. The 2024 largemouth bass catch rate (107.8 fish/hr) was slightly below the long-term mean (128.0 fish/hr; Table 55). A total of 300 largemouth bass (4 – 13 in) were stocked from nearby FINs lakes in 2020-21 to bolster the bass population at Lusby Lake. A stocking of bluegill is planned for 2025 to bolster the sunfish population and improve angling opportunities. The PSD index has been highly variable between years, with the sample size lacking sufficient sample size for sunfish and bass in several years to make a reliable prediction (Figure 19). This variability in PSD values is likely due to the introduction and reintroduction of gizzard shad in addition to supplemental largemouth bass stockings.

Scott County Park Lake (Scott County)

Bluegill and redear sunfish up to the 9 in class and largemouth bass up to the 18 in class were sampled in 2024 at Scott County Park Lake (2.5 acres; Table 56). The 2024 catch rate for bluegill (119.8 fish/hr) was much lower than the 2022 sample (311.4 fish/hr) and below the long-term mean (255.2 fish/hr; Table 57). Bluegill were nearly evenly distributed in the 3.0 – 5.9 and 6.0 – 7.9 in length groups, with some fish also present in the ≥ 8.0 in length group. Redear sunfish were stocked in 2018 and 2019 to establish a population, with 5 – 9 in class fish sampled in 2024 in low abundance. The catch rate of redear sunfish has continued to decline. The largemouth bass size structure shifted drastically in 2022 with fewer fish in the 8.0 – 11.9 in length group and a much higher catch rate for bass in the 12.0 – 14.9 and ≥ 15.0 in length groups compared to the long-term means (Table 58). This shift in the bass size structure was observed again in 2024 with a reduced overall catch rate and an improved size structure. A total of 243 largemouth bass (3 – 12 in) were removed in 2020-21 and relocated to nearby FINs lakes. Conversely, 86 largemouth bass (4 – 16 in) and 396 bluegill (3 – 7 in) were stocked in October 2021 from a nearby lake being drained. The PSD index consistently indicated a stunted bass population (2010-20) with some larger sunfish available to anglers with low recruitment (2012-24; Figure 20). However, the bass PSD value changed considerably in 2022-24 due to a drastic reduction in stock size fish and drastic increase in quality size largemouth bass.

Jesse W. Thornton Lake (Warren County)

Jesse W. Thornton Lake (formerly Three Springs Lake; 28.9 acres) has had gizzard shad present since the first sample was conducted in 2010. Typical of a lake with shad, bluegill numbers are high, with moderately low numbers of bass (Table 59). Bluegill catch rates have increased dramatically in the 2016-24 samples, compared to 2010-14 samples, with bluegill in the 3.0 – 5.9 in length group being the driving factor (Table 60). The catch rate for bluegill in the 6.0 – 7.9 in length group was above the long-term mean in 2022 and 2024. Redear sunfish in the 6.0 – 7.9 in length group made up the majority of the catch in 2024. The 2024 catch rate for largemouth bass (167.7 fish/hr) was near the long-term average (173.8 fish/hr), with the size structure shifting to larger fish in recent samples (Table 61). Over half the bass sampled in 2024 were in the ≥ 15.0 in length group. The PSD index shifted dramatically from a low PSD value for bass in 2010-14, to a high PSD for bass in 2018-24 (Figure 21). The lake currently has a

high bass PSD with large fish and low recruitment, with a balanced PSD for sunfish. The sunfish PSD has been stable from 2016-24 with a balanced sunfish population.

TANDEM HOOP NET SAMPLING

Tandem hoop net sampling for channel catfish and channel/blue hybrid catfish was conducted at 16 FINs lakes in October 2024. Tandem hoop net sets consisted of three nets per set, each 11 ft long with one-inch bar mesh and seven fiberglass hoops with the throats constricted. Three tandem sets per lake were soaked for 72-hr before checking. Each net was baited with 1/3 of a commercially prepared cheese log (about 2-lbs per net) from Nets and More Company. Care was taken not to set nets below the thermocline. Catfish were measured to the nearest 0.1 in and weighed to the nearest 0.01 pound. Relative weight (W_r) was used to determine condition of catfish at each lake. However, differentiating between channel catfish and channel/blue hybrid catfish was difficult and time consuming in the field. Therefore, channel catfish and the hybrid catfish were grouped together for analysis and the channel catfish relative weight equation was used.

Millennium Park Lake (Boyle County)

The catch rate was low for channel/hybrid catfish at Millennium Park Lake (2.2 acres) with 34 catfish sampled in 2024 (11.3 fish/set; Table 62). The 2024 catch rate was similar to the 2018 sample of 10.0 fish/set, but considerably lower than the 105.7 fish/set captured in 2018. Catfish in the 11.0 – 15.9 in length group made up the majority of the catch in 2024 and had a relative weight of 87, while catfish in the 16.0 – 23.9 in length group had a relative weight of 89 (Table 63). The relative weights for both length groups in 2024 was very similar to the 2018 sample, and slightly decreased from the 2021 sample. The relative weight of both length groups of catfish was above 85 and indicated catfish in good condition. Millennium Park Lake is a primary FINs lake and receives 1,600 catfish annually.

Alexandria Community Park Lake (Campbell County)

A total of 442 channel/hybrid catfish were caught in three tandem hoop net sets (147.3 fish/set) in 2024 at Alexandria Community Park Lake (7.0 acres; Table 64). The 2024 sample had a higher catch rate compared to 2020 (19.0 fish/set) and 2022 samples (87.0 fish/set) but was comparable to the 2012 and 2015 surveys (177.0 and 109.0 fish/set respectively). The catfish population size structure had shifted in recent years. In the past, a large proportion of the population consisted of small catfish < 13 in (88% in 2011, 60% in 2012 and 72% in 2015); however, the population shifted to larger catfish with only 16% of the catch < 13 in 2018, 26% in 2020, and 21% in 2022 respectively. However, the percentage of small catfish < 13 in increased to 45% in 2024. Catfish in the 11.0 – 15.9 length group had the lowest relative weight of 82, with catfish in the ≥ 24.0 in length group had the highest at 104 (Table 65). The relative weights had improved for all length groups of catfish in 2024 compared to the 2022 survey with the 2024 relative weights similar to the 2020 sample. Catch rates for catfish at this lake have historically been high while relative weights have been marginal in recent years. The number of stocked catfish could be reduced until relative weights improve, and the size structure could be improved by grading off smaller catfish in future stockings. Alexandria Community Park Lake is a primary FINs lake which typically receives 5,600 catfish annually, but only received 4,160 catfish in 2024 due to a production shortfall.

Flemingsburg Old Reservoir (Fleming County)

The catch rate of channel/hybrid catfish continues to be low at Flemingsburg Old Reservoir (10.8 acres) with 20 catfish netted in 2024 (6.7 fish/set; Table 66). The 2019 and 2022 catch rates were 1.0 and 7.7 fish/set respectively. Catfish sampled in 2024 ranged in size from the 11 – 18 in classes. Catfish in the 11.0 – 15.9 in length group had a relative weight of 91, while catfish in the 16.0 – 23.9 in length group had a relative weight of 88, indicating catfish were in good condition (Table 67). Flemingsburg Old Reservoir was added to the FINs program in 2017 and receives 2,200 catfish annually as a secondary FINs lake. The catch rate, size structure, and relative weights of catfish indicate a population of catfish that appears to be harvested relatively quickly after stocking with no stockpiling occurring.

Lower Sportsman's Lake (Franklin County)

The catch rate of channel/hybrid catfish was moderate at Lower Sportsman's Lake (2.7 acres) with 42.0 fish/set sampled in 2024, which was reduced from the 114 fish/set sampled in 2022 (Table 68). The size structure of catfish shifted dramatically towards smaller fish in 2022 with 56% of catfish sampled < 13 in, compared to only 17% in 2016 and 3% in 2019. In 2024, 25% of catfish sampled were < 13 in. In the 2011 and 2013 samples 80% and 77% of catfish sampled were < 13 in respectively. Grading of catfish at the hatchery and stocking larger catfish likely contributed to fewer smaller catfish being sampled in 2016-19. The relative weight for catfish was highest for fish in the 16.0 – 23.9 in length group at 87, while catfish in the 11.0 – 15.9 in length group had the lowest relative weight observed since sampling began in 2011 (83; Table 69). Lower Sportsman's receives 2,400 catfish annually as a primary FINs lake but was stocked with 2,100 catfish in 2024 due to a production shortfall. The catfish size structure could be improved by grading off smaller catfish in future stockings.

Upper Sportsman's Lake (Franklin County)

The catch rate of channel/hybrid catfish was moderate (40.3 fish/set) at Upper Sportsman's Lake (6.2 acres) in 2024 with fish ranging in size from the 9 – 23 in classes (Table 70). This catch rate was similar to the 2022 survey of 61.0 fish/set, but well above the 2013 (17.3 fish/set), 2016 (7.3 fish/set), and 2019 samples (9.7 fish/set). In 2011 and 2013 predominantly smaller catfish were sampled with 68% and 58% of catfish sampled < 13 in. However, the size structure shifted towards larger fish with only 23% and 14% of catfish < 13 in the 2016 and 2019 samples respectively. However, the size structure of catfish has shifted back to smaller catfish in recent samples with 40% and 36% of the fish sampled < 13 in in 2022 and 2024 respectively. The relative weight was highest for small catfish in the 7.0 – 10.9 in length group at 96, followed by catfish in the 16.0 – 23.9 in length group at 86 (Table 71). Catfish in the 11.0 – 15.9 in length group had a relative weight of 84, which has been lower than desired the last two samples (80 in 2022). Upper Sportsman's typically receives 4,800 catfish annually as a primary FINs lake but was stocked with 4,300 catfish in 2024 due to a production shortfall. The catfish size structure could be improved by grading off smaller catfish in future stockings.

Lake Pollywog (Grant County)

The catch rate of channel/hybrid catfish at Lake Pollywog (3.5 acres) was moderate with 26.7 fish/set sampled in 2024 (Table 72). In 2024, 25% of catfish sampled were < 13 in, compared to 84% in 2012, 74% in 2015, 9% in 2018 and 46% of catfish sampled in 2021. Relative weights for catfish in 2024 had improved for all length groups compared to the 2021 survey with catfish in the 11.0 – 15.9 having the lowest relative weight at 89 (Table 73). Lake Pollywog is a secondary lake and receives two stockings annually totaling 1,400 catfish.

Leary Lake (Grant County)

A total of 71 catfish were sampled in three tandem hoop nets sets (23.7 fish/set) in 2024 at Leary Lake (4.6 acres; Table 74). The 2024 catch rate was comparable to the first time the lake was sampled in 2021 (19.7 fish/set). Catfish ranged in size from the 10 – 20 in classes in the 2024 sample. Relative weights were low for all length groups of catfish ranging from 78-81 (Table 75). The relative weights were also low for catfish in the 11.0 – 15.9 and 16.0 – 23.9 in length groups in the 2021 sample (80 and 75 respectively). The lake is a secondary FINs lake and receives 1,800 catfish annually, but received 1,500 catfish in 2024 due to a production shortfall.

Cherokee Park Lake (Jefferson County)

No catfish were sampled in 2024 in three tandem hoop net sets at Cherokee Park Lake (4.2 acres; Table 76). The 2024 sample followed a moderate catch of 42.0 fish/set in 2021. There were no relative weights to report in 2024 as no fish were sampled (Table 77). Cherokee Park Lake is a secondary FINs lake and receives 1,600 catfish annually.

Fisherman's Park Lake #4 (Jefferson County)

The catfish catch rate was low at Fisherman's Park Lake #4 (2.4 acres) with only 35 catfish sampled (11.7 fish/set; Table 78). The 2024 catch rate was similar to the 2017 and 2020 samples (6.0 and 7.0 fish/set respectively), but well below the 115.3 fish/set sampled in 2014. Relative weights were adequate and ranged from a low of 89 for catfish in the 7.0 – 10.9 in length group to 95 for catfish in the 16.0 – 23.9 in length group (Table 79). Fisherman's Park Lake #4 is a secondary FINs lake that is stocked twice annually with a total of 800 catfish.

Waverly Park Lake (Jefferson County)

No catfish were sampled in 2024 in three tandem hoop net sets at Waverly Park Lake (4.5 acres; Table 80). The catch rate of catfish has never been high at Waverly Park Lake since sampling began in 2012, ranging from a low of 10.0 fish/set in 2018 to a high of 22.7 fish/set in 2021. There were no relative weights to report in 2024 as no fish were sampled (Table 81). Waverly Park Lake is stocked as a primary FINs lake with 3,600 catfish annually. A gizzard shad eradication was conducted with a light dose of rotenone during February 2022.

Logan Hubble Park Lake (Lincoln County)

A total of 530 channel/hybrid catfish were caught in three tandem hoop sets (176.7 fish/set) in 2024 at Logan Hubble Park Lake (9.2 acres; Table 82). This catch rate was high and more than double the 85.7 fish/set sampled in 2018 and 60.5 fish/set sampled in 2021. Catfish sampled in 2024 ranged in size from the 9 – 21 in classes. In 2021 84% of the catfish sampled $\geq$ 13 in; whereas, in 2024 that percentage fell to 66%. The relative weights were low for all length groups and have continued to decrease since sampling began in 2018 (Table 83). Catfish in the 7.0 – 10.9 in length group had a relative weight of 74. Similarly, catfish in the 11.0 – 15.9 in length group had a relative weight of 75, with catfish in the 16.0 – 23.9 in length group fairing slightly better at 83. There was a significant fish kill during the summer 2022 due to low oxygen which likely decreased forage available for catfish. Logan Hubble Park Lake receives 3,600 catfish annually as a secondary FINs lake, but only received 2,600 catfish in 2024 due to a production shortfall. In 2025 stocking will be decreased to 1,200 catfish total, in an attempt to increase relative weights and reduce catfish numbers in the lake as there appears to be stockpiling with fish in poor condition.

Maysville-Mason County Recreation Park Lake (Mason County)

The catch rate of channel/hybrid catfish at Maysville-Mason County Recreation Park Lake (11.6 acres) was moderate with 31.0 fish/set sampled in 2024 (Table 84). The 2024 catch rate was less than half the 2021 sample (67.0 fish/set), but well above the 2016 and 2019 samples (3.0 and 9.3 fish/set respectively). In 2024, 34% of catfish sampled were $<$ 13 in, compared to 49% in 2021. The relative weights were low at 79 and 78 for catfish in the 7.0 – 10.9 and 11.0 – 15.9 in length groups respectively (Table 85). The relative weight was acceptable for larger catfish in the 16.0 – 23.9 in length group at 87. Maysville-Mason County Recreation Park Lake receives 2,300 catfish annually as a secondary FINs lake but only received 1,850 catfish in 2024 due to a production shortfall.

Carlson Lake (Fort Knox; Meade County)

The catch rate of channel/hybrid catfish at Carlson Lake (Fort Knox; 14.0 acres) was much lower in 2024 (14.3 fish/set), compared to the two previous samples in 2018 and 2021 of 160.3 and 137.3 fish/set respectively (Table 86). Catfish ranged in size from the 10 – 20 in classes in 2024. Relative weights remained low for catfish in the 11.0 – 15.9 in length group at 83, similar to past samples (Table 87). The relative weights had increased from the 2015 and 2018 samples for catfish in the 7.0 – 10.9 and 16.0 – 23.9 in length groups to acceptable levels. *Nitella spp.* was growing out to 8+ ft in Fall 2024 which made setting nets difficult and may have reduced catfish catch rates. The lake was switched from a primary FINs lakes receiving 5,600 catfish annually from 2015-21 to a secondary FINs lake in 2022 to receive

2,800 catfish annually due to high catch rates and relative weights which were continuing to decline. However, only 1,390 catfish were stocked in 2023 and 2,320 catfish in 2024 due to production shortfalls.

Bloomfield Park Lake (Nelson County)

A total of 65 channel/hybrid catfish were caught in three tandem hoop sets (21.7 fish/set) in 2024 at Bloomfield Park Lake (2.4 acres; Table 88). Over 80% of catfish sampled were ≥ 15 in in 2024. The condition of catfish was marginal with catfish in the 11.0 – 15.9 and 16.0 – 23.9 in length groups having relative weights of 84 and 86 respectively (Table 89). The relative weights had increased for both length groups compared to the 2021 sample. Bloomfield Park Lake is a secondary FINs lake and normally receives two stockings of catfish per year totaling 1,000 catfish, but was stocked with 800 catfish in 2024 due to a production shortfall.

Jesse W. Thornton Lake (Warren County)

The catch rate of channel/hybrid catfish was moderate at Jesse W. Thornton Lake (formerly Three Springs Lake; 28.9 acres) with 59.7 fish/set sampled in 2024 and was consistent with the catch rates in 2018 and 2021 of 38.3 and 40.0 fish/set (Table 90). The size structure of catfish was good with 49% of catfish sampled ≥ 15 in in 2024, which was similar to the 44% of catfish sampled in 2021. Catfish in the 11.0 – 15.9 and 16.0 – 23.9 in length groups had marginal relative weights of 85 and 87 respectively, but both values had increased compared to the 2021 sample (Table 91). Conversely, small catfish in the 7.0 – 10.9 in length group and large catfish in the ≥ 24 in length group had relative weights in the high 90's (small sample sizes) which was consistent with past samples. Three Springs Lake currently receives 5,800 annually as a primary FINs lake, but was stocked with 5,150 catfish in 2024 due to a production shortfall.

