Staunton River Report 2016

From Leesville Dam downstream to the headwaters of Kerr Reservoir, the Staunton River offers 81 miles of diverse fishing opportunities. Over the past 30 years or so the Staunton River fishery has undergone some striking changes based on the flow regime from Leesville Reservoir. Peaking flows were discontinued in 1988 and the fisheries undoubtedly benefited from the stabilized flow regime. Various fish populations have rebounded in the past two decades and the change in flow regime is almost certainly responsible for the improvement. Forty-four species of fish were sampled in the last Staunton River fishery survey! In 1975, 11 miles of the Staunton from Long Island to Brookneal were designated as a scenic river in Virginia. That designation was extended from Brookneal further downstream to the Route 360 Bridge in 2001 and now totals 51.3 miles.

Photo 1. Photo of Staunton River above Brookneal, Virginia.

Photo 2. Aerial photo of braided stretch of the Staunton River near Long Island, VA.

This 81 mile reach of river has two fairly distinct sections based on habitat availability. The area from Leesville Dam to Brookneal (Photos 1 & 2) has a higher gradient, stretches with plenty of braided river channel, and a better ratio of riffles:runs:pools. For anglers, this equates to excellent habitat for Smallmouth Bass, Saugeye (Walleye x Sauger hybrid), and Walleye. The Leesville Dam tailrace (Photo 3) offers some of the best Walleye fishing in Virginia, but fish can be found throughout this reach. The Smallmouth Bass fishing is excellent as well, with trophy fish a real possibility. Channel Catfish and Flathead Catfish are found in high abundances in this reach as well. Channel Catfish are collected in greater abundances in the Staunton River than any other river in the state, so anglers can anticipate good catch rates. While not as abundant, large Flathead Catfish are found throughout the entire reach.

Photo 3. Leesville Reservoir tailrace following power generation.

From Brookneal downstream to its confluence with the Dan River (Photo 4), the Staunton River has less rocky habitat, is wider and has a predominantly sandy bottom. Habitat is abundant along the river banks in the form of fallen trees. Black bass (Smallmouth, Largemouth and Spotted Bass) are still found in this area but densities are generally lower than the upper section (Figure 1). Catfish are still abundant and anglers will have a better chance of catching Blue Catfish below Brookneal than they do above. During the spring, this section of the Staunton River is full of Striped Bass making their spawning run out of Kerr Reservoir. Angling during this time of year in the river for Striped Bass is a great way for fishermen to catch a species that for most of the year is found in deep water of Kerr Reservoir.

Photo 4. Photo of Staunton River below Brookneal, Virginia.

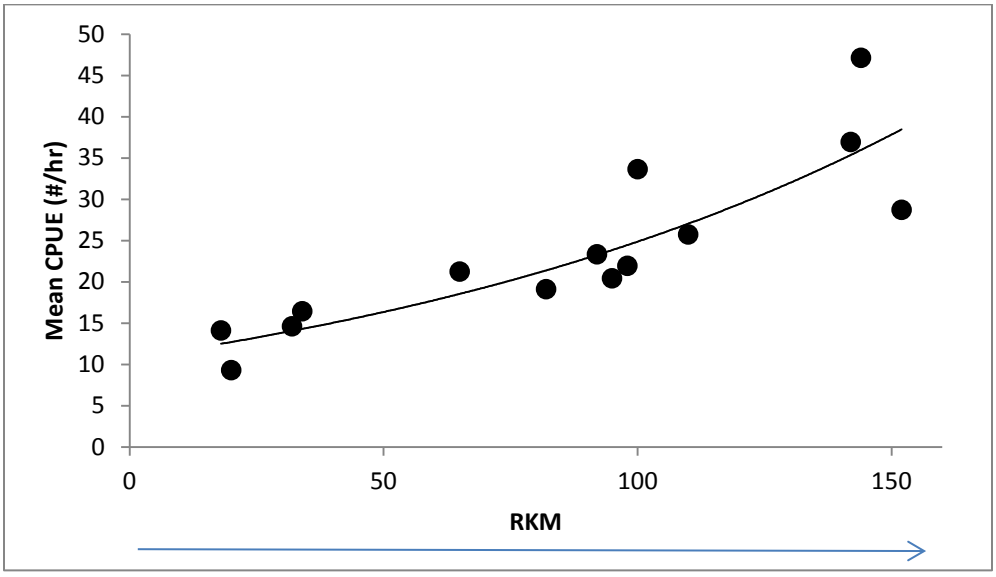

Figure 1. Smallmouth Bass abundance by river site. Arrow points upriver from Rt. 360 Bridge to Leesville Dam.

Biologists annually monitor the fish populations in the Staunton River with fall electrofishing. All species are collected and measured but Smallmouth Bass tend to be the focus of these samples (Figure 2). Biologists track year class strength (how good or bad the spawn was that year), size structure, growth, and mortality with data collected from electrofishing surveys. Additionally, most of the rivers in the state are compared to give biologists a better perspective of the smallmouth populations across the state.

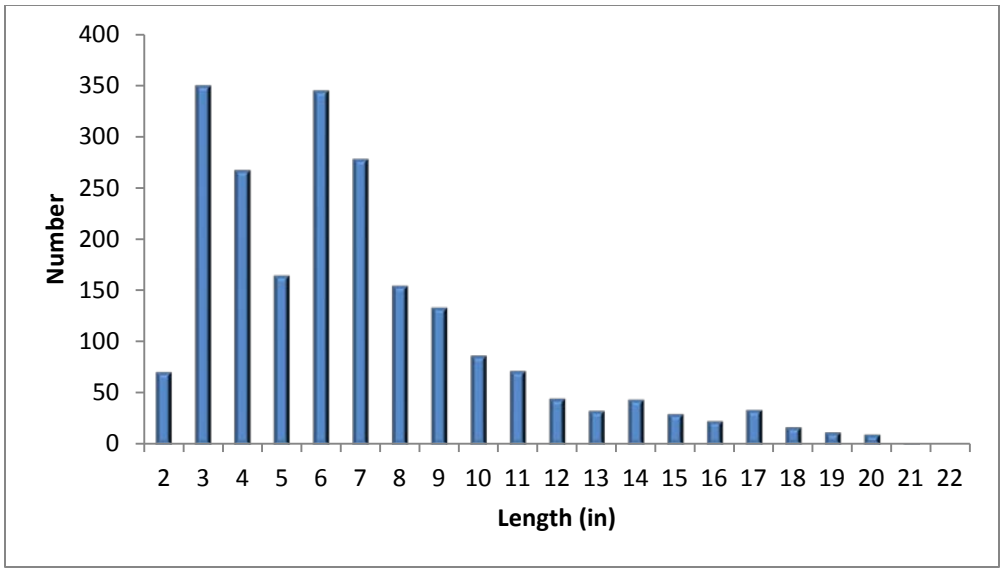

Figure 2. Length-frequency of Smallmouth Bass in the Staunton River from 1998-2015.

Smallmouth Bass in the Staunton River are generally found in lower abundance compared to other rivers in the state. However, growth and survival are above average and this leads to a fishery where anglers can expect lower than normal catch rates but higher than average size fish. Figure 3 displays Smallmouth Bass catch rates from 1998 to 2015 DGIF electrofishing sample data. Catch-per-unit-effort (CPUE) reflects the number of bass sampled by DGIF biologists in one hour of sampling effort. Average catch over this time period is 25.0 fish/hour so the most recent survey year is better than average for the Staunton River with a catch rate of 30.2 fish/hour.

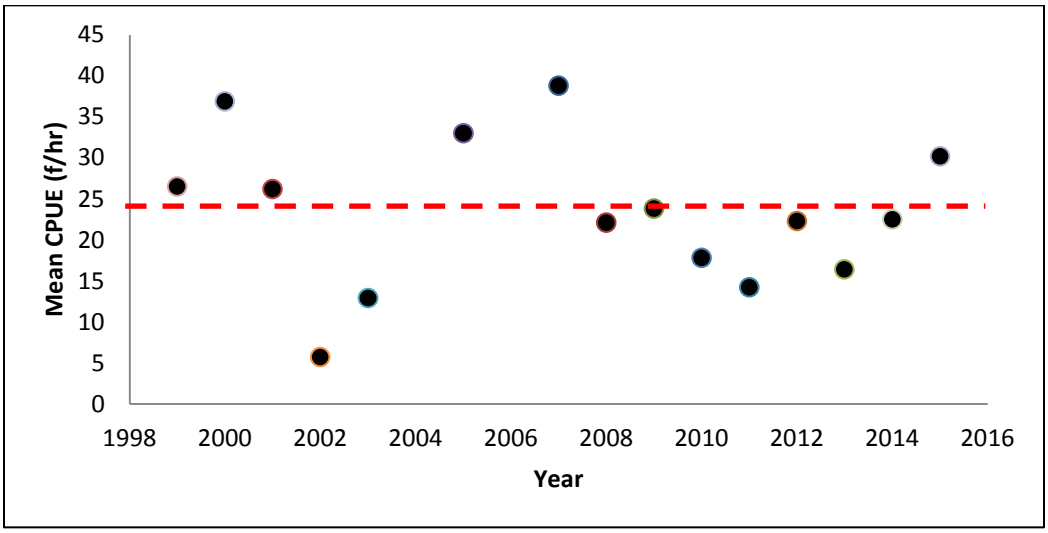

Figure 3. Average catch rates by electrofishing the Staunton River from 1998-2015. Dashed line represents long-term average catch rate.

Smallmouth Bass in all rivers exhibit years of good reproduction and years of bad reproduction. When we analyzed data of young-of-the-year Smallmouth Bass (age-0 smallmouth) we separated the analysis by upper (Brookneal up to Leesville Dam) and lower (below Brookneal to Rt. 360 Bridge) river reaches due to the differences in habitat type. Long-term average catch rates for the upper river are 8.6 fish/hour and 5.6 fish/hour for the lower stretch. Very good years in the upper river section were produced in 2002, 2005, and 2007. Good year classes included 2001, 2012 and 2015 (Figure 4). Good years in the lower river appeared to occur in 2001, 2002, 2005, 2014, and 2015 but number of sample locations were lower than desired in the lower river so these results are not as well supported as in the upper river reach (Figure 5).

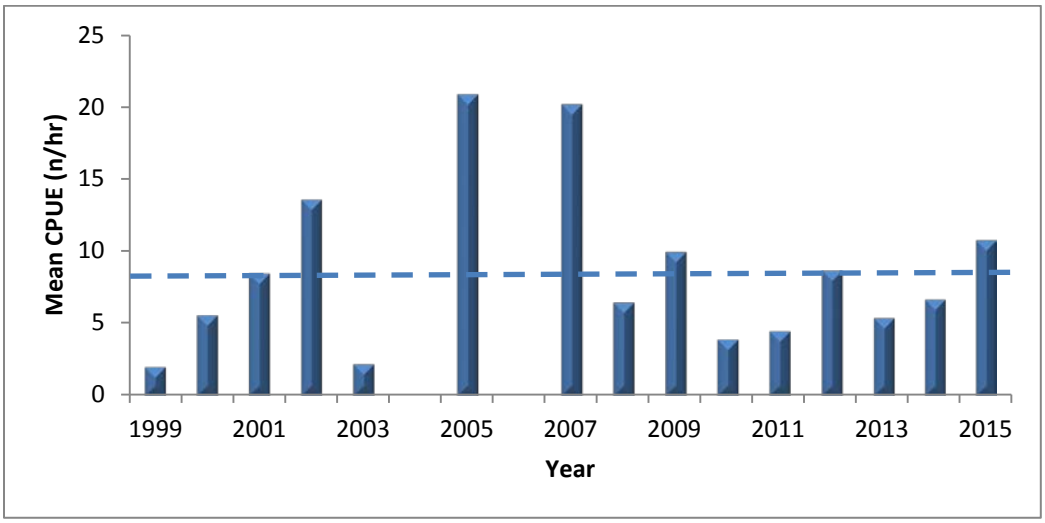

Figure 4. Average catch rates for age-0 Smallmouth Bass in the upper Staunton River. Dashed line represents long-term average catch rate.

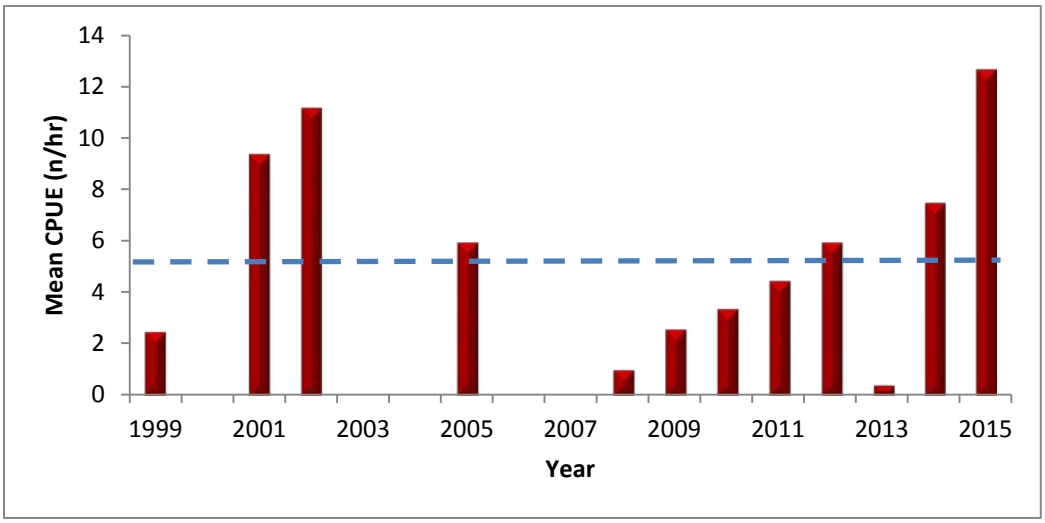

Figure 5. Average catch rates for age-0 Smallmouth Bass in the lower Staunton River. Dashed line represents long-term average catch rate.

Another tool used by DGIF biologists to manage Smallmouth Bass in the Staunton River is estimation of the total number of bass in a given reach of river. In 2006 and 2013 staff from all over the Commonwealth converged on the Staunton River to perform this work. Estimated number of Smallmouth Bass ranged from 133/mi at a private access site near Brookneal (RKM 98) to 536/mile at another private access (RKM 95) (Figure 6).

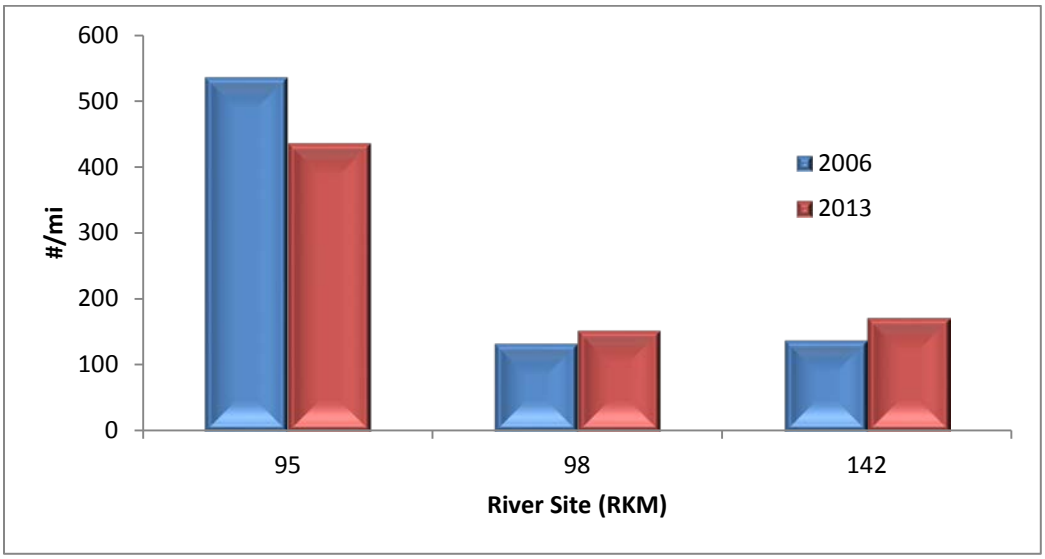

Figure 6. Number of Smallmouth Bass per mile at three sites on the Staunton River in 2006 and 2013. Site RKM 95 is near Brookneal and Site RKM 142 is Altavista.

As mentioned previously, another very popular fishery in the Staunton River is the catfish fishery. Flathead Catfish up to 60 inches have been sampled in the river! Right behind that for the potential to catch a huge Staunton River catfish is the Blue Catfish which have been sampled at sizes larger than 40 inches. While both of these species have very impressive size potential, most catfish found in the Staunton are Channel Catfish. In fact, 89% of all catfish sampled in fall DGIF electrofishing samples are channels. Channel Catfish up to 26 inches have been sampled (Figure 7), and growth rates are slightly better above Brookneal than below. While growth rates are better up-river, density is higher in the lower stretch of river. An angler's best bet to catch Channel Catfish is to use chicken livers and stink baits in the evening hours. Blues and flatheads prefer live baits or cut shad and heavy line and tackle is a must.

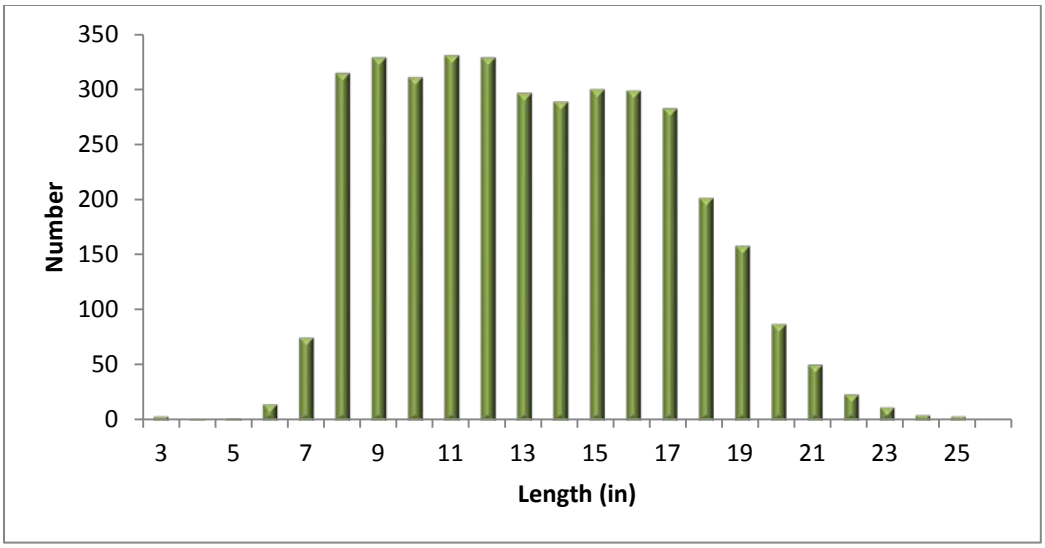

Figure 7. Length-frequency of Channel Catfish in the Staunton River from 1998-2015.

For anglers looking for plenty of action on light gear, the Staunton River offers several panfish species to choose from. Bluegill, Redear Sunfish (aka shellcracker), Redbreast Sunfish, and even a few Rock Bass call the Staunton River their home. In 2015, DGIF sampled nearly 1000 individuals at ten sample sites. The most abundant was the Redbreast Sunfish followed closely by the Bluegill. Bluegill up to eight inches and redbreast up to seven inches were observed and redear topped out at 10 inches (Figure 8). Only 25 Rock Bass were collected in 2015 and most of these were found in the upper river at Altavista and Long Island where habitat was more suitable for this species. Panfish species are great fish to target for beginning anglers and can be caught with live bait and a bobber or small spinning lures. Fly fishing for these species can also be a lot of fun.

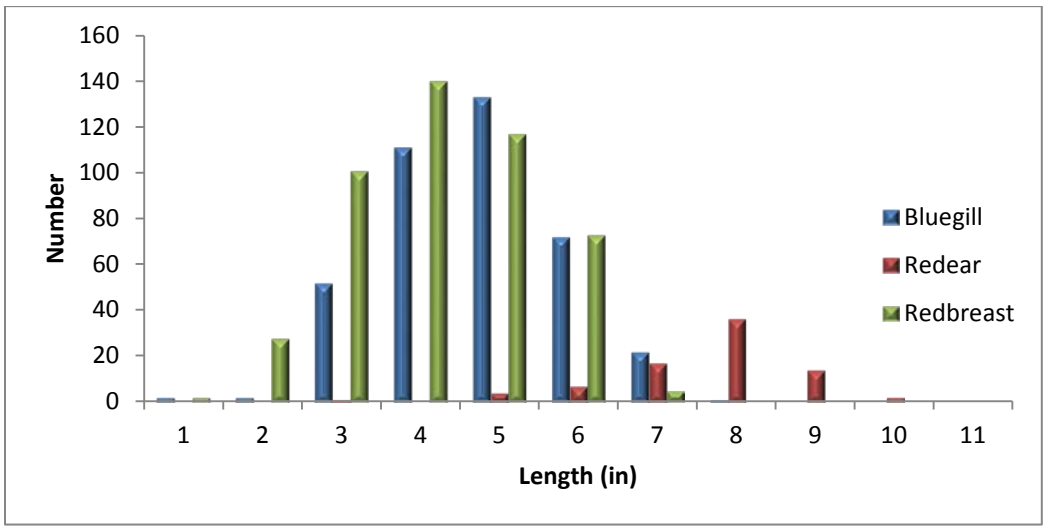

Figure 8. Length-frequency of panfish (Bluegill, Redear Sunfish, and Redbreast Sunfish) in the Staunton River in 2015.

Angler surveys on the Staunton River show that most Staunton anglers come from nearby and that the spring, Striped Bass fishery is very important to them. The main reasons they fished the Staunton were the close proximity to home and also the quality of the fishery. Anglers spent most of their time fishing for the catfish species in the river and angler effort for Striped Bass and Smallmouth Bass tied for second. Other species targeted and detected in the survey included sunfish, Walleye, and White Perch. Catch rates were highest for Striped Bass with over one fish caught per hour in 2013 (1.14 fish/hour caught). Catfish and Smallmouth Bass catch rates were also good with just under one fish per hour caught. This doesn't sound like a lot of fish caught but this relates well with other river systems in Virginia. The most often harvested fish species in the Staunton were catfish and Walleye.

Canoe and boater access is somewhat limited on the Staunton River. Currently, ramps are located at Altavista, Long Island, Brookneal, Clarkton, Watkins Bridge, U.S. 360, and Staunton River State Park. Table 1 details float distances and estimated duration via canoe.

Table 1. Access sites and float distances on the Staunton River.

River segment	Distance (miles)	Duration (hours)
Altavista – Long Island	19.8	12-20
Long Island - Brookneal	11.0	5-8
Brookneal - Clarkton	6.6	4-6
Clarkton – Watkins Bridge	22.0	12-20
Watkins Bridge – US 360	8.9	5-10
US 360 – Staunton River State Park	12.3	10-14

Most of these floats would make for a long day on a canoe excursion but other private river access is present on the Staunton. Obviously, landowner permission is necessary to use these sites. An additional canoe launch is located on Roanoke Creek near Randolph adjacent to the Staunton River Battlefield Park (not to be confused with Staunton River State Park). With Park assistance, this access site can help to break up the distance between Watkins Bridge and US 360 access sites. For information on the location and use of this site please contact the park at 434-454-4312. For more information on public boat launches please visit the following site:

http://www.dgif.virginia.gov/fishing/waterbodies/display.asp?id=175&section=maps

Anglers should also be aware of fish consumption advisories before harvesting fish. However, just because a species may have a consumption advisory imposed does not mean that recreational fishing is diminished.

http://www.dgif.virginia.gov/fishing/regulations/advisories.asp