

## **Susquehanna River (middle)**

### **2013 adult black bass survey**



*Figure 1. Fisheries Biologist John Frederick with a representative, adult Smallmouth Bass captured at the Susquehanna River near the PA Turnpike Bridge during 2013 adult Smallmouth Bass surveys. (Photo: A. Simpson – PFBC)*

Fisheries Management Division biologist routinely assess the status of the Smallmouth Bass fishery residing in Susquehanna River to determine current population levels, size structure, age and growth attributes, among other parameters. During September 16 - 19, 2013 Fisheries Management Area 7 biologists conducted nighttime electrofishing surveys targeting adult Smallmouth Bass at four historic sampling sites located within the middle portion of the Susquehanna River between the inflatable dam near Sunbury and the York Haven Dam. Sites surveyed were located in the vicinity of Clemson Island, Rockville, Dock Street Dam, and the Pennsylvania Turnpike Bridge.

During 2013, length distribution (Table 1) and catch rates of age-1 and older Smallmouth Bass varied among sites, with a reach-wide catch rate of 50.94 fish/ hour (Figure 2). This is the highest catch rate since 2001; however, it is lower than the historic median catch rate (1990 – present) of 67.99 fish/ hour (Figure 2). The reach-wide catch rate of larger and older individuals, those longer than 15 inches in total length, was 7.77 fish/ hour (Figure 3). This catch rate is slightly above the historic median for this reach of 7.24 fish/ hour (Figure 3).

Table 1: Length classes (inches) of Smallmouth Bass captured at the middle Susquehanna River during nighttime electrofishing surveys, September 16-19, 2013.

Length (inches)	Clemson Island	Rockville	Dock St. Dam	Turnpike
0	0	0	0	0
1	0	0	0	0
2	0	0	0	0
3	0	0	2	0
4	7	7	7	18
5	7	2	2	8
6	0	2	2	4
7	3	25	24	7
8	21	8	24	10
9	10	8	4	2
10	7	1	1	4
11	6	0	0	1
12	4	2	1	2
13	5	0	2	3
14	3	0	1	3
15	6	2	0	2
16	2	0	2	0
17	5	4	2	3
18	0	1	1	1
19	2	0	1	2
20	0	0	0	0
	88	62	76	70

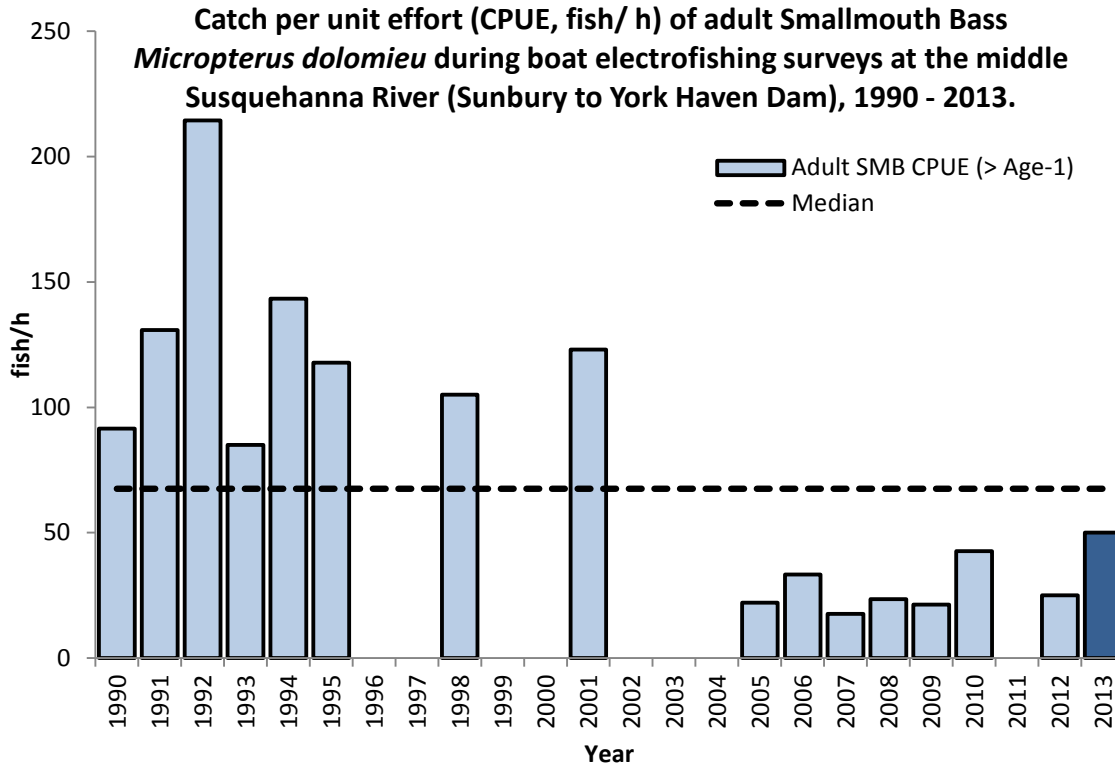


Figure 2: Catch per unit effort (CPUE, fish/h) of Smallmouth Bass age-1 and older captured during nighttime electrofishing surveys conducted during the period of 1990 to present at four historic sites at the middle Susquehanna River. Blank values are years for which no surveys were conducted or age data does not exist

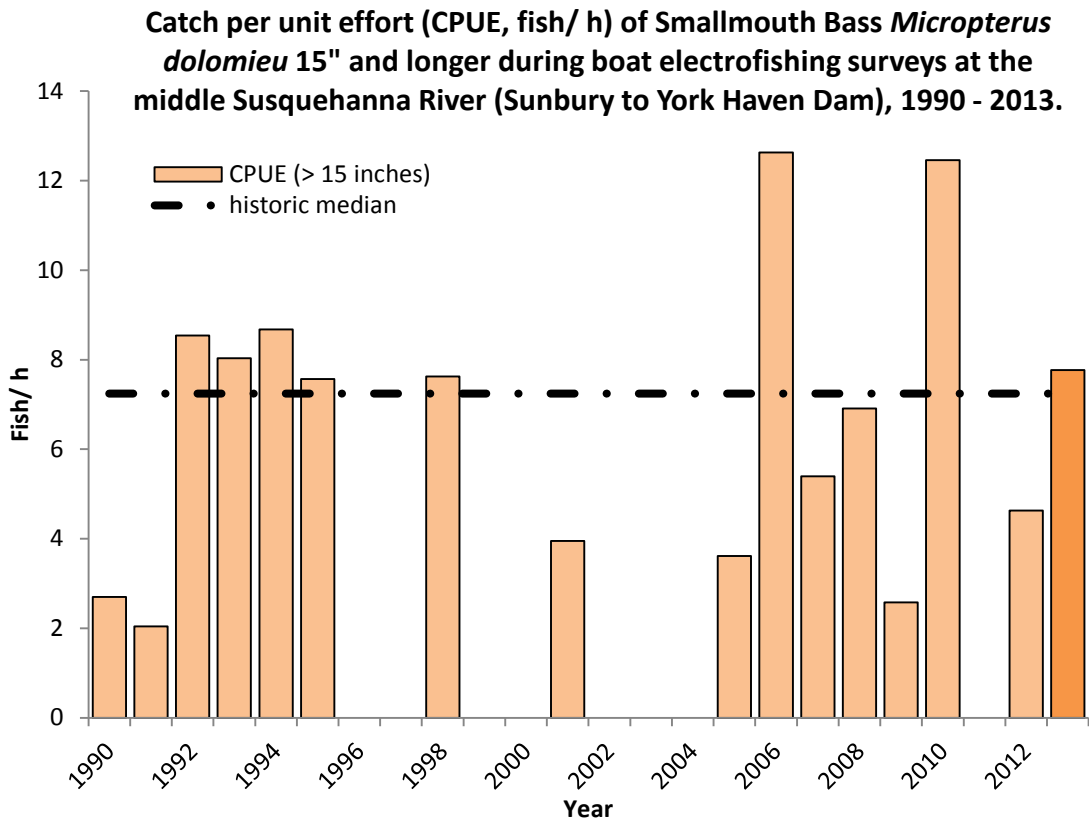


Figure 3: Catch per unit effort (CPUE, fish/h) of Smallmouth Bass 15 inches and longer captured during nighttime electrofishing surveys conducted during the period of 1990 to present at four historic sites at the middle Susquehanna River. Blank values are years when surveys were not conducted.

During 2013 surveys, the proportion of the catch between 6 and 12 inches was higher than during recent years. We have also received similar reports from anglers who fished this reach during 2013. This provides evidence that at least two modest year-classes recruited to the population despite possible limited survival attributable to disease outbreaks affecting young-of-year Smallmouth Bass since 2005 in this portion of the Susquehanna River. Anglers targeting Smallmouth Bass within the middle Susquehanna River could potentially expect slightly better catch rates in coming years as those smaller individuals (2011 and 2012 year classes) appear to have recruited to the fishery and should be available to comprise a larger proportion of the angler catch in the near term. [Catch and Immediate Release Bass Regulations](#) apply to this portion of the Susquehanna River.

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