Table 1. 2024 yearly summary of sampling conditions by waterbody and date.

Waterbody	Date	Time (24-hr)	Weather	Water temp (F)	Water level	Secchi (in)	Lake conditions/pertinent sampling information
Upper Sportsman's Lake	5/3/2024	900	Cloudy	74	Full	48	Naiad and curlyleaf pondweed present, filamentous algae previously treated with herbicide
Lower Sportsman's Lake	5/3/2024	900	Cloudy	75	Full	72	Little filamentous algae, no submerged vegetation
Kentucky Horse Park Rolex Lake	5/3/2024	1100	Cloudy	74	Full	12	Little filamentous algae, water turbid, nice bluegill, redear sunfish and largemouth bass
Bloomfield Park Lake	5/8/2024	800	Sunny	74	Full	78	No vegetation, very clear, fertilized after sampling, grass carp observed
Jesse W. Thornton Lake	5/8/2024	1100	Cloudy	75	Full	12	No vegetation, lots of gizzard shad, plentiful big bass with many more jumping field, goldfish and common carp observed
Southland Church Lake	5/13/2024	900	Sunny	70	Full	18	Aquashade was used, 1 common carp removed, filamentous algae present, no shad or grass carp after treatment
Lake Mingo	5/13/2024	1000	Sunny	70	Full	24	No vegetation, plankton bloom, 1 smallmouth buffalo removed, grass carp observed
Robert J. Barth Park Lake	5/17/2024	1000	Cloudy	74	Full	24	No vegetation, aquashade was used
Alexandria Community Park Lake	5/17/2024	1100	Cloudy	73	Full	30	Water willow, no other vegetation, 17" gizzard shad and 2 common carp removed
James D. Beville Park Lake	5/21/2024	700	Sunny	67	Full	28	Filamentous algae covering 20% of surface, water had tannic color
Yellow Creek Park Lake	5/21/2024	900	Sunny	81	Full	18	No vegetation, upper end very shallow
Waymond Morris Park Lake	5/21/2024	1000	Sunny	82	Full	18	Water had tannic color, some naiad present, shad, gar, carp, buffalo, shiners all reintroduced after renovation
Panther Creek Park Lake	5/21/2024	1100	Sunny	81	Full	42	Naiad present, recently treated, no shad observed after rotenone treatment, bass fry observed, 5 spotted gar removed
Madisonville Park Lake South	5/21/2024	1400	Sunny	83	Full	54	Clear water, no vegetation, lots of grass carp observed, sunfish on beds and beaver lodges
Kess Creek Park Lake	5/22/2024	800	Cloudy	76	Full	12	Water primrose around perimeter, very turbid, golden shiner observed
Rotary Park Lake	5/22/2024	900	Sunny	80	Full	12	No vegetation, turbid, lots of trout still present, consider cutting March trout stocking
Lake Montgomery	5/22/2024	1000	Cloudy	81	Full	12	No vegetation, plankton bloom, buffalo observed
Mike Miller Park Lake	5/22/2024	1300	Cloudy	81	Full	30	No vegetation, bass continue to be crowded
Lusby Lake	5/28/2024	900	Sunny	72	Full	42	Filamentous algae treated last week, sparse curlyleaf pondweed and naiad, duckweed present, no shad observed
Scott County Park Lake	5/28/2024	900	Sunny	74	Full	36	Filamentous algae treated last week, no vegetation present during sample
Bloomfield Park Lake	10/10/2024	900	Sunny	66	Full	24	No vegetation, nice bluegill and redear sunfish as bycatch
Jesse W. Thornton Lake	10/10/2024	1200	Sunny	72	Full	18	No vegetation, roughly 40 dead turtles in nets
Cherokee Park Lake	10/11/2024	1000	Sunny	65	Full	30	No vegetation, nice crappie and redear sunfish as bycatch
Fisherman's Park Lake #4	10/11/2024	1200	Sunny	70	Full	48	No vegetation, treated with Sonar this summer, abundant trophy redear sunfish as bycatch
Upper Sportsman's Lake	10/17/2024	800	Sunny	60	Full	24	No vegetation, blue-green algae bloom, abundant 8-in black crappie
Lower Sportsman's Lake	10/17/2024	800	Sunny	58	Full	18	No vegetation, blue-green algae bloom
Millennium Park Pond	10/17/2024	1000	Sunny	56	Full	48	No vegetation, treated with Sonar this spring, abundant trophy redear sunfish as bycatch
Logan Hubble Park Lake	10/17/2024	1100	Sunny	60	Full	36	No vegetation, lots of beaver activity, cleaned out spillway pipe
Flemingsburg Old Reservoir	10/18/2024	1000	Sunny	58	Full	18	No vegetation, plankton bloom, abundant 6-8 in white crappie and nice redear sunfish
Maysville-Mason County Rec Park Lake	10/18/2024	1100	Sunny	60	Full	18	No vegetation, plankton bloom, abundant stunted black crappie and bluegill
Waverly Park Lake	10/24/2024	1000	Sunny	59	Full	30	No vegetation, very little bycatch, small bluegill and redear sunfish, one muskrat
Carlson Lake	10/24/2024	1100	Sunny	61	2' Low	84	Nitella abundant out to 8+ ft, 8-10 white crappie present in bycatch
Lake Pollywog	10/25/2024	900	Sunny	60	Full	36	No vegetation, abundant bluegill, white crappie and redear sunfish as bycatch, sampled two suckers
Leary Lake	10/25/2024	1000	Sunny	59	Full	48	No vegetation, blue-green algae bloom, abundant nice bluegill, redear sunfish and several large white crappie 10+ in
Alexandria Community Park Lake	10/25/2024	1200	Sunny	62	Full	54	No vegetation, blue-green algae bloom, one muskrat, cut stocking rate

Table 2. Length frequency and CPUE (fish/hr) of fish collected in two, 10-min electrofishing runs at Alexandria Community Park Lake on 17 May 2024.

Species	Inch class																Total	CPUE	Std. error
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
Bluegill	2	28	45	45	19												139	416.2	176.7
Largemouth bass	3	3	3	3	1	17	7	11	15	10	6	1	2	3		1	86	257.5	35.9
Channel catfish							1		3	6	6	10	5	5	2	2	40	119.8	83.8
Redear sunfish		1	5	19	45	5											75	224.6	62.9
White crappie							1	2		1							4	12.0	12.0

uftg05sl.d24

Table 3. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2005-24) and redear sunfish (2010-24) collected at Alexandria Community Park Lake. Standard errors are in parentheses.

	Length group (in)				
Year	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	Total
Bluegill					
2005	32.0 (8.0)	264.0 (56.0)	38.0 (6.0)		334.0 (58.0)
2006	75.3 (33.5)	69.3 (29.3)	33.1 (5.8)		177.7 (58.5)
2007	2.4 (2.4)	221.7 (87.5)	57.8 (8.9)		281.9 (97.4)
2010	3.0 (3.0)	56.9 (3.0)	15.0 (3.0)		74.9 (9.0)
2012	394.1 (123.5)	408.8 (61.8)	20.6 (8.8)		823.5 (176.5)
2014	15.0 (3.0)	59.9 (18.0)	29.9 (29.9)		104.8 (83.8)
2016	143.7 (24.0)	104.8 (9.0)	38.9 (38.9)		287.4 (71.9)
2018		113.8 (12.0)	149.7 (35.9)	3.0 (3.0)	266.5 (27.0)
2020	21.0 (9.0)	191.6 (131.7)	215.6 (6.0)	3.0 (3.0)	431.1 (149.7)
2022	32.9 (3.0)	302.4 (104.8)	83.8 (65.9)		419.2 (173.7)
2024		224.6 (32.9)	191.6 (143.7)		416.2 (176.7)
Mean	59.7 (22.1)	179.8 (27.6)	73.7 (15.5)	0.4 (0.3)	313.5 (44.6)
Redear					
2010	9.0 (3.0)				9.0 (3.0)
2012	11.8 (11.8)	23.5 (0.0)	105.9 (29.4)		141.2 (17.7)
2014		21.0 (15.0)	6.0 (6.0)	29.9 (6.0)	56.9 (27.0)
2016	3.0 (3.0)	9.0 (3.0)	12.0 (6.0)	9.0 (3.0)	32.9 (3.0)
2018			15.0 (9.0)	35.9 (18.0)	50.9 (27.0)
2020			59.9 (12.0)	9.0 (3.0)	68.9 (9.0)
2022	9.0 (9.0)	212.6 (92.8)	3.0 (3.0)	3.0 (3.0)	227.5 (89.8)
2024		18.0 (6.0)	191.6 (47.9)	15.0 (9.0)	224.6 (62.9)
Mean	3.0 (1.8)	35.6 (19.5)	49.4 (17.4)	13.9 (3.7)	101.8 (23.4)

ufrpsalx.d05, ufr05alx.d06-d07, uftg05sl.d10-d24

Table 4. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Alexandria Community Park Lake from 2005-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2005	48.0 (20.0)	76.0 (12.0)	20.0 (0)	10.0 (10.0)	154.0 (18.0)
2006	105.4 (18.7)	102.4 (20.0)	48.2 (7.0)	15.1 (7.6)	271.1 (35.6)
2007	33.7 (8.0)	202.4 (30.3)	26.5 (4.5)	7.2 (4.8)	269.9 (40.1)
2010	137.7 (12.0)	170.7 (15.0)	59.9 (12.0)	9.0 (3.0)	377.3 (18.0)
2012	167.7 (32.4)	279.4 (20.6)	38.2 (2.9)		485.3 (50.0)
2014	143.7 (29.9)	227.5 (24.0)	21.0 (9.0)	12.0 (6.0)	404.2 (68.9)
2016	116.8 (9.0)	140.7 (15.0)	6.0 (6.0)	6.0 (6.0)	269.5 (24.0)
2018	113.8 (6.0)	155.7 (29.9)	47.9 (6.0)	6.0 (0.0)	323.4 (29.9)
2020	47.9 (12.0)	269.5 (24.0)	18.0 (0.0)		335.3 (35.9)
2022	71.9 (18.0)	62.9 (3.0)	29.9 (12.0)	6.0 (0.0)	170.7 (32.9)
2024	38.9 (3.0)	149.7 (0.0)	50.9 (27.0)	18.0 (6.0)	257.5 (35.9)
Mean	87.7 (9.8)	166.5 (14.6)	33.7 (3.7)	8.5 (1.8)	296.5 (19.8)

ufrpsalx.d05, ufr05alx.d06-d07, uftg05sl.d10-d24

Table 5. Length frequency and CPUE (fish/hr) of fish collected in two, 10-min electrofishing runs at Robert J. Barth Lake on 17 May 2024.

	Inch class																						Std.
Species	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	CPUE	error	
Bluegill	1	7	36	17																61	182.6	50.9	
Largemouth bass		1							1	4	5	8			2	1				22	65.9	18.0	
Channel catfish						1			1	2	1	3	3	7		5		1	1	25	74.9	15.0	
Redear sunfish		1	1		1	3														6	18.0	12.0	
Longear sunfish	1		5	1																7	21.0	3.0	
White crappie					39	3	2													44	131.7	35.9	

uftg05rb.d24

Table 6. Electrofishing CPUE data (fish/hr) for each length group of bluegill collected at Robert J. Barth Park Lake from 2021-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	
2021	3.0 (3.0)	80.8 (56.9)	21.0 (3.0)		104.8 (62.9)
2022	9.0 (9.0)	89.8 (6.0)	12.0 (6.0)		110.8 (9.0)
2024	3.0 (3.0)	179.6 (47.9)			182.6 (50.9)
Mean	5.0 (2.9)	116.8 (27.7)	11.0 (4.2)		132.7 (26.3)

uftg05rb.d21-d24

Table 7. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Robert J. Barth Park Lake from 2021-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2021	21.0 (3.0)	185.6 (18.0)	6.0 (0.0)		212.6 (15.0)
2022	9.0 (9.0)	116.8 (21.0)	6.0 (6.0)		131.7 (24.0)
2024	3.0 (3.0)	15.0 (9.0)	38.9 (15.0)	9.0 (9.0)	65.9 (18.0)
Mean	11.0 (4.2)	105.8 (32.2)	17.0 (8.1)	3.0 (3.0)	136.7 (28.2)

uftg05rb.d21-d24

Table 8. Length frequency and CPUE (fish/hr) of fish collected in two, 10-min electrofishing runs at Panther Creek Park Lake on 21 May 2024.

Species	Inch class																				Total	CPUE	Std. error
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22			
Bluegill	4	28	117	51	2																202	604.8	59.9
Largemouth bass					1	9	20	8	2	1	3	1	6	2	1	1				1	56	167.7	29.9
Channel catfish											2	1	1								4	12.0	12.0
Redear sunfish	2			21	12	24	6														65	194.6	9.0
Black crappie				1	1																2	6.0	6.0

uftg05pc.d24

Table 9. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2010-24) and redear sunfish (2014-24) collected at Panther Creek Park Lake. Redear sunfish were not observed in the 2010-12 samples. Standard errors are in parentheses.

	Length group (in)				
Year	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	Total
Bluegill					
2010	227.7 (167.5)	417.5 (16.3)	27.0 (2.9)		672.2 (154.1)
2012	5.9 (0.0)	211.8 (64.7)	150.0 (26.5)		367.7 (91.2)
2014	29.9 (18.0)	24.0 (12.0)	27.0 (3.0)	6.0 (6.0)	86.8 (21.0)
2016	9.0 (9.0)	44.9 (3.0)	83.8 (24.0)		137.7 (29.9)
2018		15.0 (3.0)	53.9 (29.9)	3.0 (3.0)	71.9 (29.9)
2020	53.9 (18.0)	497.0 (215.6)	38.9 (15.0)		589.9 (29.9)
2022	6.0 (6.0)	188.6 (9.0)	404.2 (3.0)		598.8 (0.0)
2024		446.1 (68.9)	158.7 (9.0)		604.8 (59.9)
Mean	41.6 (24.3)	231.1 (52.8)	118.3 (31.0)	1.1 (0.8)	392.0 (68.7)
Redear					
2014		3.0 (3.0)	21.0 (15.0)	21.0 (15.0)	44.9 (32.9)
2016				29.9 (12.0)	29.9 (12.0)
2018			9.0 (3.0)	21.0 (9.0)	29.9 (6.0)
2020	15.0 (3.0)	350.3 (3.0)	98.8 (32.9)	44.9 (3.0)	509.0 (29.9)
2022		3.0 (3.0)	796.4 (191.6)	182.6 (27.0)	982.0 (221.6)
2024		6.0 (0.0)	98.8 (9.0)	89.8 (18.0)	194.6 (9.0)
Mean	2.5 (1.7)	60.4 (39.1)	170.7 (88.6)	64.9 (18.0)	298.4 (108.9)

uftg04pc.d10-d12, uftg05pc.d14-d24

Table 10. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Panther Creek Park Lake from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2010	51.1 (9.2)	165.3 (39.5)	216.4 (60.7)	30.0 (5.9)	462.8 (103.5)
2012	47.1 (23.5)	120.6 (14.7)	64.7 (5.9)	41.2 (11.8)	273.5 (26.5)
2014	71.9 (24.0)	95.8 (24.0)	53.9 (18.0)	21.0 (15.0)	242.5 (44.9)
2016	65.9 (6.0)	236.5 (3.0)	24.0 (6.0)	18.0 (0.0)	344.3 (15.0)
2018	122.8 (68.9)	374.3 (9.0)	68.9 (9.0)	3.0 (3.0)	568.9 (89.8)
2020	24.0 (12.0)	38.9 (15.0)	56.9 (3.0)		119.8 (29.9)
2022	32.9 (9.0)	15.0 (9.0)	15.0 (3.0)	24.0 (6.0)	86.8 (27.0)
2024	3.0 (3.0)	116.8 (32.9)	15.0 (3.0)	32.9 (3.0)	167.7 (29.9)
Mean	52.4 (11.3)	145.6 (28.4)	64.5 (16.8)	21.3 (4.0)	283.9 (43.0)

uftg04pc.d10-d12, uftg05pc.d14-d24

Table 11. Length frequency and CPUE (fish/hr) of fish collected in one, 10-min electrofishing run at Waymond Morris Park Lake on 28 May 2024. Standard errors were not calculated because only one sampling run could be completed.

	Inch class																	
Species	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total	CPUE	
Bluegill	13	78	43	10	4	1										149	892.2	
Largemouth bass				1	2	2	3	2	2	1	4	11	6		1	35	209.6	
Channel catfish										2		2	1			5	29.9	
Orangespotted sunfish	1	6														7	41.9	

uftg05wm.d24

Table 12. Electrofishing CPUE data (fish/hr) for each length group of bluegill collected at Waymond Morris Park Lake from 2012-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	
2012	211.8	794.1			1,005.9
2014	6.0	137.7	12.0		155.7
2016	53.9	179.6			233.5
2018	6.0	455.1	18.0		479.0
2020		233.5	18.0		251.5
2024	77.8	784.4	29.9		892.2
Mean	59.9 (33.7)	433.1 (123.3)	13.0 (4.7)		506.0 (150.5)

uftg04wm.d12, uftg05wm.d14-d24

Table 13. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Waymond Morris Park Lake from 2012-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2012		11.8			11.8
2014	18.0	18.0	18.0	6.0	59.9
2016	71.9	18.0	6.0	6.0	101.8
2018	221.6	47.9	53.9	12.0	335.3
2020	47.9	35.9	18.0		101.8
2024	29.9	47.9	125.8	6.0	209.6
Mean	64.9 (32.9)	29.9 (6.6)	36.9 (19.3)	5.0 (1.8)	136.7 (47.8)

uftg04wm.d12, uftg05wm.d14-d24

Table 14. Length frequency and CPUE (fish/hr) of fish collected in one, 10-min electrofishing run at Yellow Creek Park Lake on 21 May 2024. Standard errors were not calculated because only one sampling run could be completed.

Species	Inch class							Total	CPUE
	4	5	6	7	8	9	10		
Bluegill	1	3	15	1				20	119.8
Largemouth bass			3	1	15	14	3	36	215.6
Channel catfish								1	6.0
Redear sunfish					8	1		8	47.9

uftg05yc.d24

Table 15. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2010-24) and redear sunfish (2023-24) collected at Yellow Creek Park Lake. Redear sunfish were first stocked in 2018. Standard errors are in parentheses.

	Length group (in)				
Year	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	Total
Bluegill					
2010	24.0	137.2	383.2	6.0	550.9
2012	35.3	223.5	82.4		341.2
2014		83.8	83.8		167.7
2016		35.9	47.9		83.8
2018		95.8	179.6		275.5
2023		257.5	53.9	6.0	317.4
2024		24.0	95.8		119.8
Mean	8.6 (5.7)	123.2 (34.1)	132.6 (44.9)	1.7 (1.1)	266.0 (60.7)
Redear					
2023			18.0	65.9	83.8
2024				47.9	47.9
Mean			9.0 (9.0)	56.9 (9.0)	65.9 (18.0)

uftg04yc.d10-d12, uftg05yc.d14-d24

Table 16. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Yellow Creek Park Lake from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2010	83.8	389.2			473.1
2012		270.6			270.6
2014	47.9	191.6	12.0	29.9	281.4
2016	119.8	125.8	12.0	6.0	263.5
2018	113.8	251.5		6.0	371.3
2023	257.5	95.8	29.9	6.0	389.2
2024	24.0	191.6			215.6
Mean	92.4 (32.3)	217.3 (37.3)	7.7 (4.3)	6.8 (4.0)	324.2 (33.9)

uftg04yc.d10-d12, uftg05yc.d14-d24

Table 17. Length frequency and CPUE (fish/hr) of fish collected in two, 10-min electrofishing runs at Kentucky Horse Park Rolex Lake on 3 May 2024.

Species	Inch class																		Total	CPUE	Std. error
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
Bluegill	4	33	80	92	12	1													222	664.7	47.9
Largemouth bass				4	2	6	7	2	5	1	1	1	6	8	5	3		4	55	164.7	32.9
Channel catfish							1					1	1		3				6	18.0	6.0
Redear sunfish		1		13	28	30	9	2											83	248.5	32.9
White crappie					1	5													6	18.0	18.0

uftg05rl.d24

Table 18. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2016-24) and redear sunfish (2020-24) collected at Kentucky Horse Park Rolex Lake. Redear sunfish were first stocked in 2018. Standard errors are in parentheses.

	Length group (in)				
Year	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	Total
Bluegill					
2016		6.0 (0.0)	74.9 (44.9)		80.8 (44.9)
2018	9.0 (3.0)	53.9 (6.0)	89.8 (59.9)		152.7 (68.9)
2020	29.9 (12.0)	125.8 (24.0)	92.8 (9.0)		248.5 (21.0)
2022	3.0 (3.0)	404.2 (15.0)	200.6 (140.7)		607.8 (158.7)
2024		350.3 (50.9)	311.4 (0.0)	3.0 (3.0)	664.7 (47.9)
Mean	8.4 (4.2)	188.0 (54.1)	153.9 (38.5)	0.6 (0.6)	350.9 (84.6)
Redear					
2020		21.0 (15.0)	18.0 (0.0)	32.9 (3.0)	71.9 (18.0)
2022		3.0 (3.0)	12.0 (6.0)	12.0 (6.0)	27.0 (9.0)
2024		3.0 (3.0)	122.8 (44.9)	122.8 (15.0)	248.5 (32.9)
Mean		9.0 (5.5)	50.9 (25.6)	55.9 (21.9)	115.8 (43.9)

uftg05rl.d16-d24

Table 19. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Kentucky Horse Park Rolex Lake from 2016-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2016				12.0 (6.0)	12.0 (6.0)
2018	89.9 (6.0)	35.9 (12.0)	38.9 (3.0)	3.0 (3.0)	167.7 (12.0)
2020	32.9 (21.0)	24.0 (6.0)	18.0 (6.0)	12.0 (0.0)	86.8 (9.0)
2022	15.0 (3.0)	95.8 (0.0)	44.9 (9.0)	18.0 (6.0)	173.7 (6.0)
2024	18.0 (0.0)	59.9 (18.0)	9.0 (3.0)	77.8 (12.0)	164.7 (32.9)
Mean	31.1 (10.9)	43.1 (11.4)	22.2 (6.0)	24.6 (9.3)	121.0 (21.8)

uftg05rl.d16-d24

Table 20. Length frequency and CPUE (fish/hr) of fish collected in one, 10-min electrofishing run at Lower Sportsman's Lake on 3 May 2024. Standard errors were not calculated because only one sampling run could be completed.

Species	Inch class															Total	CPUE
	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Bluegill		6	8	27	21										62	371.3	
Largemouth bass	1	1	1	1			2	1	7	2	1	1		1	19	113.8	
Redear sunfish					1	2									3	18.0	
Longear sunfish			1	1											2	12.0	
Black crappie								1							1	6.0	
Yellow bass						2									2	12.0	
Yellow bullhead				2											2	12.0	
uftg05ls.d24																	

uftg05ls.d24

Table 21. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2010-24) and redear sunfish (2020-24) collected at Lower Sportsman's Lake. Redear sunfish were first stocked in 2018. Standard errors are in parentheses.

	Length group (in)				
Year	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	Total
Bluegill					
2010	185.6	1,652.7	509.0	6.0	2,353.3
2012	82.4	194.1	76.5		352.9
2014	35.9	437.1	101.8		574.9
2016	24.0	137.7	293.4		455.1
2018		47.9	113.8		161.7
2020	6.0	41.9	59.9		107.8
2022		203.6	299.4		503.0
2024		83.8	287.4		371.3
Mean	41.9 (22.9)	350.3 (191.4)	217.8 (55.2)	0.8 (0.8)	610.8 (255.3)
Redear					
2020		24.0	47.9	12.0	83.8
2022			35.9	29.9	65.9
2024			6.0	12.0	18.0
Mean		8.0 (8.0)	29.9 (12.5)	18.0 (6.0)	55.9 (19.7)

uftg05ls.d10, uftg04ls.d12-d16, uftg05ls.d18-d24

Table 22. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Lower Sportsman's Lake from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2010	24.0	59.9	41.9	24.0	149.7
2012	100.0	47.1	58.8	82.4	288.2
2014	29.9	155.7	107.8	77.8	371.3
2016	65.9	197.6	113.8	41.9	419.2
2018	6.0	71.9	18.0	6.0	101.8
2020	83.8	95.8	41.9		221.6
2022	12.0	83.8	12.0	6.0	113.8
2024	24.0	59.9	24.0	6.0	113.8
Mean	43.4 (12.6)	96.6 (18.7)	52.4 (13.9)	30.7 (12.0)	223.1 (44.2)

uftg05ls.d10, uftg04ls.d12-d16, uftg05ls.d18-d24

Table 23. Length frequency and CPUE (fish/hr) of fish collected in two, 10-min electrofishing runs at Upper Sportsman's Lake on 3 May 2024.

	Inch class																				Std.
Species	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total	CPUE	error	
Bluegill	5	7	19	44	104	9												188	562.9	95.8	
Largemouth bass		1	1	5	1			6	8	8	12	10	5	3	2	2	1	65	194.6	44.9	
Channel catfish							1						1		1	2	2	7	21.0	3.0	
Green sunfish	1			1														2	6.0	0.0	
Redear sunfish						8	6	1										15	44.9	15.0	
Longear sunfish					1													1	3.0	3.0	
Black crappie						2	2	1										5	15.0	3.0	
Yellow bass					31	41	35	7										114	341.3	59.9	

uftg05us.d24

Table 24. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2005-24) and redear sunfish (2020-24) collected at Upper Sportsman's Lake. Redear sunfish were first stocked in 2018. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	
Bluegill					
2005	13.4 (0.5)	209.5 (66.0)	177.8 (22.2)	2.2 (2.2)	402.9 (67.0)
2006	12.1 (4.9)	60.2 (48.4)	72.3 (25.6)		144.6 (65.1)
2007	20.1 (4.0)	281.1 (62.7)	132.5 (102.9)		433.7 (152.6)
2010	44.9 (9.0)	371.3 (65.9)	131.7 (6.0)		547.9 (68.9)
2012	35.3 (5.9)	320.6 (44.1)	50.0 (2.9)		405.9 (41.2)
2014	18.0 (12.0)	323.4 (131.7)	185.6 (41.9)		527.0 (185.6)
2016		374.3 (110.8)	263.5 (83.8)		637.7 (194.6)
2018		104.8 (80.8)	176.7 (32.9)		281.4 (113.8)
2020	3.0 (3.0)	80.8 (32.9)	24.0 (0.0)		107.8 (29.9)
2022		24.0 (0.0)	113.8 (65.9)		137.7 (65.9)
2024	15.0 (3.0)	209.6 (47.9)	338.3 (44.9)		562.9 (95.8)
Mean	14.7 (2.9)	205.4 (29.3)	145.7 (21.1)	0.3 (0.3)	366.1 (43.7)
Redear					
2020		12.0 (12.0)	18.0 (6.0)	18.0 (12.0)	47.9 (18.0)
2022				6.0 (0.0)	6.0 (0.0)
2024			24.0 (18.0)	21.0 (3.0)	44.9 (15.0)
Mean		4.0 (4.0)	14.0 (6.7)	15.0 (4.3)	32.9 (10.5)

ufrpsugf.d05, ufr05ugf.d06-d07, uftg05us.d10, uftg04us.d12-d16, uftg05us.d18-d24

Table 25. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Upper Sportsman's Lake from 2005-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2005	165.6 (76.2)	100.0 (47.0)	51.8 (24.1)	30.0 (16.2)	347.3 (80.8)
2006	108.4 (44.3)	108.4 (19.1)	57.2 (25.3)	12.1 (7.0)	286.1 (68.8)
2007	24.1 (18.4)	120.5 (45.6)	60.2 (31.9)	12.1 (7.0)	216.9 (100.3)
2010	21.0 (3.0)	77.8 (53.9)	107.8 (53.9)	35.9 (24.0)	242.5 (128.7)
2012	76.5 (29.4)	82.4 (47.1)	44.1 (38.2)	50.0 (32.4)	252.9 (147.1)
2014	24.0 (0.0)	218.6 (32.9)	128.7 (38.9)	35.9 (0.0)	407.2 (71.9)
2016	218.6 (21.0)	80.8 (32.9)	83.8 (24.0)	41.9 (18.0)	425.2 (53.9)
2018	38.9 (15.0)	239.5 (89.8)	74.9 (50.9)	15.0 (9.0)	368.3 (164.7)
2020	71.9 (35.9)	143.7 (59.9)	74.9 (15.0)	9.0 (3.0)	299.4 (113.8)
2022	21.0 (3.0)	107.8 (29.9)	50.9 (21.0)	6.0 (6.0)	185.6 (53.9)
2024	24.0 (0.0)	65.9 (18.0)	80.8 (32.9)	24.0 (6.0)	194.6 (44.9)
Mean	76.8 (16.1)	120.4 (14.5)	71.5 (9.1)	23.5 (4.3)	292.2 (27.4)

ufrpsugf.d05, ufr05ugf.d06-d07, uftg05us.d10, uftg04us.d12-d16, uftg05us.d18-d24

Table 26. Length frequency and CPUE (fish/hr) of fish collected in one, 10-min electrofishing run at Kess Creek Park Lake on 22 May 2024. Standard errors were not calculated because only one sampling run could be completed.

Species	Inch class																	Total	CPUE
	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
Bluegill	2	7	2	2		1												14	83.8
Largemouth bass			2	4	1		5	1									1	14	83.8
Channel catfish					1	1	3	5	1	4	1	2	1	3				22	131.7
Redear sunfish				4	2													6	35.9
Longear sunfish	1	1																2	12.0
White crappie				6	4		1											11	65.9

uftg05ks.d24

Table 27. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2018-24) and redear sunfish (2020-24) collected at Kess Creek Park Lake. Redear sunfish were first stocked in 2018. Standard errors are in parentheses.

	Length group (in)				
Year	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	Total
Bluegill					
2018	119.8	455.1	12.0		586.8
2020		35.9			35.9
2022		59.9	18.0		77.8
2024		53.9	24.0	6.0	83.8
Mean	29.9 (29.9)	151.2 (101.4)	13.5 (5.1)	1.5 (1.5)	196.1 (130.7)
Redear					
2020		95.8	12.0		107.8
2022		41.9	77.8	6.0	125.8
2024			24.0	12.0	35.9
Mean		45.9 (27.7)	37.9 (20.3)	6.0 (3.5)	89.8 (27.4)

uftg05ks.d18-d24

Table 28. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Kess Creek Park Lake from 2018-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2018	18.0	12.0		24.0	53.9
2020	12.0	12.0	29.9	53.9	107.8
2022	29.9	12.0		24.0	65.9
2024	35.9	41.9		6.0	83.8
Mean	24.0 (5.5)	19.5 (7.5)	7.5 (7.5)	27.0 (9.9)	77.8 (11.7)

uftg05ks.d18-d24

Table 29. Length frequency and CPUE (fish/hr) of fish collected in two, 10-min electrofishing runs at James D. Beville Park Lake on 21 May 2024.

Inch class																									Std.	
Species	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	Total	CPUE	error		
Bluegill	2	7	13	21	37	19																99	296.4	116.8		
Largemouth bass					7	7	1		9	14	6	3	2			2				1	1	53	158.7	50.9		
Channel catfish									4		4	2	1	1	2	1						15	44.9	3.0		
Redear sunfish			4	20	3	1	2	1	1													32	95.8	0.0		
White crappie							3	4	1													8	24.0	0.0		

uftg05jb.d24

Table 30. Electrofishing CPUE data (fish/hr) for each length group of bluegill and redear sunfish collected at James D. Beville Park Lake from 2013-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	
Bluegill					
2013		404.2 (134.7)	389.2 (95.8)	12.0 (6.0)	805.4 (236.5)
2015	3.0 (3.0)	146.7 (32.9)	200.6 (38.9)		350.3 (74.9)
2018		347.3 (113.8)	179.6 (101.8)		527.0 (12.0)
2020	3.0 (3.0)	161.7 (131.7)	197.6 (95.8)		362.3 (230.5)
2022	21.0 (15.0)	200.6 (38.9)	197.6 (65.9)	3.0 (3.0)	422.2 (15.0)
2024	6.0 (6.0)	122.8 (27.0)	167.7 (83.8)		296.4 (116.8)
Mean	5.5 (3.0)	230.5 (42.6)	222.1 (33.9)	2.5 (1.6)	460.6 (67.7)

Redear

2013		12.0 (12.0)			12.0 (12.0)
2015					0.0 (0.0)
2018			21.0 (9.0)	6.0 (0.0)	27.0 (9.0)
2020		47.9 (29.9)	18.0 (6.0)	3.0 (3.0)	68.9 (38.9)
2022		18.0 (18.0)	6.0 (6.0)	62.9 (3.0)	86.8 (27.0)
2024		71.9 (0.0)	12.0 (0.0)	12.0 (0.0)	95.8 (0.0)
Mean		25.0 (9.1)	9.5 (2.9)	14.0 (6.7)	48.4 (12.8)

uftg04jb.d13, uftg05jb.d15-d24

Table 31. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at James D. Beville Park Lake from 2013-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2013	95.8 (0.0)	128.7 (15.0)	9.0 (3.0)	6.0 (6.0)	239.5 (12.0)
2015	56.9 (9.0)	107.8 (47.9)	3.0 (3.0)	9.0 (3.0)	176.7 (50.9)
2018	155.7 (47.9)	71.9 (29.9)	15.0 (9.0)	12.0 (12.0)	254.5 (3.0)
2020	98.8 (32.9)	74.9 (9.0)		6.0 (0.0)	179.6 (41.9)
2022	65.9 (35.9)	101.8 (18.0)	41.9 (18.0)	6.0 (6.0)	215.6 (6.0)
2024	41.9 (29.9)	71.9 (12.0)	32.9 (9.0)	12.0 (0.0)	158.7 (50.9)
Mean	85.8 (14.5)	92.8 (10.1)	17.0 (5.4)	8.5 (2.0)	204.1 (14.8)

uftg04jb.d13, uftg05jb.d15-d24

Table 32. Length frequency and CPUE (fish/hr) of fish collected in one, 10-min electrofishing run at Rotary Park Lake on 22 May 2024. Standard errors were not calculated because only one sampling run could be completed.

Species	Inch class												Total	CPUE
	2	3	4	5	6	7	8	9	10	11	12	13		
Bluegill	5		2	7	9	2							25	149.7
Largemouth bass							4	5	5		4		18	107.8
Channel catfish							1	2	3	2	1	4	13	77.8
Redear sunfish							5						5	29.9

uftg05rp.d24

Table 33. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2016-24) and redear sunfish (2020-24) collected at Rotary Park Lake. Redear sunfish were first stocked in 2018. Standard errors are in parentheses.

	Length group (in)				
Year	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	Total
Bluegill					
2016	24.0	149.7	131.7		305.4
2018	77.8	47.9	197.6		323.4
2020		113.8	29.9		143.7
2022		197.6	47.9	6.0	251.5
2024	29.9	53.9	65.9		149.7
Mean	26.4 (14.3)	112.6 (28.5)	94.6 (31.0)	1.2 (1.2)	234.7 (37.8)
Redear					
2020		6.0	47.9	18.0	71.9
2022		29.9	167.7	6.0	203.6
2024				29.9	29.9
Mean		12.0 (9.2)	71.9 (49.9)	18.0 (6.9)	101.8 (52.3)

uftg05rp.d16-d24

Table 34. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Rotary Park Lake from 2016-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2016	35.9	107.8			143.7
2018	12.0	179.6	18.0	6.0	215.6
2020	35.9	65.9	24.0		125.8
2022	24.0	125.8	12.0	18.0	179.6
2024		83.8	24.0		107.8
Mean	21.6 (7.0)	112.6 (19.6)	15.6 (4.5)	4.8 (3.5)	154.5 (19.4)

uftg05rp.d16-d24

Table 35. Length frequency and CPUE (fish/hr) of fish collected in three, 10-min electrofishing runs at Madisonville City Park Lake South on 21 May 2024.

	Inch class																				Total	CPUE	Std. error
Species	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21					
Bluegill	13	14	4	21	35														87	173.7	45.7		
Largemouth bass	1	7	3	4	11	26	10	10	3	1									76	151.7	29.0		
Channel catfish																2		1	3	6.0	6.0		
Redear sunfish		4	2	2	68	52													52	255.5	83.0		
Warmouth			2																2	4.0	2.0		

uftg05mv.d24

Table 36. Electrofishing CPUE data (fish/hr) for each length group of bluegill and redear sunfish collected at Madisonville City Park Lake South from 2012-2024. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	
Bluegill					
2012	53.9 (19.3)	331.3 (38.6)	27.9 (22.0)		413.2 (55.6)
2014	2.0 (2.0)	193.6 (127.7)	209.6 (57.1)	6.0 (3.5)	411.2 (189.7)
2016		35.9 (15.1)	57.9 (8.7)	31.9 (12.1)	125.8 (12.5)
2018	4.0 (2.0)	119.8 (45.2)	85.8 (46.0)	10.0 (7.2)	219.6 (91.1)
2020	63.9 (28.8)	59.9 (6.9)	33.9 (14.0)		157.7 (46.7)
2022	4.0 (4.0)	181.6 (86.1)	77.8 (24.0)		263.5 (78.3)
2024		53.9 (15.1)	49.9 (8.7)	69.9 (32.9)	173.7 (45.7)
Mean	18.3 (7.1)	139.4 (29.5)	77.6 (16.2)	16.8 (6.9)	252.1 (37.7)
Redear					
2012	6.0 (6.0)	41.9 (13.8)	59.9 (12.5)	49.9 (14.0)	157.7 (13.1)
2014		27.9 (10.6)	57.9 (20.8)	41.9 (9.2)	127.7 (33.2)
2016		29.9 (6.9)	271.5 (25.5)	71.9 (50.9)	373.3 (26.0)
2018		47.9 (0.0)	39.9 (15.6)	73.9 (28.2)	161.7 (42.1)
2020	14.0 (7.2)	51.9 (2.0)	59.9 (24.9)	29.9 (24.2)	155.7 (52.3)
2022		14.0 (8.7)	177.6 (33.2)	141.7 (32.1)	333.3 (56.3)
2024		8.0 (5.3)	8.0 (5.3)	239.5 (80.6)	255.5 (83.0)
Mean	2.9 (1.6)	31.7 (4.3)	96.4 (20.5)	92.7 (20.1)	223.6 (25.4)

uftg04mv.d12, uftg05mv.d14-d24

Table 37. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Madisonville City Park Lake South from 2012-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2012	97.8 (26.2)	63.9 (2.0)	57.9 (16.3)		219.6 (27.9)
2014	101.8 (27.0)	191.6 (6.0)	22.0 (8.0)		315.4 (29.4)
2016	43.9 (10.0)	65.9 (6.0)	18.0 (6.0)		127.7 (14.4)
2018	16.0 (4.0)	93.8 (14.0)	6.0 (0.0)		115.8 (14.0)
2020	51.9 (10.6)	83.8 (9.2)	6.0 (3.5)		141.7 (22.5)
2022	22.0 (7.2)	167.7 (27.4)			189.6 (31.4)
2024	29.9 (3.5)	113.8 (27.0)	8.0 (4.0)		151.7 (29.0)
Mean	51.9 (8.8)	111.5 (11.6)	16.8 (4.7)		180.2 (16.5)

uftg04mv.d12, uftg05mv.d14-d24

Table 38. Length frequency and CPUE (fish/hr) of fish collected in one, 10-min electrofishing run at Lake Mingo on 13 May 2024. Standard errors were not calculated because only one sampling run could be completed.

	Inch class																				Total	CPUE
Species	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
Bluegill	20	18	8	1	7															54	323.4	
Largemouth bass		6	13		1			1	1		4	1	1	1		1				30	179.6	
Channel catfish													1	1					1	3	18.0	
Redear sunfish	1	5	13	3		2	4	1												29	173.7	
Warmouth				1																1	6.0	

uftg05lm.d24

Table 39. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2010-24) and redear sunfish (2018-24) collected at Lake Mingo. Redear sunfish were stocked in 2019 on top of a low-density population. Standard errors are in parentheses.

	Length group (in)				
Year	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	Total
Bluegill					
2010		83.8	47.9	6.0	137.7
2012	35.3	1,023.5	29.4		1,088.2
2014	6.0	1,197.6	35.9		1,239.5
2016		862.3	191.6		1,053.9
2018	173.7	497.0	12.0		682.6
2020	12.0	568.9	29.9		610.8
2022	12.0	485.0	305.4		802.4
2024	119.8	161.7	41.9		323.4
Mean	44.9 (23.1)	612.3 (140.4)	86.8 (37.1)	0.8 (0.8)	744.8 (136.5)
Redear					
2018			29.9	12.0	41.9
2020		179.6	18.0	6.0	203.6
2022		77.8	47.9	107.8	233.5
2024	6.0	125.8	12.0	29.9	173.7
Mean	1.5 (1.5)	95.8 (38.1)	27.0 (7.9)	38.9 (23.5)	163.2 (42.2)
uftg05lm.d10-d12, uftg04lm.d14-d16, uftg05lm.d18-d24					

uftg05lm.d10-d12, uftg04lm.d14-d16, uftg05lm.d18-d24

Table 40. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Lake Mingo from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2010	24.0	101.8	6.0		131.7
2012	17.7	5.9	135.5	11.8	170.6
2014		12.0	24.0	77.8	113.8
2016	77.8	59.9	29.9	65.9	233.5
2018	161.7	35.9	95.8	6.0	299.4
2020	35.9	59.9	41.9	12.0	149.7
2022	12.0	77.8	18.0	29.9	137.7
2024	119.8	12.0	35.9	12.0	179.6
Mean	56.1 (20.6)	45.7 (12.3)	48.7 (15.9)	27.0 (10.3)	177.4 (21.8)

uftg05lm.d10-d12, uftg04lm.d14-d16, uftg05lm.d18-d24

Table 41. Length frequency and CPUE (fish/hr) of fish collected in one, 10-min electrofishing run at Southland Church Lake on 13 May 2024. Standard errors were not calculated because only one sampling run could be completed.

Species	Inch class																		Total	CPUE
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
Bluegill	2	4	16	19	21	1													63	377.3
Largemouth bass			3		2		5	7	1	5	2			1		1			27	161.7
Channel catfish										1	1	2	1	1	1			1	8	47.9
Redear sunfish					10	9	4												23	137.7
Warmouth			1																1	6.0
Black crappie					1		1												2	12.0

uftg05so.d24

Table 42. Electrofishing CPUE data (fish/hr) for each length group of bluegill and redear sunfish collected at Southland Church Lake from 2018-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	
Bluegill					
2018	71.9	341.3	6.0		419.2
2020	53.9	485.0			538.9
2022	12.0	365.3	59.9		437.1
2024	12.0	233.5	131.7		377.3
Mean	37.4 (15.1)	356.3 (51.6)	49.4 (30.6)		443.1 (34.3)
Redear					
2018			12.0	6.0	18.0
2020		221.6	29.9		251.5
2022		185.6	203.6	6.0	395.2
2024			113.8	24.0	137.7
Mean		101.8 (59.2)	89.8 (43.9)	9.0 (5.2)	200.6 (80.5)

uftg05so.d18-d24

Table 43. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Southland Church Lake from 2018-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2018				35.9	35.9
2020		18.0	18.0	12.0	47.9
2022	65.9	59.9	12.0		137.7
2024	29.9	107.8	12.0	12.0	161.7
Mean	24.0 (15.7)	46.4 (24.0)	7.5 (4.5)	18.0 (6.0)	95.8 (31.6)

uftg05so.d18-d24

Table 44. Length frequency and CPUE (fish/hr) of fish collected in two, 10-min electrofishing runs at Mike Miller Park Lake on 22 May 2024.

Species	Inch class												Total	CPUE	Std. error
	3	4	5	6	7	8	9	10	11	12	13	14			
Bluegill	11	27	22	31	16								107	320.4	38.9
Largemouth bass		3	9	4	1	4	9	6					36	107.8	12.0
Channel catfish								2	4	6	2	1	15	44.9	9.0
Green sunfish			2	1									3	9.0	3.0
Redear sunfish	1	7	41	37	15	6							107	320.4	15.0

uftg05mm.d24

Table 45. Electrofishing CPUE data (fish/hr) for each length group of bluegill and redear sunfish collected at Mike Miller Park Lake from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	
Bluegill					
2010		68.9 (50.9)	44.9 (32.9)		113.8 (18.0)
2012	52.9 (29.4)	32.4 (2.9)	29.4 (11.8)		114.7 (20.6)
2014	3.0 (3.0)	104.8 (15.0)	32.9 (15.0)		140.7 (3.0)
2016	27.0 (15.0)	323.4 (137.7)	170.7 (122.8)		521.0 (275.5)
2018	3.0 (3.0)	317.4 (83.8)	170.7 (44.9)		491.0 (131.7)
2020	3.0 (3.0)	86.8 (32.9)	98.8 (27.0)		188.6 (62.9)
2022		194.6 (56.9)	98.8 (74.9)		293.4 (131.7)
2024		179.6 (6.0)	140.7 (32.9)		320.4 (38.9)
Mean	11.2 (5.6)	163.6 (31.5)	98.4 (20.4)		273.2 (50.2)
Redear					
2010		3.0 (3.0)	24.0 (12.0)	9.0 (3.0)	35.9 (12.0)
2012			11.8 (0.0)	14.7 (8.8)	26.5 (8.8)
2014		15.0 (9.0)	9.0 (3.0)	21.0 (9.0)	44.9 (15.0)
2016		200.6 (21.0)	107.8 (12.0)	56.9 (15.0)	365.3 (18.0)
2018		56.9 (3.0)	272.5 (62.9)	62.9 (9.0)	392.2 (74.9)
2020		21.0 (9.0)	134.7 (27.0)	6.0 (0.0)	161.7 (35.9)
2022		24.0 (18.0)	41.9 (12.0)	122.8 (3.0)	188.6 (3.0)
2024		146.7 (3.0)	155.7 (6.0)	18.0 (6.0)	320.4 (15.0)
Mean		58.4 (18.2)	94.7 (23.1)	38.9 (9.9)	192.0 (37.5)

uftg04mm.d10-d14, uftg05mm.d16-d24

Table 46. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Mike Miller Park Lake from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2010	110.8 (3.0)	296.4 (32.9)	12.0 (6.0)	3.0 (3.0)	422.2 (32.9)
2012	132.4 (44.1)	311.8 (29.4)	2.9 (2.9)	2.9 (2.9)	450.0 (73.5)
2014	140.7 (32.9)	194.6 (50.9)	6.0 (0.0)		341.3 (83.8)
2016	182.6 (44.9)	215.6 (6.0)		3.0 (3.0)	401.2 (41.9)
2018	119.8 (29.9)	167.7 (59.9)	9.0 (3.0)	6.0 (0.0)	302.4 (92.8)
2020	98.8 (3.0)	89.8 (6.0)			188.6 (3.0)
2022	221.6 (41.9)	191.6 (18.0)			413.2 (59.9)
2024	50.9 (3.0)	56.9 (9.0)			107.8 (12.0)
Mean	132.5 (14.9)	191.2 (23.3)	3.7 (1.3)	1.9 (0.7)	329.3 (33.5)

uftg04mm.d10-d14, uftg05mm.d16-d24

Table 47. Length frequency and CPUE (fish/hr) of fish collected in two, 10-min electrofishing runs at Lake Montgomery on 22 May 2024.

	Inch class																			Std.
Species	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total	CPUE	error	
Bluegill	5	12	38	44	9												108	323.4	18.0	
Largemouth bass				7		4	11	7	2	3		2	1				37	110.8	3.0	
Channel catfish							2	2	4	1	6	3	2		1	3	24	71.9	12.0	
Green sunfish		3	2	1													6	18.0	18.0	
Redear sunfish					2	5	2										9	27.0	9.0	
Warmouth	2	1				1											4	12.0	0.0	

uftg05bn.d24

Table 48. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2010-24) and redear sunfish (2020-24) collected at Lake Montgomery. Redear sunfish were first stocked in 2018. Standard errors are in parentheses.

	Length group (in)				
Year	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	Total
Bluegill					
2010	15.0 (9.0)	203.6 (71.9)	9.0 (9.0)		227.5 (89.8)
2012	41.2 (29.4)	558.8 (100.0)	73.5 (50.0)		673.5 (179.4)
2014	24.0 (6.0)	242.5 (21.0)	161.7 (83.8)		428.1 (98.8)
2016		515.0 (65.9)	245.5 (71.9)		760.5 (137.7)
2018	3.0 (3.0)	134.7 (27.0)	35.9 (29.9)		173.7 (59.9)
2020		221.6 (24.0)	9.0 (3.0)		230.5 (27.0)
2022	3.0 (3.0)	200.6 (74.9)	326.4 (15.0)		529.9 (62.9)
2024		164.7 (3.0)	158.7 (21.0)		323.4 (18.0)
Mean	10.9 (4.7)	281.4 (42.6)	127.6 (30.5)		419.9 (59.2)
Redear					
2020		6.0 (0.0)	56.9 (9.0)		62.9 (9.0)
2022			62.9 (15.0)	65.9 (35.9)	128.7 (21.0)
2024			6.0 (6.0)	21.0 (15.0)	27.0 (9.0)
Mean		2.0 (1.3)	41.9 (12.4)	28.9 (15.9)	72.9 (19.9)

uftg04bn.d10-d14 uftg05bn.d16-d24

Table 49. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Lake Montgomery from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2010	47.9 (41.9)	6.0 (0.0)	6.0 (6.0)	35.9 (6.0)	95.8 (53.9)
2012	67.7 (2.9)	32.4 (2.9)	29.4 (5.9)	58.8 (11.8)	188.2 (11.8)
2014	62.9 (15.0)	62.9 (9.0)	24.0 (0.0)	44.9 (3.0)	194.6 (21.0)
2016	6.0 (6.0)	41.9 (18.0)	12.0 (6.0)	18.0 (12.0)	77.8 (41.9)
2018	203.6 (12.0)	3.0 (3.0)	18.0 (6.0)	24.0 (0.0)	248.5 (9.0)
2020	18.0 (12.0)	38.9 (3.0)	3.0 (3.0)	15.0 (3.0)	74.9 (15.0)
2022	21.0 (3.0)	44.9 (9.0)	38.9 (3.0)	21.0 (3.0)	125.8 (18.0)
2024	21.0 (3.0)	71.9 (0.0)	15.0 (3.0)	3.0 (3.0)	110.8 (3.0)
Mean	56.1 (16.0)	37.8 (6.2)	18.3 (3.2)	27.7 (4.7)	140.0 (16.9)

uftg04bn.d10-d14 uftg05bn.d16-d24

Table 50. Length frequency and CPUE (fish/hr) of fish collected in one, 10-min electrofishing run at Bloomfield Park Lake on 8 May 2024. Standard errors were not calculated because only one sampling run could be completed.

