

Historic catch rates of adult smallmouth bass at the upper Susquehanna River (North Branch)



Figure 1. Area 4 fisheries biologist with a smallmouth bass from the upper Susquehanna River (photo: PFBC)

Adult smallmouth bass have been sampled annually since 1990 by the Division of Fisheries Management in the major rivers and streams of the Commonwealth as index of the catchable smallmouth bass population. This index is then used to gain insight about overall population dynamics of smallmouth bass including the distribution of the different age and size classes.

Since 2005, high flow conditions following the spawn (2006 and 2009) and disease incidence (2005, 2007, and 2008) have led to five consecutive year classes with below average reproductive success in the middle and lower Susquehanna River and to a lesser extent on the West Branch Susquehanna and upper Susquehanna rivers. However, catch rates of legal-length smallmouth bass (≥ 12 inches) have remained at or near historic average (figure 4) and catch rates of trophy-length (≥ 15 inches) have been at or above the historic average in the upper Susquehanna River (figure 5)

Overall, anglers have been pleased with the status of the smallmouth bass fishery at the upper Susquehanna River (North Branch). In recent years, there has been an increase in the numbers of legal-length and larger smallmouth bass within the population and have seen reflected in angler's catches.

Historical catch per unit effort (CPUE) of smallmouth bass older than age-1 at the upper Susquehanna River (North Branch)

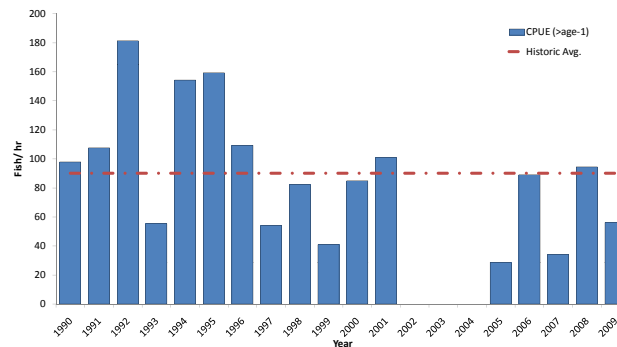


Figure 2. Historic catch rates of adult smallmouth bass at the upper Susquehanna River (North Branch). Blank values indicate years when no surveys were conducted, not zero values. Note differences in scale between graphics.

Historical catch per unit effort (CPUE) of legal-length smallmouth bass at the upper Susquehanna River (North Branch)

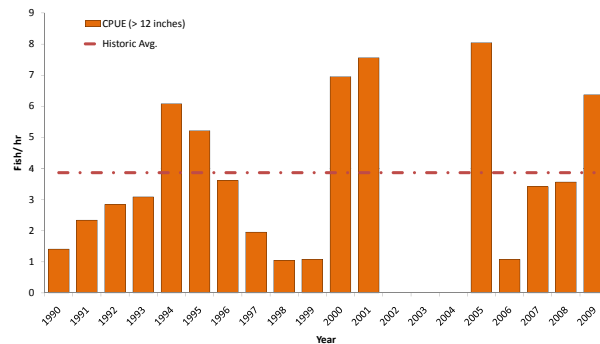


Figure 4. Historical catch rate of legal-length smallmouth bass (≥ 12 in., 300mm) at the upper Susquehanna River (North Branch). Blank values indicate years when no surveys were conducted, not zero values. Note differences in scale between graphics.



Figure 6. Area 4 fisheries biologist Jake Precone with a smallmouth bass from the upper Susquehanna River. (Photo: PFBC)



Figure 7. Area 7 fisheries manager Kris Kuhn (r) and biologist John Frederick (l) process smallmouth bass from the middle Susquehanna River. (Photo: PFBC)



Figure 8. Division of Fish Production Services Chief Andy Shiels with a fly-rod-caught smallmouth bass from the middle Susquehanna River (Photo: M. Hendricks)

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

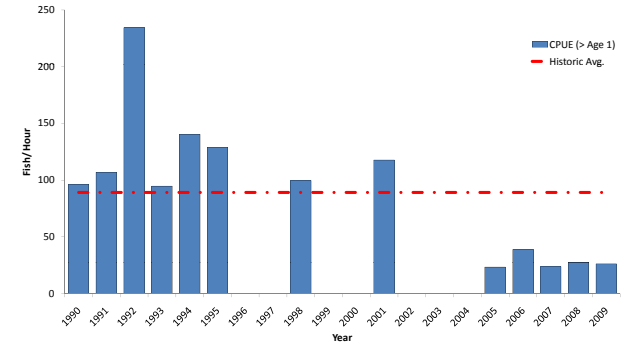


Figure 3. Historic catch rates of adult smallmouth bass at the Susquehanna River. Between Sunbury and York Haven Dam. Blank values indicate years when no surveys were conducted, not zero values. Note differences in scale between graphics.

Historical catch per unit effort (CPUE) of trophy-length smallmouth bass at the upper Susquehanna River (North Branch)

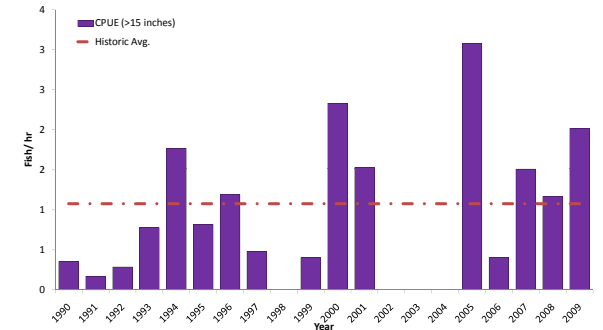


Figure 5. Historical catch rate of trophy-length smallmouth bass (≥ 15 in., 375mm) at the upper Susquehanna River (North Branch). Note differences in scale between graphics.



Figure 9. Adult smallmouth bass being released after being caught by an angler (Photo: A. Shiels)

