

## **Delaware River**

Wayne, Pike, Monroe, Northampton, and Bucks counties

### **2024 Delaware Angler Diaries Summarization**

Voluntarily submitted angler diaries recording American Shad catches from the Delaware Basin were received by the Pennsylvania Fish and Boat Commission (PFBC) for the 2024 season. These submissions represent the recent re-initiation of this voluntary diary program. Historical (i.e., 2006 to 2015 and 2023), 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. An online form is available at this link: [https://www.pa.gov/content/dam/copapwp-pagov/en/fishandboat/documents/about-us/agencyoverview/fisheries-mgmt-plans/delaware\\_river\\_journal.pdf](https://www.pa.gov/content/dam/copapwp-pagov/en/fishandboat/documents/about-us/agencyoverview/fisheries-mgmt-plans/delaware_river_journal.pdf).

In 2024 a total of six diaries were received, representing eight unique anglers. Collectively, a total of 321 hours were spent fishing for American Shad between March 15<sup>th</sup> to May 29<sup>th</sup> of 2024. During this time, 1,895 American Shad were reported caught with only 2 fish being reported as harvested. Fishing was reported occurring from Riegelsville to Eshback, PA (Table 1). On average, anglers caught 2.5 fish/h (i.e., 1 fish per approx. 24 minutes spent fishing), varying between a minimum of 0.625 fish/h (i.e., 1 fish per approx. 96 minutes spent fishing) to a maximum of 5.95 fish/h (i.e., 1 fish per approx. 10 minutes spent fishing).

Similarity of trends between the fishery (i.e., angler effort) and the adult spawning run relative abundance (i.e., Smithfield Beach gill net catch-per-unit-of-effort) can be gleaned by graphically overlaying the two-datasets annual time-series (Figure 1). Inferences are very weak given only two years' worth of data are available and that the received angler diaries are not suitably representative of the fishery at this time. Yet, intuitively, the decline of shad relative abundance appears to correspond to a decline in angler effort. Delaware River anglers reported American Shad ranging from 16 to 24 inches total length; comparable to the length range caught by PFBC in 2024.

Overall, the diaries were suggestive of a catch-and-release fishery. Less than 1% of the total catch was harvested. From the received reports, only two of the eight participants in the diary program reported harvesting shad. While harvest appears to remain a component of the fishery, it is unknown if this interpretation is representative of the fishery rather than diary participants given the limited angler diary participation. A better interpretation of the fishery can be made over an expanded time series with increased participation in the Delaware angler diary program. Angler diaries can be sent electronically to a biologist through email at [cbarshinge@pa.gov](mailto:cbarshinge@pa.gov) or through the U.S. Postal Service to:

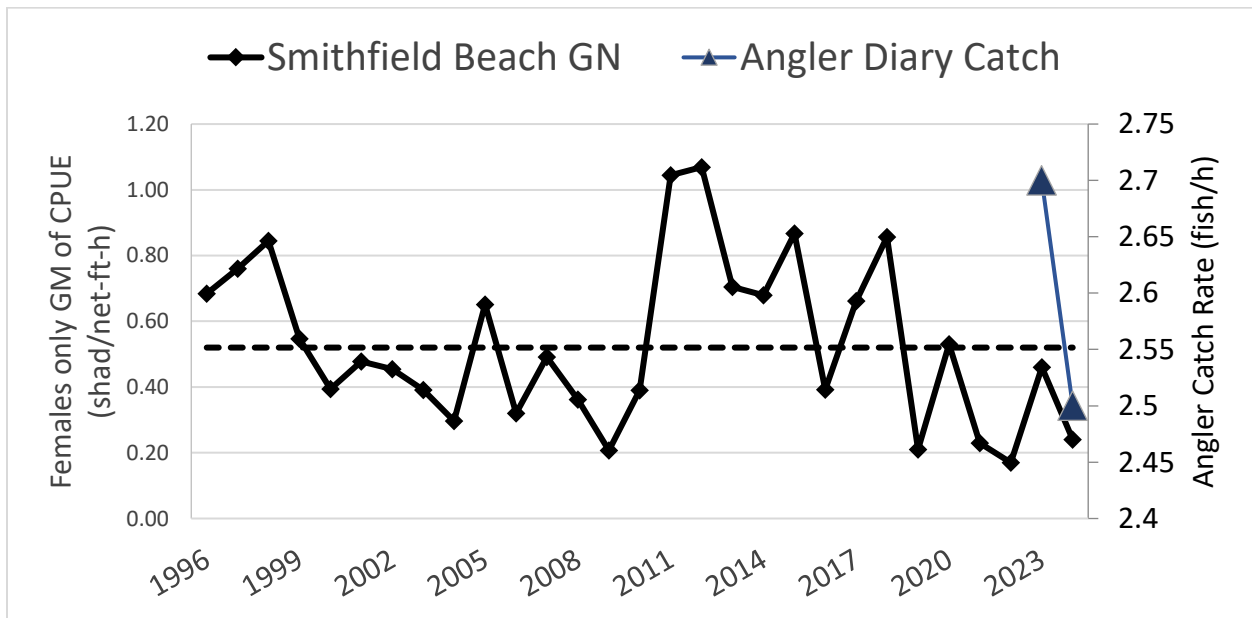
Pennsylvania Fish and Boat Commission  
Attn: Cooper Barshinger  
2174A Route 611  
Swiftwater, PA 18370

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 experience through the Delaware angler diary form.

**Cooper Barshinger**  
**Area 5 Fisheries Biologist**

**Table 1. Reach fished and catch (N) of American Shad for March, April, and May 2024 as reported by anglers in the Delaware Angler Diaries**

Reach	Catch (N)		
	March	April	May
Riegelsville	-	7	-
Raubsville	-	91	137
Easton	11	339	101
Belvedere	-	-	36
Water Gap	-	7	-
Shawnee	-	272	86
Eshback	-	113	48
Not listed	-	7	-
<b>Total</b>	<b>11</b>	<b>829</b>	<b>408</b>



**Figure 1. Annual geometric means of catch-per-unit-of-effort (fish/net-ft-h.) for adult female American Shad during the spawning run at Smithfield Beach (RM 218), Delaware River main stem, 1996 to 2024 compared to the 2023 and 2024 angler diary average catch rate (fish/h.).**