

HAW RIVER ANGLER DIARY PROGRAM, 2020-2022



Federal Aid in Sport Fish Restoration
Project F-108
Report Type: Summary Report



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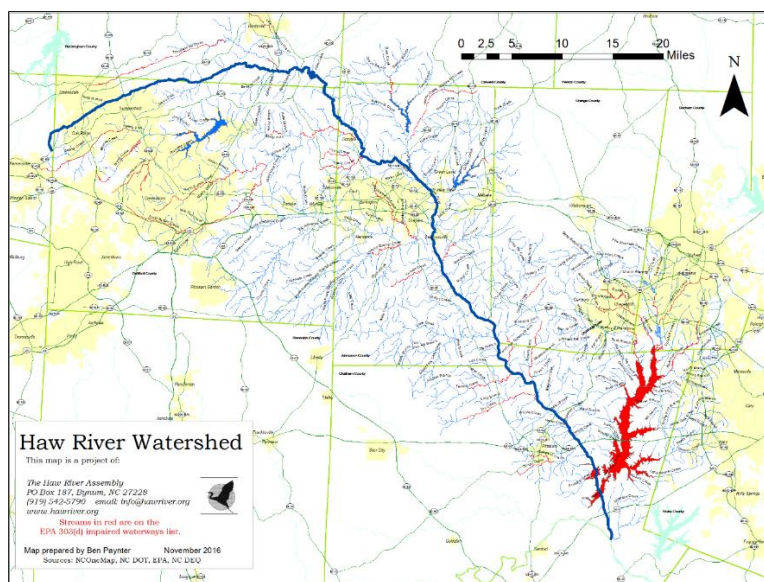
December 2022

Keywords: Haw River, Angling, Self-Reporting, River Fishing, Kayak Fishing, Saxapahaw, Glenco, Burlington, Pittsboro

This project was funded under the Federal Aid in Sport Fish Restoration Program utilizing state fishing license money and federal grant funds derived from federal excise taxes on fishing tackle and other fishing related expenditures. Funds from the Sport Fish Restoration Program are used for fisheries management and research, aquatic education, and boating access facilities. The program is administered cooperatively by the N.C. Wildlife Resources Commission and the U.S. Fish and Wildlife Service.

STUDY SITE

Haw River and its tributaries:



(Haw River Assembly, 2021)

OBJECTIVES

- 1) Qualitatively measure angler use of sport fish in the Haw River without using a creel clerk or conducting any in-person interviews.
- 2) Measure the effectiveness of Survey123 as a tool for future creel efforts.

METHODS

The electronic survey platform ESRI Survey123© was used to interview anglers about their fishing trips to the Haw River upstream of US 64. An email was sent to 20,651 fishing license holders in 6 NC counties: Alamance, Chatham, Guilford, Orange, Randolph, and Rockingham. The Haw River either passes by or flows directly through these counties. In the initial email, respondents were instructed to email a district biologist about how to participate in the diary program. Instructions on how to access the electronic survey and submit entries were emailed back to all interested respondents. The survey was then opened for a period of 24 consecutive months. After the initial trial period, some errors in the survey were corrected and anglers were asked to log complete fishing trips. Anglers were completely autonomous for approximately 21 months. Errors with cellular reception and log-in issues were the most common issues during the initial months of the survey period. The study was open for a 736-day period from September 1, 2020–September 5, 2022.

RESULTS

Participation:	Email response rate: < 1%	Number of email respondents: 42
	Number of individual participants: 16	
	Number of participants submitting >1 survey: 8	
	Number of participants submitting >10 surveys: 4	
	Number of complete entries: 66	Number of incomplete entries: 18
	Total trip hours: 322	Avg. trip time: 5 hr (0.5–11 hr)
Fishing Access:	Most used access area(s): Saxapahaw Lake	
	Most used vessel(s): Kayak (39%); Bank/wade (39%)	
Fisheries:	Number of species captured: 9	Number of sportfish caught: 636
	Most targeted species: Largemouth Bass	
	Total fish per trip: 9.08	Fish per angler hour: 1.97
	LMB per trip: 1.06	LMB per angler hour: 0.21 fish/hr
	Number of LMB \geq 357 mm: 170	Number of LMB <357 mm: 72

Species Composition of Total Catch: 38% Largemouth Bass; 25% Crappie; 16% other sunfish

BIOLOGIST COMMENTS

During the study period, anglers invested a total of 322 hours on the Haw River. Most fishing trips (52%) occurred in the summer months (May–August; Table 1). Only four trips (<0.01%) were reported during winter months (December–February; Table 1). Cooler, flowing, water during summer provides anglers with potentially better fishing than lakes and a chance to stay cool as much of the Haw River is littered with shallow shoals that are very conducive to wade fishing. Anglers were asked about their reasons for choosing to fish in the Haw River (Appendix A). Escaping the larger crowds of the small lakes in Piedmont was the most reported reason for using the Haw River fisheries. Other comments included the scenic views and “wilder” setting of the river over man-made reservoirs.

Most anglers (72%) used generalized fishing lures to angle for 2–3 species of fish within one trip. Anglers captured an average of 9.08 fish per trip. The most targeted species was Largemouth Bass *Micropterus salmoides* (40%) followed by Bluegill *Lepomis macrochirus* (26%) and Crappie (25%; Figure 1). Black Crappie *Poxomis nigromaculatus* and White Crappie *P. annularis* were captured while Black Crappie were more commonly targeted from impounded sections immediately upstream of run-of-the-river dams. White Crappie were not common and consisted of <1% of the total captures. Sunfishes such as Redbreast Sunfish *L. auritus* and Bluegill seem to have stable riverine populations. Anglers captured sunfish species throughout the mainstem. White Bass *Morone chrysops* make an annual potamodromous migration from B. Everette Jordan Reservoir and thus, were the least targeted species among this small subset of anglers. Bowfin *Amia calva* and White Perch *M. americana* were captured incidentally while targeting other fishes. Catfish were targeted during cooler months after the river cooled down and fish activity diminished. Channel Catfish *Ictalurus punctatus* were the most commonly capture catfish. There were no records of invasive catfish species such as Flathead *Pylodictis olivaris* or Blue Catfishes *I. furcatus*.

