

Susquehanna River (middle)

2012 adult black bass survey



Figure 1. A representative, adult smallmouth bass captured at the Susquehanna River near the Dock St. Dam during 2012 adult smallmouth bass surveys. (Photo: J. Frederick – 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 24 - 27, 2012 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 Clemsons Island, Rockville, Dock Street Dam, and the Pennsylvania Turnpike Bridge.

During 2012, size distribution (Table 1) and catch rates of age-1 and older smallmouth bass varied among sites with a reach-wide catch rate of 25.05 fish/ hour (Figure 2). This is a decrease from the 2010 catch rate (42.68 fish per hour) and lower than the historic median catch rate (1990 – present) of 64.07 fish/ hour (Figure 2). Surveys were not conducted during 2011 because of high river flows resulting from Tropical Storm Lee that persisted through the historical sampling timeframe of mid- to late-September. The reach-wide catch rate of larger and older individuals, those longer than 15 inches in total length, was 4.63 fish/ hour (Figure 3). This catch rate is slightly below the historic median for this reach of 4.93 fish/ hour (Figure 3).

Table 1: Length classes (inches) of smallmouth bass captured at the middle Susquehanna River during nighttime electrofishing surveys, September 24-27, 2012.

	Clemson Island	Rockville	Dock. St. Dam	Turnpike Bridge
0"	0	0	0	0
1"	0	0	0	0
2"	0	0	0	0
3"	0	1	2	1
4"	2	10	3	5
5"	1	7	8	2
6"	5	2	3	2
7"	1	8	1	0
8"	6	12	5	5
9"	6	4	4	1
10"	3	1	1	3
11"	0	3	1	0
12"	1	0	2	1
13"	3	1	4	1
14"	2	0	2	1
15"	3	0	2	0
16"	3	0	0	0
17"	2	1	2	0
18"	2	1	1	1
19"	0	1	1	0
20"	0	0	0	0

Historic catch per unit effort (CPUE) of smallmouth bass age-1 and older from the middle Susquehanna River (Sunbury to York Haven Dam)

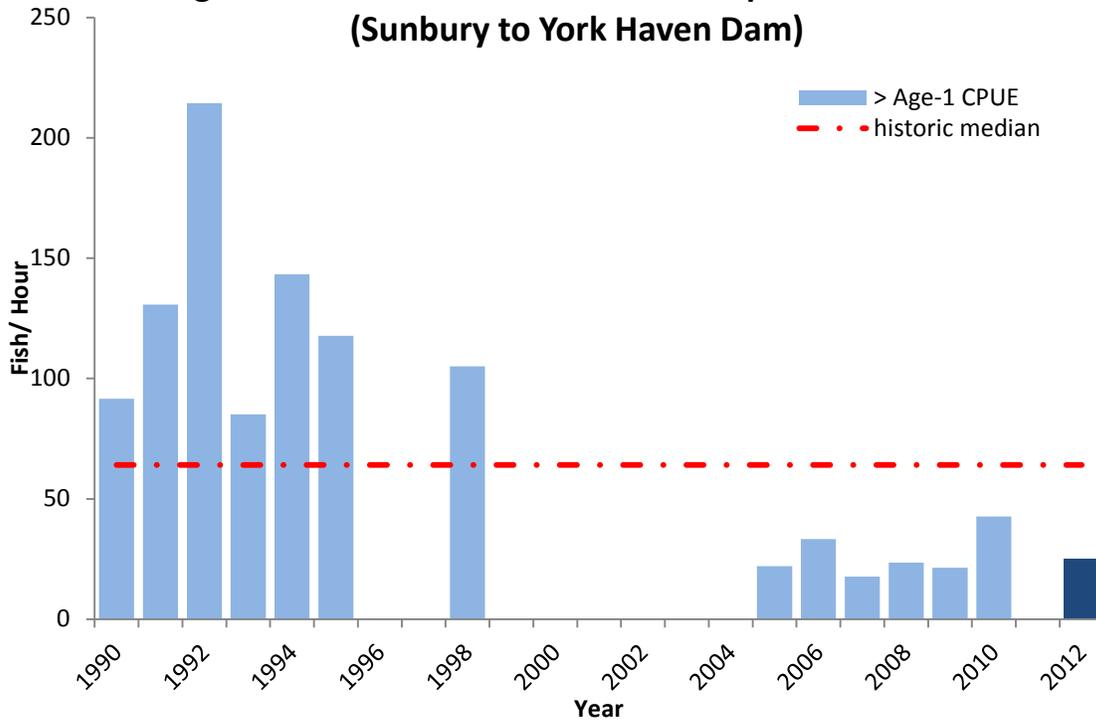


Figure 2: Catch per hour of smallmouth bass age-1 and older captured during nighttime electrofishing surveys conducted during the period of 1990 to present at four historic sites at the middle Susquehanna River. Blank values are years for which no surveys were conducted or age data does not exist

Historic catch per unit effort (CPUE) of smallmouth bass longer than 15 inches from the middle Susquehanna River (Sunbury to York Haven Dam)

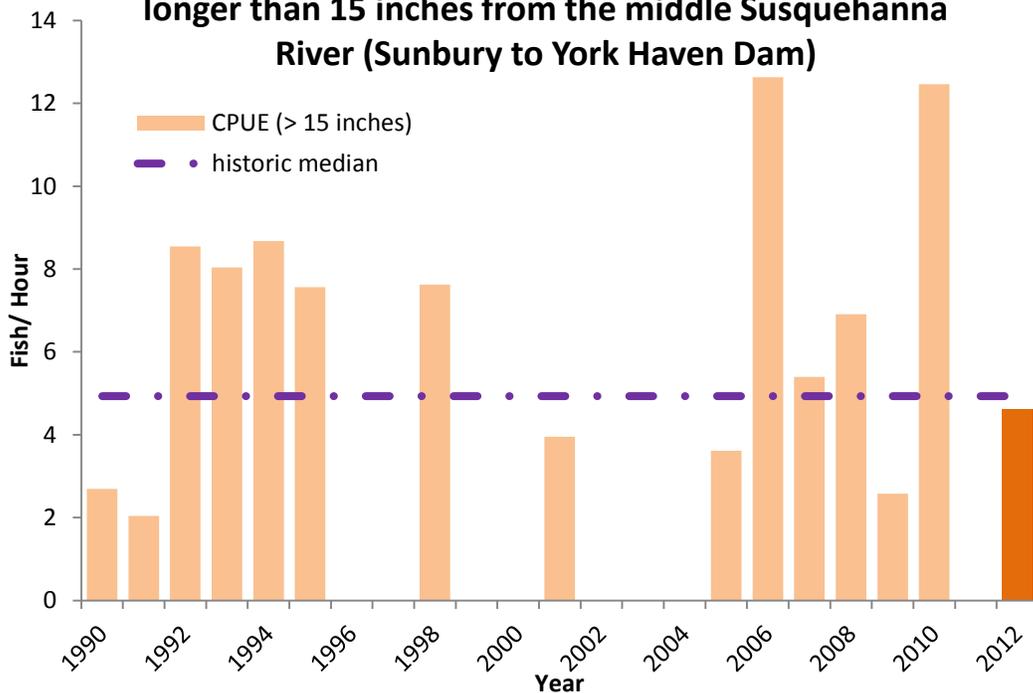


Figure 3: Catch per hour of smallmouth bass 15 inches and longer captured during nighttime electrofishing surveys conducted during the period of 1990 to present at four historic sites at the middle Susquehanna River. Blank values are years when surveys were not conducted.

During 2012 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 2012. This provides some evidence that there were at least two modest year-classes that have recruited to the population despite limited survival of young-of-year smallmouth bass in this portion of the Susquehanna River because of disease since 2005.

Anglers targeting smallmouth bass at the middle Susquehanna River should expect similar numbers to those encountered during recent years.