	Inch class																			
Species	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total	CPUE	
Bluegill	1	4	7	14	7													33	197.6	
Largemouth bass	1	1	4	5	14	7	2	4	4	4	1	1	1					49	293.4	
Channel catfish								1	1		2	2	3	3	1	2	1	16	95.8	
Green sunfish			4	1														5	29.9	
Redear sunfish			1			2												3	18.0	

uftg05bl.d24

Table 51. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2010-24) and redear sunfish (2020-24) collected at Bloomfield Park Lake. Redear sunfish were first stocked in 2018. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	
Bluegill					
2010	53.9 (12.0)	224.6 (3.0)	227.5 (149.7)	18.0 (18.0)	524.0 (152.7)
2012	6.0	281.4	113.8		401.2
2014		143.7	179.6		323.4
2016		35.9	323.4		359.3
2018	18.0	29.9	47.9		95.8
2020		35.9	53.9		89.8
2022		29.9	131.7		161.7
2024		71.9	125.8		197.6
Mean	14.6 (7.9)	119.8 (33.6)	159.0 (38.9)	4.0 (4.0)	297.4 (62.0)
Redear					
2020		24.0	47.9	35.9	107.8
2022				35.9	35.9
2024		6.0		12.0	18.0
Mean		10.0 (7.2)	16.0 (16.0)	27.9 (8.0)	53.9 (27.4)
uftg05bl.d10, uftg04bl.d12-d14, uftg05bl.d16-d24					

uftg05bl.d10, uftg04bl.d12-d14, uftg05bl.d16-d24

Table 52. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Bloomfield Park Lake from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2010	62.9 (3.0)	98.8 (32.9)	104.8 (15.0)	15.0 (9.0)	281.4 (53.9)
2012	77.8	113.8	35.9	29.9	257.5
2014	53.9	221.6	77.8	18.0	371.3
2016	65.9	521.0	65.9	12.0	664.7
2018	95.8	281.4	77.8	12.0	467.1
2020	71.9	281.4	59.9		413.2
2022	89.8	227.5	113.8	18.0	449.1
2024	149.7	101.8	35.9	6.0	293.4
Mean	81.2 (9.7)	216.2 (46.4)	75.2 (9.9)	14.0 (3.2)	386.6 (44.4)

uftg05bl.d10, uftg04bl.d12-d14, uftg05bl.d16-d24

Table 53. Length frequency and CPUE (fish/hr) of fish collected in one, 10-min electrofishing run at Lusby Lake on 28 May 2024. Standard errors were not calculated because only one sampling run could be completed.

Species	Inch class																Total	CPUE
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
Bluegill		1	4														5	29.9
Largemouth bass			2		1	2	5	2	2	2	1					1	18	107.8
Redear sunfish						2											2	12.0
Warmouth	1																1	6.0

uftg05ll.d24

Table 54. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2010-24) and redear sunfish (2020-24) collected at Lusby Lake. Redear sunfish were first stocked in 2018. Standard errors are in parentheses.

2010: Standard errors are in parentheses.

Year	Length group (in)				Total
	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	
Bluegill					
2010	29.9	467.1	149.7		646.7
2012	77.8	119.8	53.9		251.5
2014		2,065.9	101.8		2,167.7
2016	95.8	1,018.0	53.9		1167.7
2018	6.0	143.7	95.8		245.5
2020		143.7	12.0		155.7
2022		389.2	287.4		676.7
2024			29.9		29.9
Mean	26.2 (13.8)	543.4 (245.2)	98.1 (31.2)		667.7 (250.7)
Redear					
2020		179.6	47.9	6.0	233.5
2022		6.0	53.9	83.8	143.7
2024				12.0	12.0
Mean		61.9 (58.9)	33.9 (17.1)	33.9 (25.0)	129.7 (64.3)
uftg05ll.d10, uftg04ll.d12-d16, uftg05ll.d18-d24					

uftg05ll.d10, uftg04ll.d12-d16, uftg05ll.d18-d24

Table 55. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Lusby Lake from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2010	29.9	47.9	6.0	35.9	119.8
2012		71.9			71.9
2014	29.9	12.0	18.0	77.8	137.7
2016	71.9	12.0	18.0	35.9	137.7
2018	18.0	41.9	12.0	6.0	77.8
2020		12.0	6.0	65.9	83.8
2022	143.7	89.8	29.9	24.0	287.4
2024	12.0	47.9	35.9	12.0	107.8
Mean	38.1 (17.1)	41.9 (10.3)	15.7 (4.4)	32.2 (9.9)	128.0 (24.5)

uftg05ll.d10, uftg04ll.d12-d16, uftg05ll.d18-d24

Table 56. Length frequency and CPUE (fish/hr) of fish collected in one, 10-min electrofishing run at Scott County Park Lake on 28 May 2024. Standard errors were not calculated because only one sampling run could be completed.

Species	Inch class																	Total	CPUE
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
Bluegill	1	2	7	7	2		1											20	119.8
Largemouth bass	5	6	5	1	3			3	1	8	7	1	4	3	1	1		49	293.4
Channel catfish											1	1		1	1		1	5	29.9
Redear sunfish			1	1		2	1											5	29.9

uftg05sc.d24

Table 57. Electrofishing CPUE data (fish/hr) for each length group of bluegill (2010-24) and redear sunfish (2020-24) collected at Scott County Park Lake. Redear sunfish were first stocked in 2018. Standard errors are in parentheses.

first stocked in 2010. Standard errors are in parentheses.					
	Length group (in)				
Year	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	Total
Bluegill					
2010	77.8	257.5	89.8		425.2
2012	35.3	223.5	223.5		482.4
2014	6.0	263.5	251.5		521.0
2016		12.0	65.9	29.9	107.8
2018		18.0	41.9		59.9
2020		6.0			6.0
2022		131.7	155.7	24.0	311.4
2024		59.9	53.9	6.0	119.8
Mean	15.0 (10.0)	122.0 (40.1)	110.8 (32.2)	7.5 (4.4)	255.2 (73.0)
Redear					
2020		71.9	35.9	71.9	179.6
2022			12.0	41.9	53.9
2024		6.0	6.0	18.0	29.9
Mean		26.0 (23.0)	18.0 (9.2)	43.9 (15.6)	87.8 (46.4)
uftg05sc.d10-d12, uftg04sc.d14-d16, uftg05sc.d18-d24					

uftg05sc.d10-d12, uftg04sc.d14-d16, uftg05sc.d18-d24

Table 58. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Scott County Park Lake from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	≥ 15.0	
2010	293.4	71.9			365.3
2012		141.2	11.8		152.9
2014	209.6	245.5	53.9	59.9	568.9
2016	143.7	149.7	12.0	12.0	317.4
2018	107.8	233.5	6.0		347.3
2020	29.9	323.4	18.0	24.0	395.2
2022	203.6	41.9	221.6	35.9	503.0
2024	119.8	24.0	95.8	53.9	293.4
Mean	138.5 (34.2)	154.2 (37.7)	52.4 (26.7)	23.2 (8.7)	368.3 (44.9)

uftg05sc.d10-d12, uftg04sc.d14-d16, uftg05sc.d18-d24

Table 59. Length frequency and CPUE (fish/hr) of fish collected in five, 10-min electrofishing runs at Jesse W. Thornton Lake on 8 May 2024.

Species	Inch class																				Total	CPUE	Std. error
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21			
Bluegill	11	41	193	227	83	18	1														574	687.4	124.4
Largemouth bass			3	4	2	3	8	13	8	4	10	3	8	8	12	17	19	12	3	3	140	167.7	24.3
Channel catfish									3	2	1	2	2	3	1	1		2			17	20.4	7.0
Redear sunfish		1	3	4	20	89	44	3													164	196.4	20.3
Warmouth	1																				1	1.2	1.2

uftg05ts.d24

Table 60. Electrofishing CPUE data (fish/hr) for each length group of bluegill and redear sunfish collected at Jesse W. Thornton Lake from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 3.0	3.0 - 5.9	6.0 - 7.9	≥ 8.0	
Bluegill					
2010		25.0 (7.2)	82.8 (38.3)	3.0 (3.0)	110.8 (44.9)
2012	18.6 (10.1)	53.9 (11.4)	21.6 (6.0)	1.0 (1.0)	95.1 (17.1)
2014	3.0 (3.0)	60.9 (12.1)	31.9 (6.7)		95.8 (18.0)
2016	27.9 (6.3)	394.2 (84.8)	64.9 (15.4)	1.0 (1.0)	488.0 (96.4)
2018	12.0 (2.4)	612.3 (20.7)	214.1 (35.7)		838.3 (46.8)
2020	20.0 (9.2)	851.3 (138.2)	76.9 (23.2)		948.1 (158.3)
2022	25.2 (6.9)	727.0 (70.0)	167.7 (45.3)		919.8 (81.5)
2024	13.2 (5.2)	552.1 (109.6)	121.0 (21.7)	1.2 (1.2)	687.4 (124.4)
Mean	15.0 (2.6)	390.0 (53.6)	90.2 (12.3)	0.8 (0.5)	496.1 (61.5)
Redear					
2010		1.0 (1.0)	2.0 (1.3)	16.0 (5.1)	19.0 (7.0)
2012		54.9 (18.6)	4.9 (2.4)	6.9 (3.2)	66.7 (17.7)
2014		23.0 (8.4)	31.9 (8.4)	49.9 (7.4)	104.8 (15.5)
2016		85.8 (9.5)	70.9 (6.1)	88.8 (7.5)	244.5 (15.3)
2018		27.0 (5.2)	130.2 (12.6)	136.2 (38.0)	293.4 (42.4)
2020	2.0 (2.0)	15.0 (4.6)	98.8 (15.7)	44.9 (7.9)	160.7 (24.9)
2022		74.3 (24.4)	166.5 (23.5)	53.9 (11.7)	294.6 (20.5)
2024		9.6 (4.1)	130.5 (14.0)	56.3 (13.7)	196.4 (20.3)
Mean	0.3 (0.3)	36.6 (6.0)	73.9 (9.6)	53.1 (6.8)	163.9 (16.0)

uftg04ts.d10-d12, uftg05ts.d14-d24

Table 61. Electrofishing CPUE data (fish/hr) for each length group of largemouth bass collected at Jesse W. Thornton Lake from 2010-24. Standard errors are in parentheses.

Year	Length group (in)				Total
	< 8.0	8.0 - 11.9	12.0 - 14.9	> 15.0	
2010	133.7 (32.8)	96.8 (16.0)	1.0 (1.0)	3.0 (2.1)	234.5 (47.5)
2012	82.4 (17.1)	192.2 (39.5)	14.7 (4.5)	3.9 (2.0)	293.1 (43.7)
2014	54.9 (12.7)	90.8 (13.5)	7.0 (2.9)		152.7 (17.6)
2016	40.9 (10.8)	45.9 (10.0)	27.9 (4.3)	6.0 (2.2)	120.8 (13.9)
2018	24.0 (6.5)	28.4 (5.1)	34.4 (6.2)	56.9 (16.3)	143.7 (20.0)
2020	28.9 (3.3)	9.0 (2.6)	18.0 (5.4)	44.9 (7.7)	100.8 (10.2)
2022	20.4 (6.2)	27.5 (4.9)	26.4 (4.9)	83.8 (12.0)	158.1 (11.5)
2024	14.4 (5.6)	39.5 (6.2)	25.2 (4.4)	88.6 (16.6)	167.7 (24.3)
Mean	52.8 (7.9)	70.0 (10.6)	18.4 (2.1)	32.7 (5.9)	173.8 (13.3)

uftg04ts.d10-d12, uftg05ts.d14-d24

Table 62. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Millennium Park Pond on 17 October 2024. Additional samples were collected in 2012, 2015, 2018 and 2021.

Year	Inch class																			Total	CPUE
	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		
2012	2	2	14	7	8	1	1	2			1	1	1						1	41	13.7
2015				2	2	6			1											11	3.7
2018			1	14	37	66	48	35	25	18	19	11	18	13	5	5	2			317	105.7
2021			2	4	11	4	5	2	1	1										30	10.0
2024			4	7	5	9	3	2		2		1		1						34	11.3

ufcf10mi.d12-d24

Table 63. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Millennium Park Pond from 2012-24. Standard errors are in parentheses.

parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2012	4	74 (5)	31	89 (2)	5	93 (5)	1	84	41	88 (2)
2015			10	94 (2)	1	106			11	95 (2)
2018			94	86 (1)	63	89 (1)	2	98 (3)	159	87 (1)
2021			26	94 (3)	4	114 (7)			30	96 (3)
2024			28	87 (2)	6	89 (2)			34	87 (1)

ufcf10mi.d12-d24

Table 64. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Alexandria Community Park Lake on 25 October 2024. Additional samples were collected in 2007, 2011, 2012, 2015, 2018, 2020 and 2022.

	Inch class																														
Year	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	Total	CPUE						
2007			1	2	5	5	15	16	5	12	8	7	2		2		3	1							84	28.0					
2011	2	28	133	231	250	177	73	18	4	1	1	4				4	2	1				1	1	931	310.3						
2012		2	44	96	114	60	39	35	23	24	28	27	23	8	2	2	3	1						531	177.0						
2015			7	38	123	69	32	24	8	8	6	3	1	2	2	3		1						327	109.0						
2018			1		4	13	33	20	10	11	3	5	3	3	1		2	1						110	36.7						
2020				3	4	8	14	12	7	5	1	1		1	1									57	19.0						
2022		2	5	16	11	21	28	42	53	32	22	12	8		6	1	2							261	87.0						
2024		1	25	31	68	74	80	46	44	28	17	10	7	4	2	1	1	1	2					442	147.3						

ufcf09sl.d07-d11, ufcf11sl.d12, ufcf10sl.d15-d24

Table 65. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Alexandria Community Park Lake from 2011-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24.0			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2011	28	94 (2)	102	84 (1)	12	99 (3)	3	87 (11)	145	88 (1)
2012	25	107 (3)	109	93 (1)	72	96 (1)	1	103	207	96 (1)
2015	45	94 (2)	256	88 (1)	25	87 (2)	1	58	327	88 (1)
2018			78	89 (1)	28	83 (1)	1	104	107	88 (1)
2020	3	91 (3)	45	85 (1)	9	86 (3)			57	85 (1)
2022	23	77 (2)	155	78 (1)	83	81 (1)			261	79 (1)
2024	16	93 (2)	125	82 (1)	43	86 (1)	3	104 (4)	187	84 (1)

ufcf09sl.d11, ufcf11sl.d12, ufcf10sl.d15-d24

Table 66. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Flemingsburg Old Reservoir on 18 October 2024. Additional samples were collected in 2019 and 2021.

Year	Inch class															Total	CPUE
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
2019							1						1		1	3	1.0
2021	2	4	5	2	3		3		1	3						23	7.7
2024	1	1	6	3	3	4	1	1								20	6.7

ufcf09fo.d19, ufcf10fo.d21-d24

Table 67. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Flemingsburg Old Reservoir from 2021-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2021			16	94 (3)	7	90 (3)			23	93 (2)
2024			14	91 (3)	6	88 (5)			20	90 (3)

ufcf10fo.d21-d24

Table 68. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Lower Sportsman's Lake on 17 October 2024. Additional samples were collected in 2011, 2013, 2016, 2019 and 2022.

Year	Inch class																				Total	CPUE
	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
2011	1	8	15	22	62	40	19	8	2	3	3	2		1							186	93.0
2013		1	7	25	49	88	29	12	4	2		1		1							219	73.0
2016				2	2	6	10	18	15	3	1	1				1			1		60	20.0
2019					2		8	30	16	11	2		1	1	1	3					75	25.0
2022		1	8	29	70	82	67	40	13	13	10	7				1				1	342	114.0
2024		1			10	20	35	19	10	10	7	8	3	2		1					126	42.0

ufcf10ls.d11, ufcf09ls.d13-d16, ufcf10ls.d19-d24

Table 69. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Lower Sportsman's Lake from 2011-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24.0			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2011	18	95 (3)	72	90 (1)	9	90 (2)			99	91 (1)
2013	14	92 (3)	105	85 (1)	4	89 (5)			123	86 (1)
2016	2	80 (13)	51	85 (2)	6	90 (3)	1	95	60	86 (1)
2019			56	90 (2)	19	95 (3)			75	91 (1)
2022	10	91 (6)	77	85 (1)	28	85 (1)	1	101	116	86 (1)
2024	1	73	94	83 (1)	31	87 (2)			126	84 (1)

ufcf10ls.d11, ufcf09ls.d13-d16, ufcf10ls.d19-d24

Table 70. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Upper Sportsman's Lake on 17 October 2024. Additional samples were collected in 2007, 2011, 2013, 2016, 2019 and 2022.

Year	Inch class																														Total	CPUE
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30									
2007				2	2	6	4	2	6	8	2	3	3	1		1		2										42	14.0			
2011	3	5	6	26	27	20	5	1	2				2		1								1					99	49.5			
2013		1	4	7	18	12	4	5		1																		52	17.3			
2016					5	3	2	3	7	1	1																	22	7.3			
2019				3	1	7	8	7	1		1	1																29	9.7			
2022		6	8	19	41	49	30	11	9	2	4	2	1		1													183	61.0			
2024		1	5	10	27	20	19	13	7	5	4	2	2	2	3	1												121	40.3			

ufcf09us.d07, ufcf10us.d11, ufcf09us.d13-d16, ufcf10us.d19-d24

Table 71. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Upper Sportsman's Lake from 2011-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24.0			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2011	14	96 (4)	79	91 (1)	5	97 (2)	1	91	99	92 (1)
2013	5	96 (5)	46	92 (1)	1	93			52	93 (1)
2016			13	91 (2)	9	91 (3)			22	91 (2)
2019			26	91 (2)	3	95 (7)			29	92 (2)
2022	14	90 (3)	150	80 (1)	19	88 (3)			183	82 (1)
2024	6	96 (9)	89	84 (2)	26	86 (2)			121	85 (1)

ufcf09us.d07, ufcf10us.d11, ufcf09us.d13-d16, ufcf10us.d19-d24

Table 72. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Lake Pollywog on 25 October 2024. Additional samples were collected in 2012, 2015, 2018 and 2021.

Year	Inch class																Total	CPUE
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22			
2012		9	14	12	1	2	2	2							1	43	14.3	
2015	1	10	17	20	18	10	6	4	2	1						89	29.7	
2018			1	1	1	7	3	4	6	4	3	2				32	10.7	
2021	1	5	12	27	29	18	24	24	8	6	3	2	3			162	54.0	
2024			3	3	14	19	14	9	9	2	3	1	2	1		80	26.7	

ufcf10lp.d12-d24

Table 73. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Lake Pollywog from 2012-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2012	23	90 (2)	19	84 (2)					42	87 (1)
2015	28	106 (2)	58	95 (1)	3	103 (5)			89	99 (1)
2018	1	96	15	84 (2)	15	79 (2)			31	82 (1)
2021	18	81 (4)	122	78 (1)	22	79 (2)			162	78 (1)
2024	3	92 (2)	59	89 (1)	18	95 (3)			80	91 (1)

ufcf10lp.d12-d24

Table 74. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Leary Lake on 25 October 2024. An additional sample was collected in 2021.

Year	Inch class												Total	CPUE
	10	11	12	13	14	15	16	17	18	19	20	21		
2021	2	6	6	8	12	8	6	1	5	3	1	1	59	19.7
2024	1	6	7	3	17	17	9	5	4	1	1		71	23.7

ufcf10le.d21-d24

Table 75. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Leary Lake from 2021-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2021	2	93 (0)	40	80 (4)	17	75 (2)			59	79 (3)
2024	1	80	50	81 (1)	20	78 (1)			71	80 (1)

ufcf10le.d21-d24

Table 76. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Cherokee Park Lake on 11 October 2024. Additional samples were collected in 2012, 2015, 2018 and 2021.

	Inch class																				Total	CPUE
Year	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
2012	2	7	23	21	14	15	10	3	6	8	2	5	3								119	39.7
2015							2	4	3	3	1	1	1	1							16	5.3
2018								1		2		1	2	2							8	2.7
2021					4	14	10	22	19	22	16	3	9		3	2		2	1	1	126	42.0
2024																					0	

ufcf10cp.d12-d24

Table 77. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Cherokee Park Lake from 2012-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2012	53	93 (2)	48	85 (1)	18	84 (2)			119	88 (1)
2015			9	86 (3)	7	88 (3)			16	87 (2)
2018			1	112	4	108 (4)			5	109 (4)
2021			68	88 (1)	54	88 (1)	4	97 (6)	126	88 (1)
2024									0	

ufcf10cp.d12-d24

Table 78. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Fisherman's Park Lake #4 on 11 October 2024. Additional samples were collected in 2014, 2017 and 2020.

	Inch class																Total	CPUE
Year	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22			
2014	13	52	88	94	57	24	12	3	1	1					1	346	115.3	
2017			2	4		1	1	4	3	1		2				18	6.0	
2020					1	2	3	4	6	2	1	1	1			21	7.0	
2024	1	1	4	4	4	4	7	4	2	2	2					35	11.7	

ufcf10fl.d14-d24

Table 79. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Fisherman's Park Lake #4 from 2014-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2014	153	88 (1)	490	87 (1)	3	96 (8)			346	88 (0)
2017	2	85 (6)	10	86 (2)	6	92 (2)			18	88 (2)
2020			10	78 (1)	11	91 (3)			21	85 (2)
2024	6	89 (3)	23	91 (2)	6	95 (5)			35	91 (2)

ufcf10fl.d14-d24

Table 80. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Waverly Park Lake on 24 October 2024. Additional samples were collected in 2012, 2015, 2018 and 2021.

Year	Inch class													Total	CPUE
	9	10	11	12	13	14	15	16	17	18	19	20	21		
2012	5	3	4	1	1	5	2	1						22	11.0
2015			5	8	8	12	3	3	1					40	13.3
2018				2	1	8	6	4	1	5	2		1	30	10.0
2021	3	8	15	20	8	4	3	3	1	1		2		68	22.7
2024														0	

ufcf10wp.d12-d24

Table 81. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Waverly Park Lake from 2012-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2012	8	85 (4)	13	81 (1)	1	81			22	82 (2)
2015			36	92 (2)	4	91 (7)			40	92 (2)
2018			17	90 (2)	12	90 (2)			29	90 (1)
2021	11	100 (3)	50	97 (1)	7	91 (6)			68	97 (1)
2024									0	

ufcf10wp.d12-d24

Table 82. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Logan Hubble Park Lake on 17 October 2024. Additional samples were collected in 2018 and 2021.

Year	Inch class																Total	CPUE
	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
2018	1	5	5	19	21	43	29	33	33	19	17	15	6	6	4	1	257	85.7
2021			7	12	20	24	26	8	13	6	4		1				121	60.5
2024	12	53	50	67	86	76	55	43	41	24	14	7	2				530	176.7

ufcf10lh.d18-d24

Table 83. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Logan Hubble Park Lake from 2018-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2018	4	108 (5)	45	97 (1)	35	92 (1)			84	95 (1)
2021			89	84 (1)	32	84 (2)			121	84 (1)
2024	17	74 (3)	58	75 (1)	62	83 (1)			137	79 (1)

ufcf10lh.d18-d24

Table 84. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Maysville-Mason County Recreation Park Lake on 18 October 2024. Additional samples were collected in 2016, 2019 and 2021.

Year	Inch class																Total	CPUE
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22			
2016					1	1	3	1	2				1			9	3.0	
2019						3	8	7	8	1			1			28	9.3	
2021	2	8	11	22	23	18	12	14	9	4	5	2	1	2	1	134	67.0	
2024			5	11	16	23	14	11	3	2	4	2	2			93	31.0	

ufcf10ma.d16, ufcf09ma.d19, ufcf10ma.d21-d24

Table 85. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Maysville-Mason County Recreation Park Lake from 2016-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2016			6	83 (3)	3	79 (1)			9	81 (2)
2019			18	82 (3)	10	90 (8)			28	85 (3)
2021	21	93 (2)	89	86 (1)	24	86 (2)			134	87 (1)
2024	5	79 (5)	75	78 (1)	13	87 (3)			93	80 (1)

ufcf10ma.d16, ufcf09ma.d19, ufcf10ma.d21-d24

Table 86. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Carlson Lake (Ft. Knox) on 24 October 2024. Additional samples were collected in 2015, 2018 and 2021.

Year	Inch class																				Total	CPUE
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		
2015			2	3	5	7	3	1													21	7.0
2018		11	26	60	92	104	60	30	32	31	11	9	3	7	3		2				481	160.3
2021	4	18	38	52	48	70	67	52	23	19	6	6	2	3	2				1	1	412	137.3
2024			2	6	4	8	12	2	2	5		1	1								43	14.3

ufcf10cl.d15-d24

Table 87. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Carlson Lake (Ft. Knox) from 2015-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2015	2	102 (17)	19	82 (3)					21	84 (3)
2018	7	93 (6)	147	82 (1)	56	84 (2)	2	82 (7)	212	83 (1)
2021	30	86 (2)	117	81 (1)	41	81 (1)	2	93 (6)	190	82 (1)
2024	2	95 (8)	32	83 (1)	9	88 (2)			43	85 (1)

ufcf10cl.d15-d24

Table 88. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Bloomfield Park Lake on 10 October 2024. Additional samples were collected in 2012, 2015, 2018 and 2021.

Year	Inch class																		Total	CPUE
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
2012	1	10	35	29	34	26	15	11	4	4	6	2			1	1			179	59.7
2015	1	4	11	24	49	43	33	9	10	1	3	5							193	64.3
2018							1	5	2	4	2	1			1				16	5.3
2021			10	29	18	34	36	27	24	6	8	4	1	2	1	1		1	202	67.3
2024					5	2	5	10	9	12	12	5	1	3	1				65	21.7

ufcf10bl.d12-d24

Table 89. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Bloomfield Park Lake from 2012-24. Standard errors are in parentheses.

parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2012	46	90 (1)	115	86 (2)	18	89 (3)			179	87 (1)
2015	15	88 (4)	158	86 (1)	19	82 (3)			192	85 (1)
2018			6	95 (4)	10	99 (3)			16	98 (3)
2021	10	84 (2)	144	79 (0)	47	81 (1)	1	95	202	80 (0)
2024			22	84 (3)	43	86 (1)			65	85 (1)

ufcf10bl.d12-d24

Table 90. Length frequency and CPUE (fish/net set) of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Jesse W. Thornton Lake on 10 October 2024. Additional samples were collected in 2011, 2015, 2018 and 2021.

Year	Inch class																													Total	CPUE
	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29								
2011	1	33	49	41	66	120	122	62	30	15	10	6	3				1											559	186.3		
2015									3	2	2	1	2	1	2	1	1											15	5.0		
2018						2	9	26	22	20	14	7	4	2	5	2	3		1	1	1	1						120	40.0		
2021				1	3	9	23	28	14	11	9	5	6	2		1	1					1	1					115	38.3		
2024			2	2	10	19	32	27	35	18	12	10	6	2	1	1		2										179	59.7		

ufcf10ts.d11-d24

Table 91. Number of fish and the relative weight (Wr) for each length group of channel/hybrid catfish collected by baited-tandem hoop nets (three sets; 72-hr soak time) that were set at Jesse W. Thornton Lake from 2011-24. Standard errors are in parentheses.

Year	Length group (in)								Total	
	7.0 - 10.9		11.0 - 15.9		16.0 - 23.9		≥ 24			
	No.	Wr	No.	Wr	No.	Wr	No.	Wr	No.	Wr
2011	38	95 (1)	127	87 (1)	34	88 (2)			199	89 (1)
2015			3	106 (7)	12	108 (2)			15	108 (2)
2018			59	90 (2)	57	91 (1)	4	93 (3)	120	90 (1)
2021	1	93	77	83 (1)	35	84 (1)	2	99 (2)	115	84 (1)
2024	4	97 (6)	123	85 (1)	50	87 (1)	2	97 (1)	179	86 (1)

ufcf10ts.d11-d24

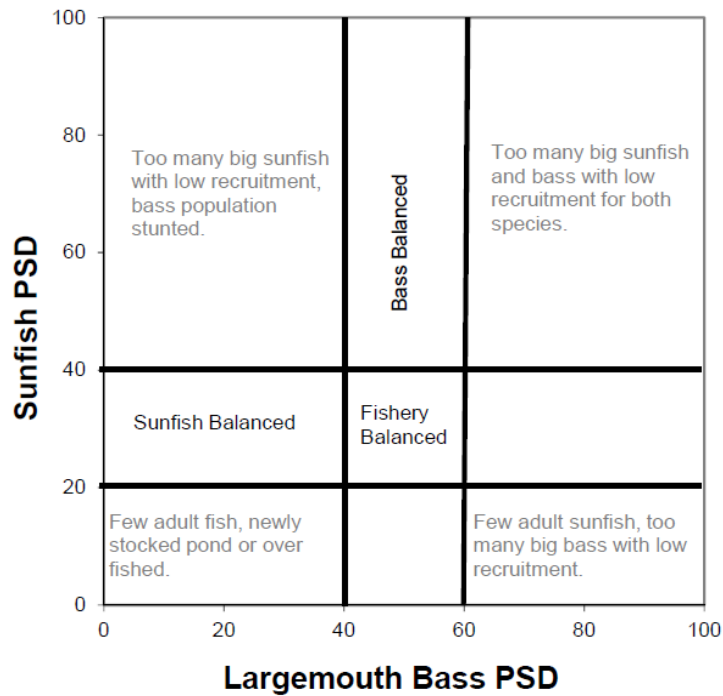


Figure 1. Generally accepted proportional stock density (PSD) index ranges for sunfish (bluegill and redear sunfish, weighted) and largemouth bass populations in small impoundments.

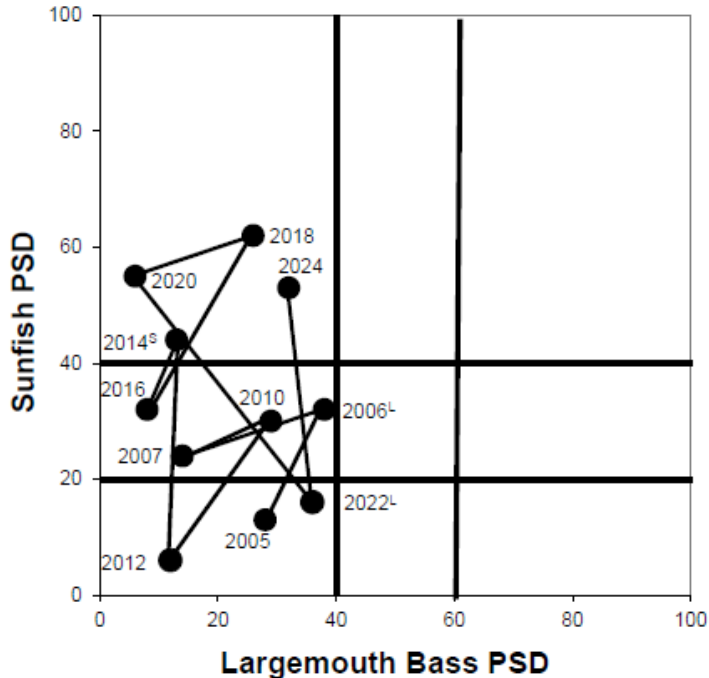


Figure 2. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Alexandria Community Park Lake from 2005-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

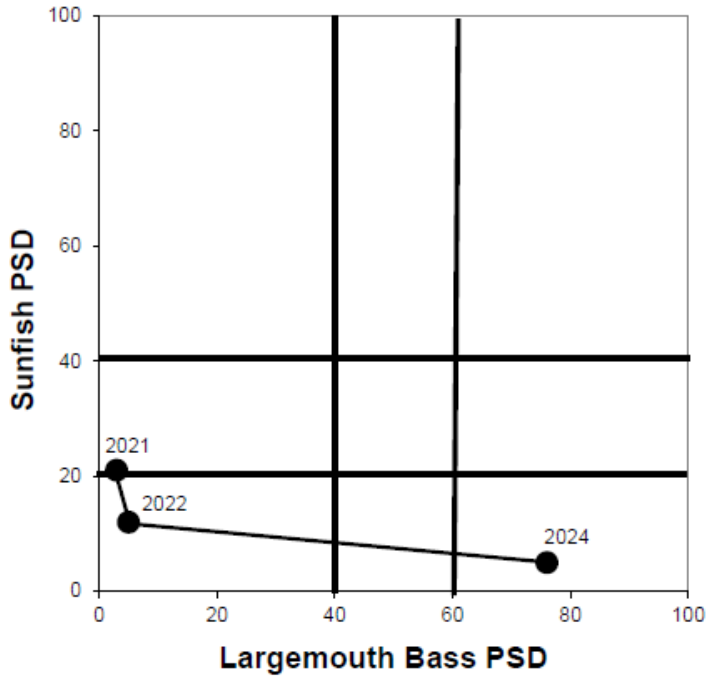


Figure 3. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Robert J. Barth Park Lake from 2021-24.

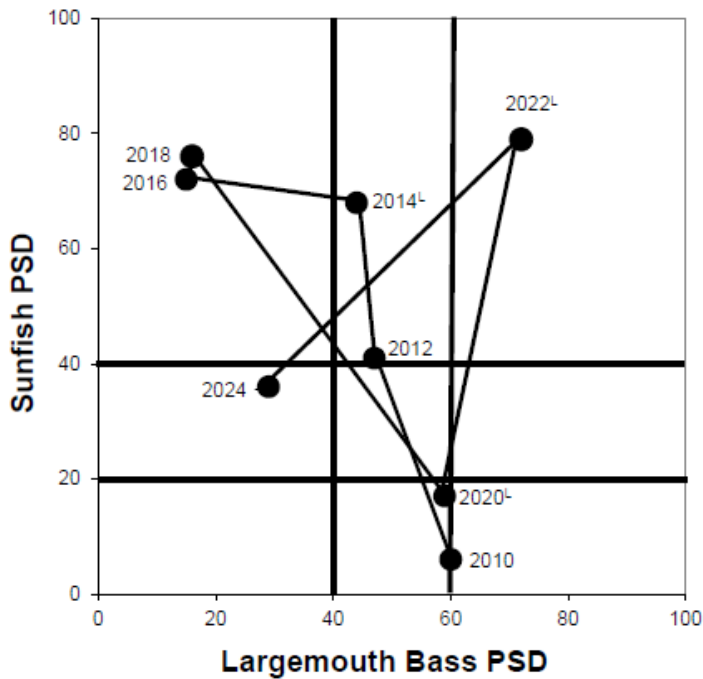


Figure 4. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Panther Creek Park Lake from 2010-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

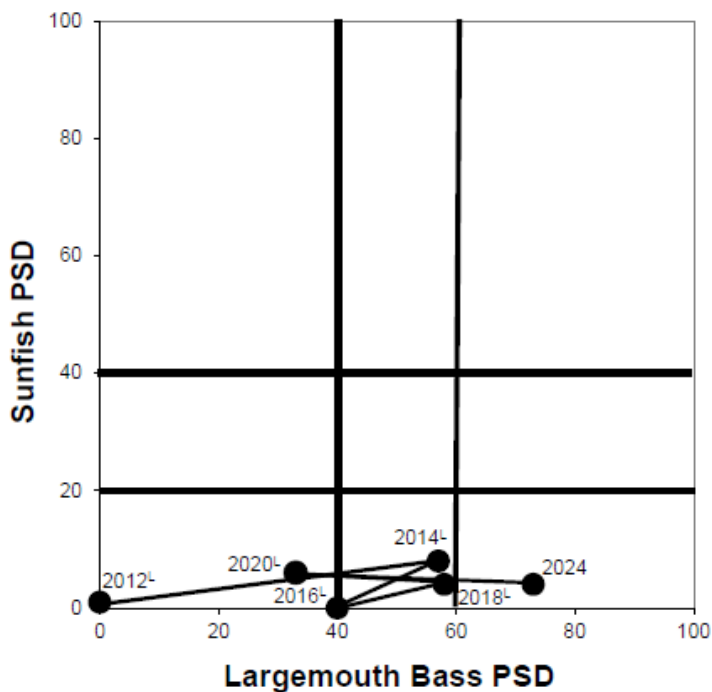


Figure 5. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Waymond Morris Park Lake from 2012-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

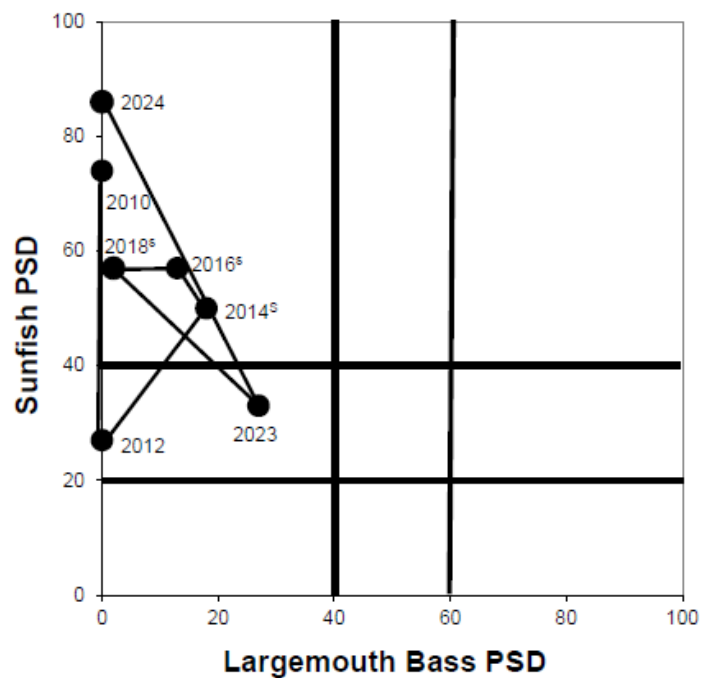


Figure 6. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Yellow Creek Park Lake from 2010-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

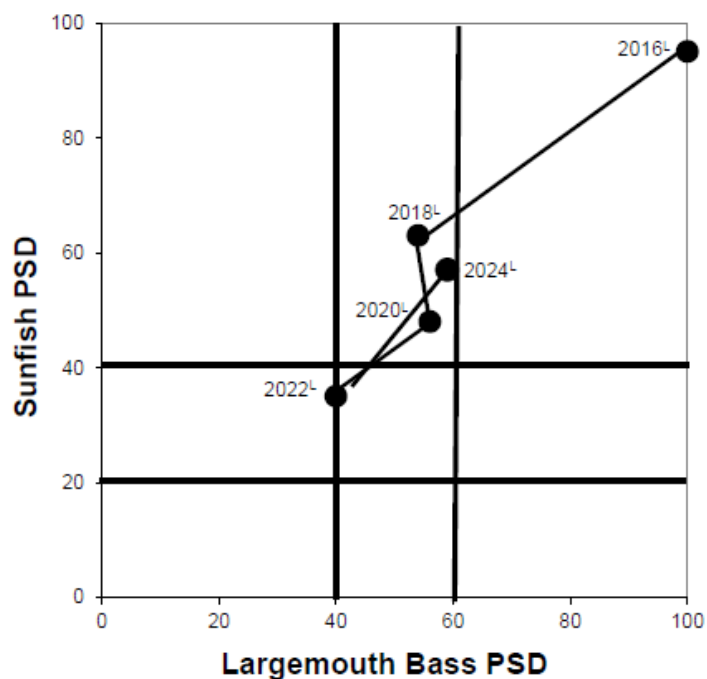


Figure 7. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Kentucky Horse Park Rolex Lake from 2016-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

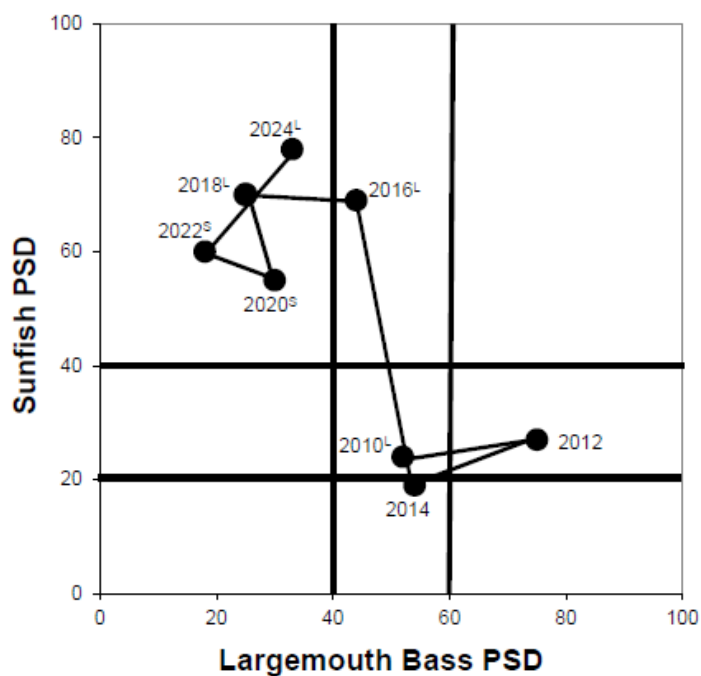


Figure 8. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Lower Sportsman's Lake from 2010-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

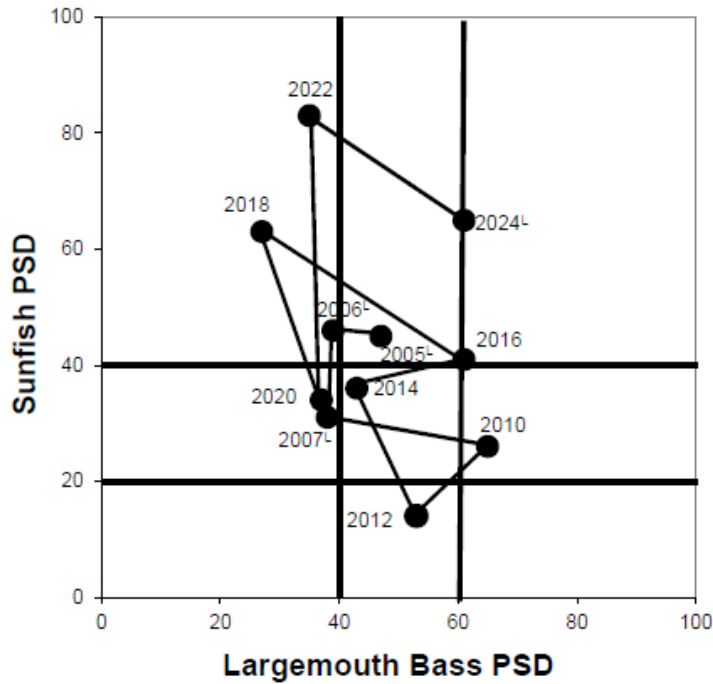


Figure 9. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Upper Sportsman's Lake from 2005-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

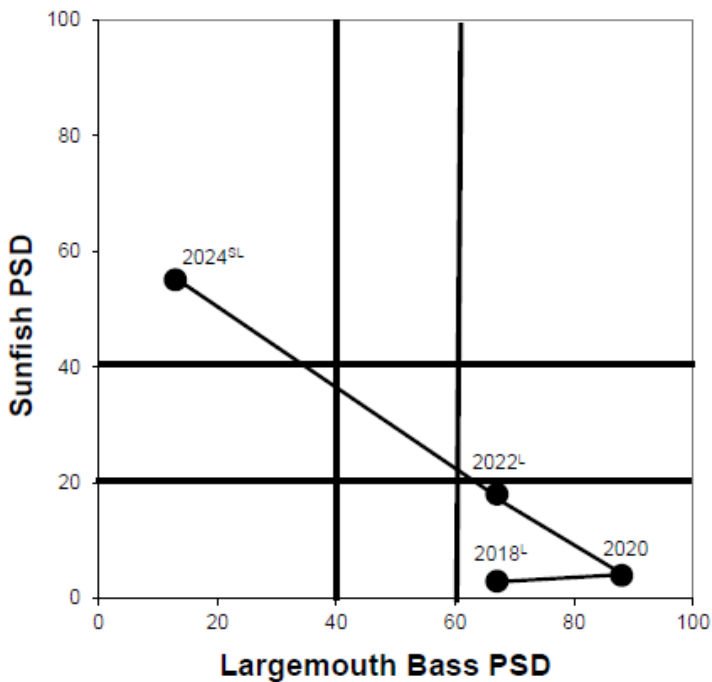


Figure 10. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Kess Creek Park Lake from 2018-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

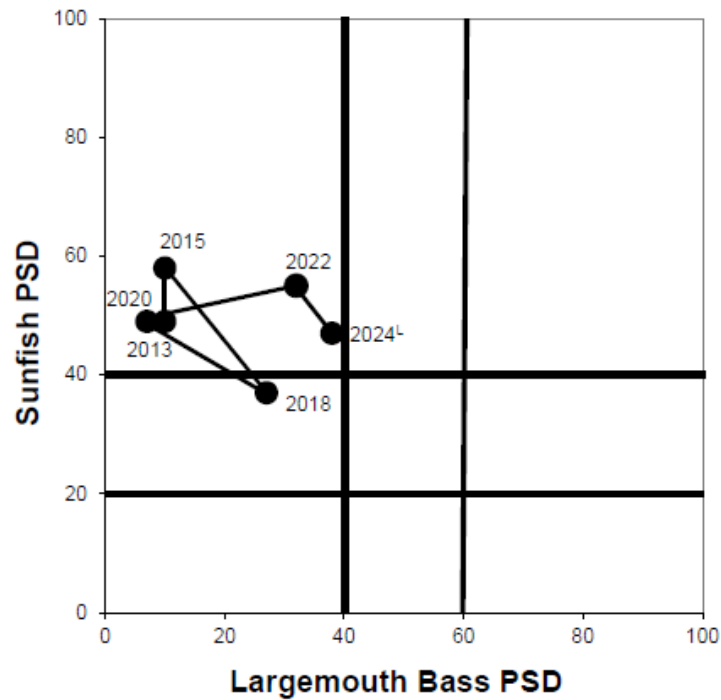


Figure 11. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at James D. Beville Park Lake from 2013-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

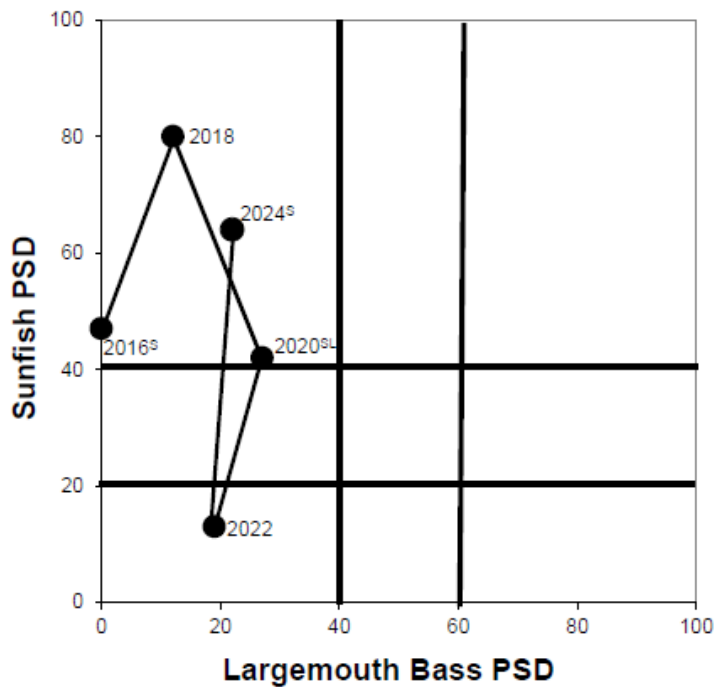


Figure 12. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Rotary Park Lake from 2016-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

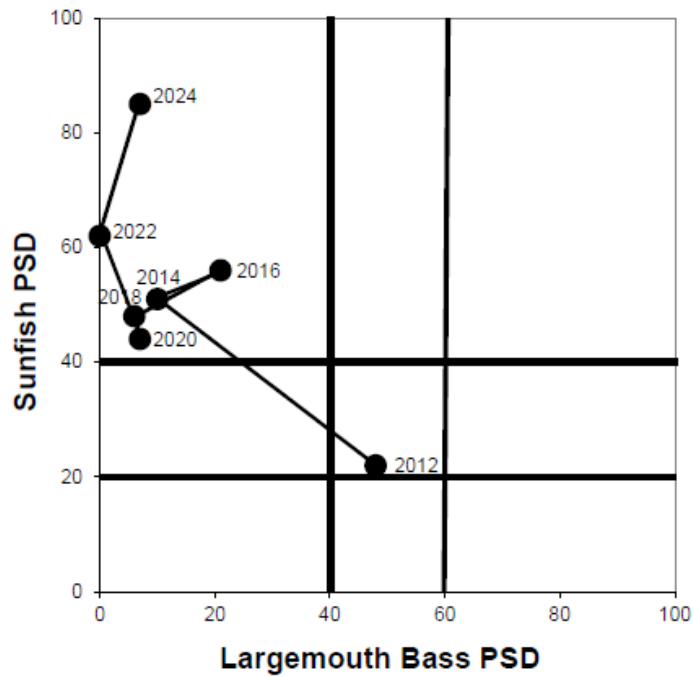


Figure 13. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Madisonville City Park Lake South from 2012-24.

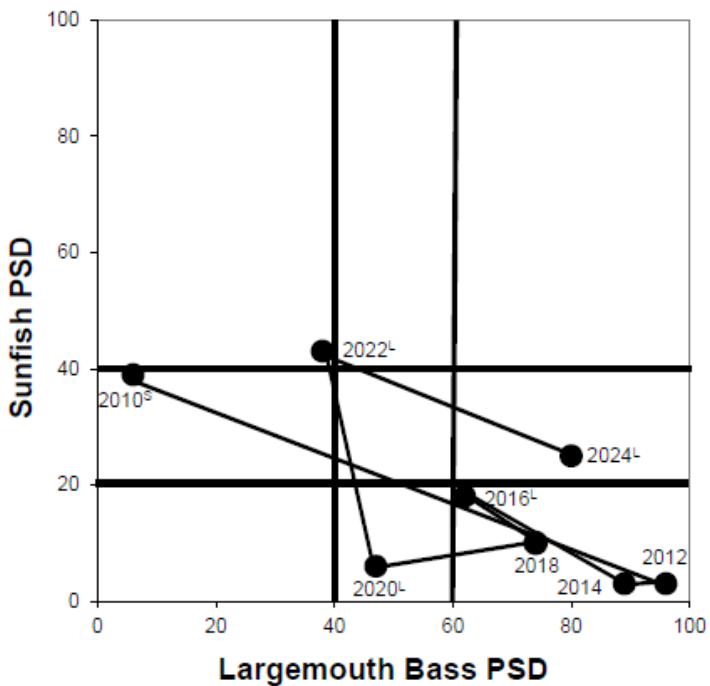


Figure 14. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Lake Mingo from 2010-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

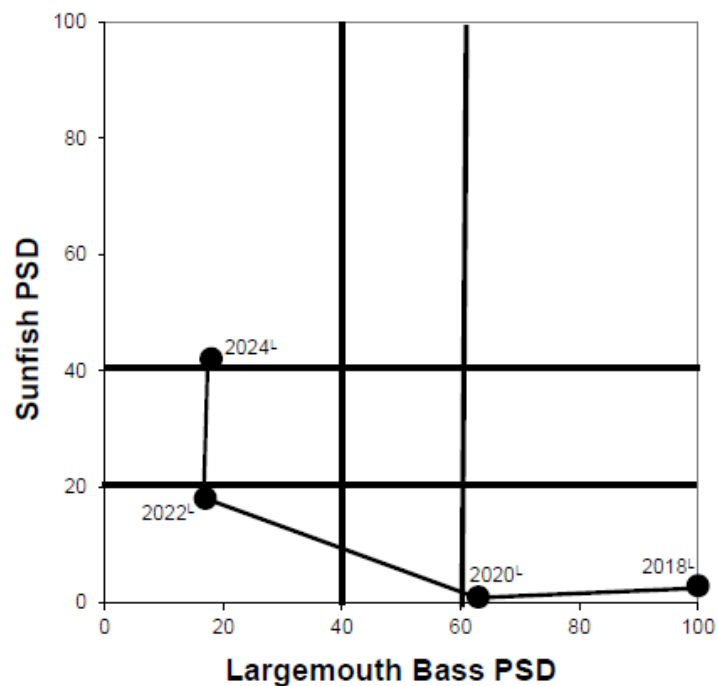


Figure 15. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Southland Church Lake from 2018-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

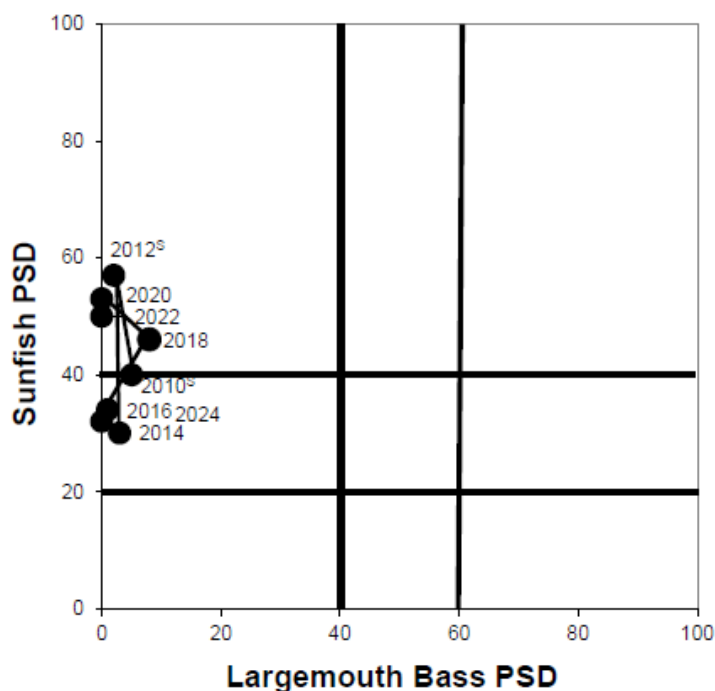


Figure 16. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Mike Miller Park Lake from 2010-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

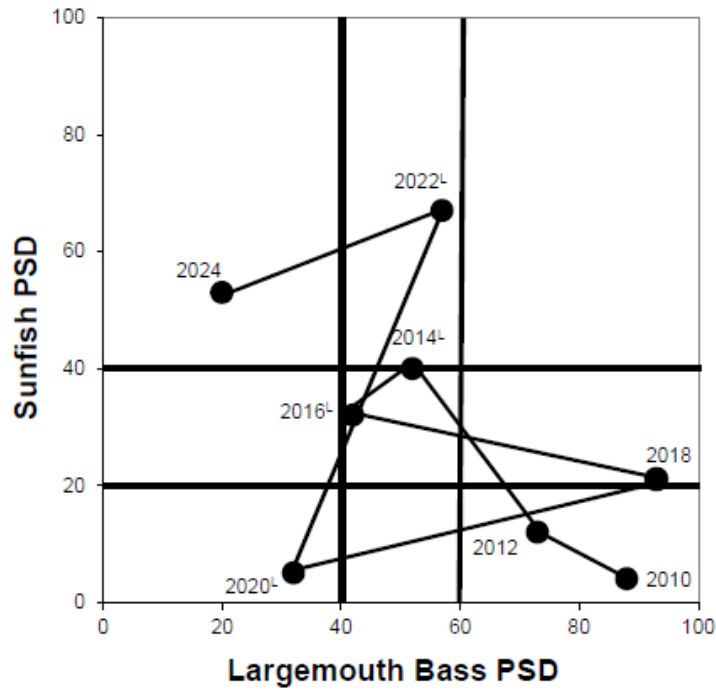


Figure 17. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Lake Montgomery from 2010-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

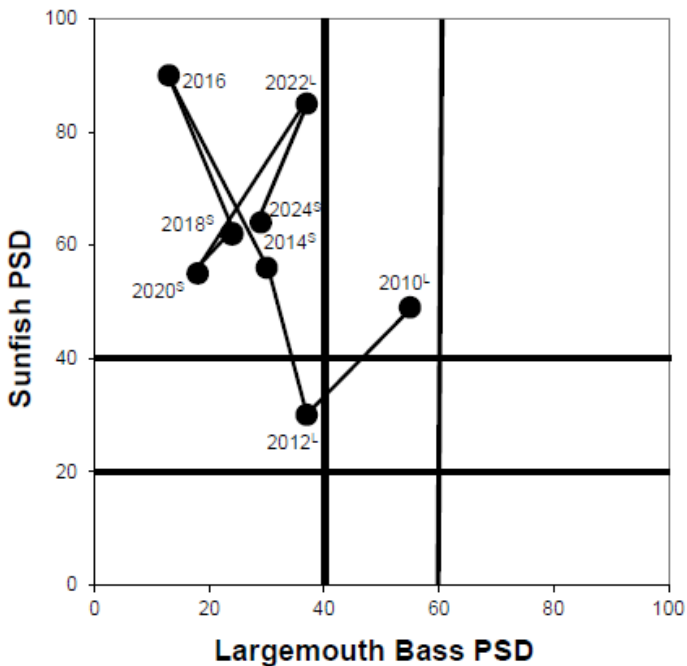


Figure 18. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Bloomfield Park Lake from 2010-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

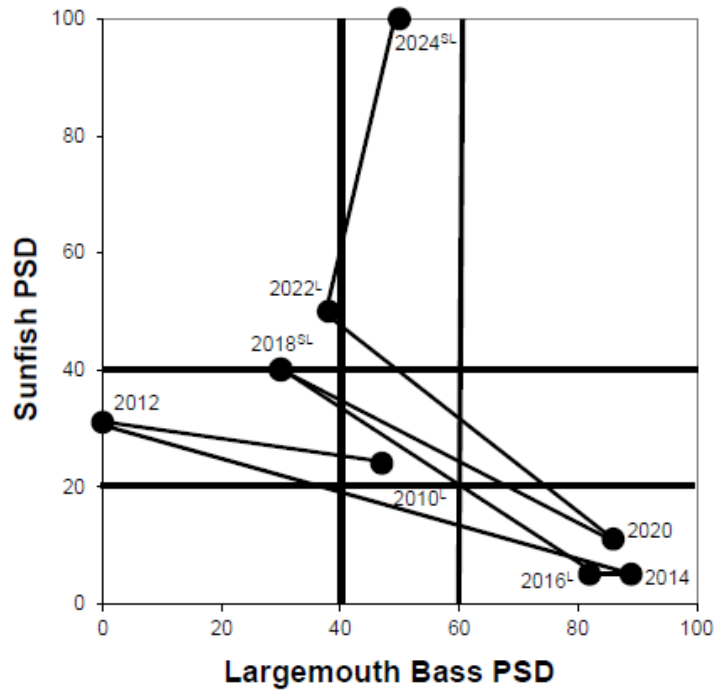


Figure 19. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Lusby Lake from 2010-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

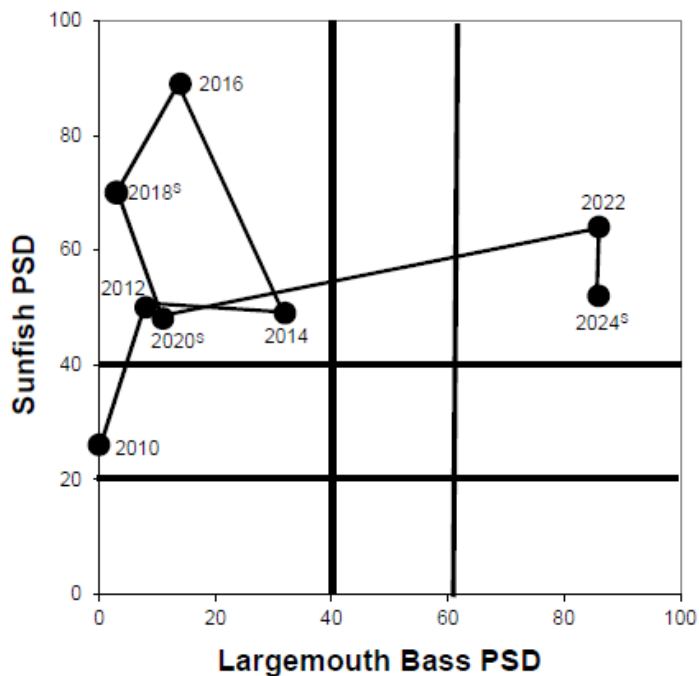


Figure 20. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Scott Coutny Park Lake from 2010-24. Superscripts denote occasions where sample size of either sunfish (^S) or largemouth bass (^L) was insufficient to estimate PSD with 90% confidence of being in one of three intervals (0-39, 40-60, 61-100).

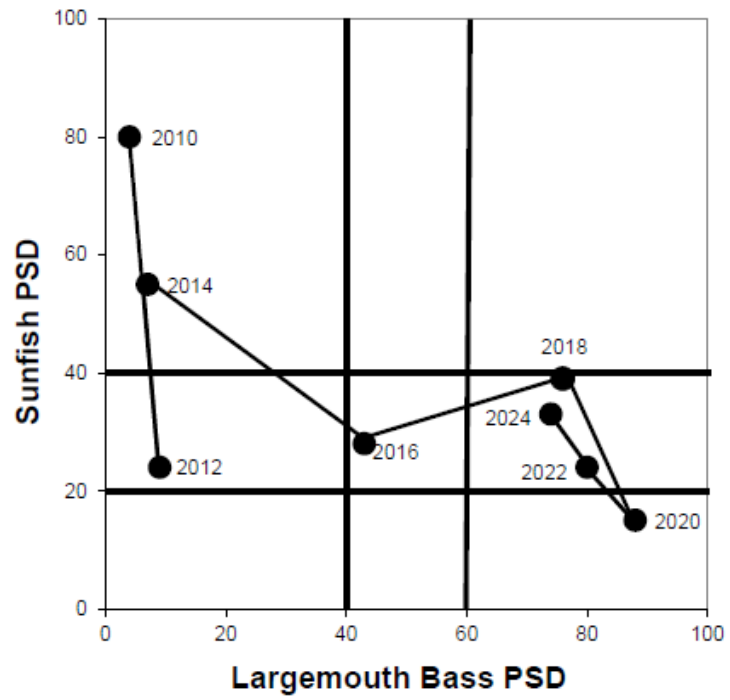


Figure 21. Proportional stock density (PSD) index for sunfish (weighted) and largemouth bass populations at Three Springs Lake from 2010-24.

Project II: Evaluation of Angling Effort Using Remote Cameras

FINDINGS

The Fishing in Neighborhoods (FINs) program began in 2006 as a cooperative endeavor between Kentucky Department of Fish and Wildlife Resources (KDFWR) and local municipalities to provide access to quality fishing opportunities close to large populations of people. The FINs program currently includes 45 lakes in 28 counties across Kentucky. An angler attitude survey was conducted at 27 of the lakes in 2012. In addition, five creel surveys have been conducted at central Kentucky FINs lakes since 2010. However, little is known regarding angling effort at lakes where creel surveys have not been previously conducted. Fishing pressure was extremely high at creel surveyed lakes with total angler-hrs ranging from 11,000 – 66,000 hours per lake or 1,400 – 9,500 angler-hrs/acre. Angling effort is perceived to be high at most FINs lakes; however, quantifying effort using creel surveys is expensive and would be cost prohibitive to conduct at all FINs lakes. However, a new tool is available in the form of remote time-lapse cameras, which offer a cost-effective way to estimate angling effort. Using these remote, fixed position cameras it is possible to effectively monitor multiple lakes, capturing effort for a full 12-month period, while capturing daily and seasonal trends.

The FINs lakes are intensively stocked with large “keeper-sized” fish as a put-and-take fishery to sustain quality-fishing opportunities to a diverse group of anglers. To ensure anglers are utilizing these fish stockings, monitoring of angling effort is needed on a lake-by-lake basis as well as at a program scale. The additional knowledge of angling effort, in conjunction with exploitation studies and electrofishing and hoop net sampling, will assist in adaptively managing these fisheries. The angling effort data will aid in determining whether FINs lakes in other parts of the state are having similar angling pressure to previously surveyed FINs lakes in Central Kentucky. This data will also aid in assessing if current stocking strategies are adequate for the amount and timing of angling effort. If certain FINs lakes are not receiving the perceived pressure, then stocking rates could be reduced or other lake(s) substituted in the FINs program.

A total of 31 Reconyx Hyperfire HC500 cameras were purchased along with metal lock boxes. Cameras were purchased in January 2015 on price contract for \$435 each and lock boxes for \$45 each. Additionally, 62 4-GB SDHC cards were purchased for \$4 each for image storage and 540 rechargeable AA-batteries and 2 charging ports were purchased for \$823. Cameras require 12 AA-batteries to operate, and rechargeable batteries should be much more cost efficient over the long term.

Prior to installing cameras, a letter was sent to lake owners explaining the purpose of the study and seeking the owner's permission to use cameras within their park. Most of the lakes in the FINs program are not owned by KDFWR, but all have a memorandum of understanding in place. An additional waiver, consent and release form was drafted by the KDFWR attorney and signed by lake owners prior to implementation. Cameras were installed in September 2017, with counts beginning 1 October 2017 and running through 30 September 2018 in most instances. Jacobson Park Lake was surveyed 1 November 2018 through 31 October 2019 due to a delay in getting permission from the City Council to install cameras. Cameras were checked every 6-8 weeks to exchange memory cards and batteries. Both primary and secondary FINs lakes were surveyed to get a range of angling effort (primary lakes are stocked four times annually with catfish, whereas secondary lakes are only stocked twice annually with catfish). The second round of the study included 16 lakes that range in size from 1-46 acres. Data collection for this second round of lakes is complete with analysis still ongoing. Cameras were installed in September 2019, with counts beginning 1 October 2019 and running through 30 September 2020 at the final eight lakes to be surveyed.

Camera lock boxes were mounted to a tree or utility pole with lag bolts about 10-20 ft above the ground. The camera sits inside the lock box and is secured with a lock on the outside. This lock box and height of the cameras should deter vandals. All cameras were mounted to cover maximum bank access, especially anticipated high use areas. Many lakes required multiple cameras to get adequate coverage of the bank access areas. Care was taken during placement that there was no overlap of camera images on lakes that required multiple cameras. This prevented anglers from being counted twice during

analysis. In one instance at Leary Lake, no trees or utility poles were available to get the optimal view of the lake. In this case, the camera was placed inside the lock box, welded to a metal signpost, and placed out in the water. A wooden box was built around the camera and lock box to disguise it as a wood duck nesting box. There is no boating activity on this lake, so the cameras were only susceptible to vandalism during instances when the lake has ice cover. However, the metal poles were set at sufficient depths in the sediment that prevent someone from removing by hand.

The cameras did not cover 100% of the bank access at most lakes so a correction factor was employed to account for missed anglers and estimate total angler effort. Each survey lake was visited multiple times over the course of the study to do a visual count in-person at the same time as the remote cameras took a picture. A linear regression equation, $VC = a + b(CC)$, where the y-intercept was set to 0, was used to generate a correction factor. The dependent variable, Visual Count (VC), is the visual count taken in person at the same time the photo was recorded and the independent variable, Camera Count (CC), is the number of anglers observed on camera(s). Since the y-intercept (a) is equal to 0, the slope of the regression equation (b) is the correction factor. All correction factor linear regression equations were significant at $p < 0.001$ and had excellent coefficients of determination (r^2) in most cases (Table 1). Several lakes had insufficient visual counts to derive a correction factor. Collecting the in-person visual counts was especially challenging at lakes located out of the way and not near travel routes or workstations. Local park staff were contacted to assist with the visual counts in several instances. Even with ample explanation and follow up, the counts obtained by non-KDFWR staff were either lacking or suspect in some cases and thus excluded. Additional visual angler counts are needed in future camera surveys with the goal of a minimum of 30 counts and across the higher usage times to provide a more accurate correction factor.

Cameras were set up to take a picture every half-hour from daylight to dusk. Only images at the top of the hour were used for analysis; however, the half hour pictures helped postulate if someone was fishing as well as aided in the number of in-person visual counts that could be collected for the correction factor. Timelapse Image Analyzer was used to assist KDFWR personnel with image analysis. This free software designed by the University of Calgary speeds up image analysis and reduces errors, by automatically populating many of the fields needed for analysis and reduces data entry errors by placing the image and data entry on the same form. In a previous study, this software was found to cut image analysis time in half versus viewing images and entering data in separate spreadsheet. Cameras were collected after the 12-month period with one instance of vandalism at Logan Hubble Park Lake. The cameras and security box were missing upon retrieval in June 2018.