The Haw River had 19 individual access points during the study period. Anglers within this subset preferred areas in close proximity to their homes. The most chosen access area was Saxapahaw Lake which had a more stable water level. All areas are easily accessible via truck during dry conditions. Two areas have ramp access for Jon boats/trailers while all others are smaller canoe/kayak launch points.

MANAGEMENT RECOMMENDATIONS

- This survey reiterates the importance of in-person creel interviewing. Self-reports are easier to collect yet less reliable and are of lower frequency through time. A period of 4–5 years would have been needed to obtain adequate data for this river system.
- A more comprehensive creel survey on kayak and non-motorized boat angling is needed to determine the angler use and behavior within Piedmont rivers.
- The Haw River seems to have a small contingency of devoted anglers yet is likely still dominated by recreational paddlers who are not angling. NCWRC fisheries staff should

consider angler use, popularity, and accessibility when allocating resources to the Haw River compared to other rivers with higher angler usage (Eno, Tar, and Dan rivers).

- The popularity of river angling may increase over time and Commission staff should consider cost-effective methods to gauge river angler needs utilizing tools like Survey123. A similar effort on the Dan River may be useful.

ACKNOWLEDGMENTS

This project was performed with the cooperation of four area anglers who submitted more than 92% of the fishing reports used for this report. These anglers took time to report fishing trip anecdotes and log species counts after hours of fishing on the river. Many thanks go to all anglers who submitted any surveys, but especially to: Noah Mace, James Myers, Greg Cardinale, and Mike McKeon for their exceptional participation in the project!

TABLE 1. — Number of trips reported and sport fish captured during each season of the angler diary survey period.

Year	Season	No. of Trips	No. of Sport Fish Captured	Angler Effort (Hours)
2020	Spring	1	8	8
	Summer	0	0	0
	Fall	2	13	9
	Winter	0	0	2
2021	Spring	10	42	34
	Summer	19	214	106
	Fall	5	92	35
	Winter	4	16	8
2022	Spring	7	102	45
	Summer	19	149	75
		66	636	322

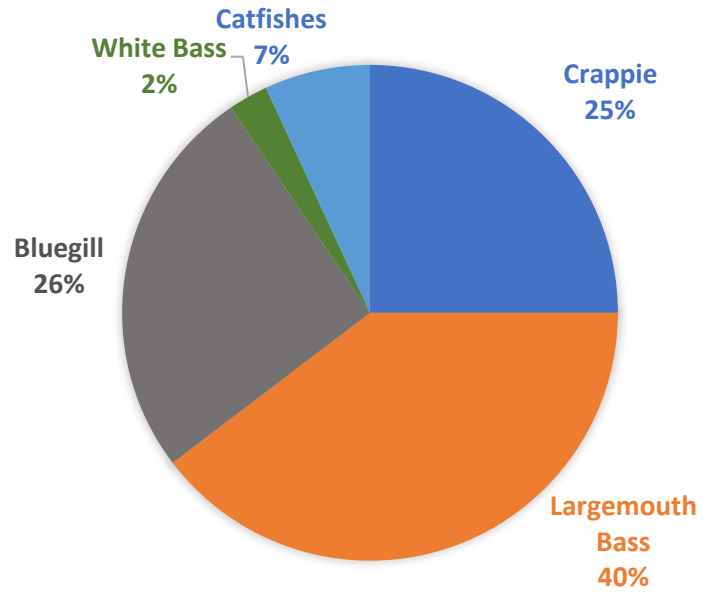


FIGURE 1.— Proportions of reported targeted species across all complete trip logs (n=66) on the Haw River between September 2020–September 2022.

APPENDIX A

List of survey questions asked to anglers for this pseudo-creel effort.

- Date
- Time started fishing
- Time ended fishing
- Access area(s) used – select all that apply [selections: all public areas and box for private lands]
- Fishing From? [selections: Kayak, Bank, non-motorboat, motorboat, other (SUP)]
- Were you specifically targeting any of these species today? [selections: Largemouth Bass, White Bass, Crappie, Catfish, Bluegill/Panfish]
- Did you catch any fish today? [Yes/No]
 - How many Largemouth Bass were caught?
 - How many White Bass were caught?
 - How many Black and White Crappie were caught?
 - How many Sunfishes were caught?
- Did you catch any species other than those mentioned above? List Species and Number (ex. Striped Bass - 5, Common Carp - 3, Gizzard shad - 5)
- How many of the Largemouth Bass were LONGER than 14 inches long?
- How many of the Largemouth Bass were SHORTER than 14 inches long?
- How many White Bass were LONGER than 14 inches?
- How many White Bass were SHORTER than 14 inches?
- If you would like to report length ranges of the other species please do so here (ex. Bluegill 4-8in, crappie 6-12in)
- On a scale of 0-10 how were you satisfied with today's fishing trip to the Haw River? (Where 10 is Best and 1 is least)
- If you answered '0' you can elect to explain why here:
- Do you have any complaints about the access area(s) that you used today?
- Why did you choose the haw river over other nearby lakes/rivers for this trip? (ex. proximity to home, good panfishing, away from crowds.)
- Do you have any photos to share? [5 prompts for file sharing]
- Thank you for your participation! If you would like to learn more about this project or hear from a biologist about it, please leave any contact information here: