



Biologist Report: Delaware River

Wayne, Pike, Monroe, Northampton and Bucks Counties

2025 Delaware River Angler Diary Summary

Voluntarily-submitted angler diaries recording American Shad catches from the Delaware Basin were received by the Pennsylvania Fish and Boat Commission (PFBC) for the 2025 season. These submissions represent the recent re-initiation of this voluntary diary program. Historically (i.e., 2006 to 2015), voluntary angler submissions tended to be sparse, precluding informative characterization of the American Shad fishery. Ideally, diaries would be reported for each angler, characterizing each trip, but an initial goal was set to receive a minimum of 30 anglers' diaries per season. After three years of renewing the program, this goal has been reached. A total of 44 diaries representing 99 unique anglers were received in 2025. For 2026, the goal has been increased to receive 100 diaries; an online form is available on the PFBC website labeled as the [Delaware River and Estuary Angler Log](#).

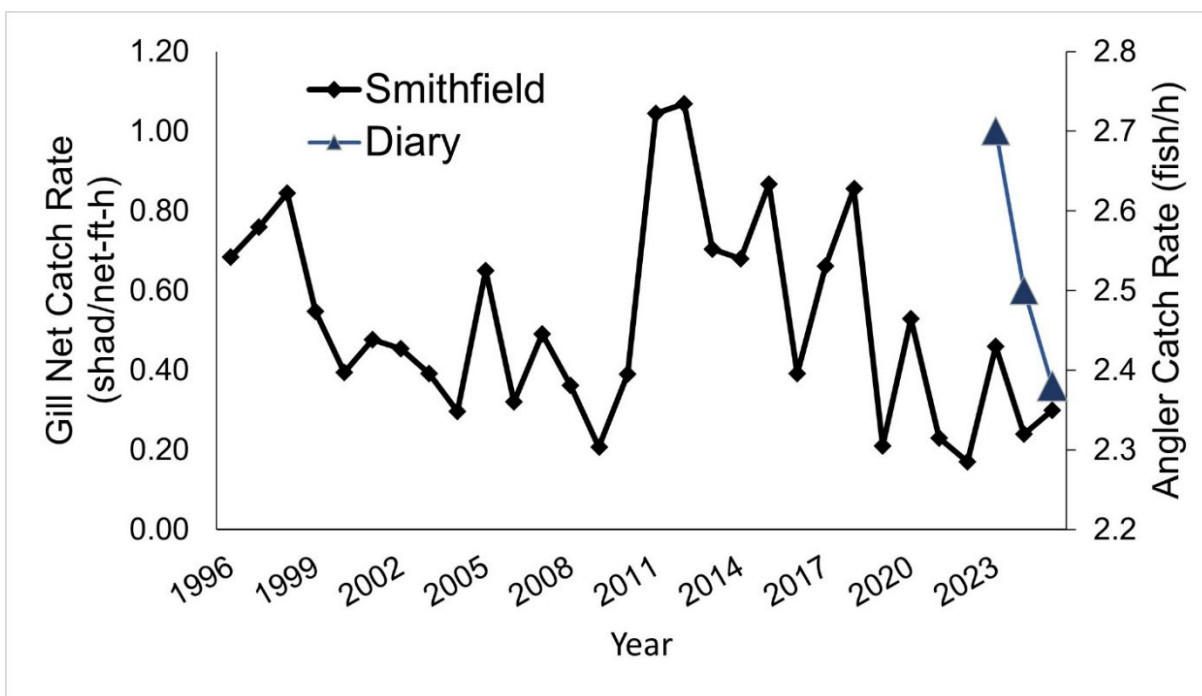
Collectively, out of the 44 diaries received, a total of 2,090 hours were spent fishing for American Shad between March 3 - June 13, 2025. Anglers reported catching 8,340 American Shad during this time, with only 27 fish being harvested. Anglers reported fishing from Bensalem, PA to Tusten, NY (Ten Mile River) (Table 1). Anglers caught 4.1 fish/h (i.e., 1 fish per approx. 15 minutes spent fishing) on average, varying between a minimum of 0 fish/h to a maximum of 16 fish/h (i.e., 1 fish per approx. 4 minutes spent fishing). The mean catch rate of American Shad by unguided anglers was 2.38 fish/h (i.e., 1 fish per approx. 25 minutes spent fishing). The catch rate for guided trips was 6.15 fish/h (i.e., 1 fish per approx. 10 minutes spent fishing). The catch rate data from guided trips is removed from the analysis as it artificially inflates the overall catch rate. Overall, anglers reported the season ending early; not having the ability to fish much in May due to high water on the river.

There appears to be a relationship between the fishery (i.e., angler catch rate excluding guides) and the adult spawning run relative abundance (i.e., gill net catch-per-unit-of-effort at Smithfield Beach). The apparent decline in angler catch rate appears to correspond to a decline of shad relative abundance. The estimates for both time-series show a similar downwards trend from the 2023 season estimate (Figure 1); however discrepancies are present between the time-series comparison for 2025 when gill net catch rates of female American Shad at Smithfield Beach increased slightly while angler catch rates continued to decline. At this time, inferences are limited given that only three years of comparable data. Delaware River anglers reported American Shad size ranging from 16-inch to 22.5-inch total length; comparable to the size range caught by PFBC in 2025.

Table 1: Reported angler total catch for each reach by month during 2025. Dashes indicate no fishing reported from those reaches during that month.

Reach	Catch (N)			
	March	April	May	June
Ten Mile River	-	-	18	-
Port Jervis	-	20	53	61
Bushkill	4	336	181	60
Smithfield Beach	0	374	55	31
Water Gap	-	417	59	130
Belvedere	-	340	251	-
Sandts Eddy	-	403	-	-
Easton	7	947	362	-
Riegelsville	10	788	179	-
Frenchtown	-	52	8	-
Byram	-	5	-	-
Lambertville/ New Hope	-	574	41	-
Yardley	14	29	-	-
Trenton	-	4	-	-
Bensalem	-	5	-	-
Not listed	80	1,765	231	-
Total	115	6,059	1,438	282

Figure 1. Annual geometric mean (GM) of catch-per-unit-of-effort (fish/net-ft-h) for adult female American Shad spawning run at Smithfield Beach (River Mile 218), Delaware River main stem, 1996 to 2025 compared to the 2023 to 2025 average American Shad catch rate (fish/h) from angler diaries.



Overall, the diaries were suggestive of a catch-and-release fishery with less than 1% of the total catch harvested. Only six of the 99 anglers in the 2025 diary program reported harvesting shad. Harvest appears to remain a component of the fishery; however, it is unknown if this interpretation is representative of the fishery rather than diary participants, given the limited participation in the program. Continued participation in the Delaware River angler diary will enable more insightful interpretation of the fishery. Angler diaries can be sent electronically through email at cbarshinge@pa.gov or mail with the U.S. Postal Service to:

Pennsylvania Fish and Boat Commission
Attn: Cooper Barshinger
2174A Route 611,
Swiftwater, PA 18370

The PFBC is thankful for those who have volunteered this information in the past and encourages all anglers, no matter their experience or success rate, to report their trip experience through the Delaware River angler diary form.

Created by: Cooper Barshinger, Area 5 Fisheries Biologist