

#### INTRODUCTION

The West Virginia Division of Natural Resources (WVDNR) began collecting fishing tournament data in 1975. For many years, bass tournaments were the only tournaments that provided data. More recently, tournament angling in West Virginia has expanded to include catfish, crappie, walleye, musky, panfish, and trout. The goal of this document is to summarize the angler catch data to provide valuable information to West Virginia's fishing community. Within this report, anglers can find which waterbodies have provided the best tournament success, catch-rates by month, average weight per reported bass in tournament weigh-ins, number of tournaments held per waterbody, etc. Anglers can use this information to plan tournaments or non-tournament fishing trips.

#### **SUMMARY OF RESULTS**

The number of fishing tournaments and tournament angler effort significantly increased in 2021 from the previous year. In 2021, a total of 752 fishing tournaments were held in West Virginia with a species breakdown of 644 bass tournaments, 68 catfishing tournaments, 29 musky tournaments, five crappie/panfish tournaments, three bowfishing tournaments, two trout tournaments and one youth tournament. Fishing tournaments were held on 31 waterbodies that included 13 reservoirs (>500 acres), nine small impoundments (<500 acres), six small rivers, and three large rivers. In addition to traditional fishing tournaments that conduct events and weigh-ins at a single location, tournaments requiring lengths only and immediate releases for species such as Muskellunge and Black Bass occurring across multiple waterbodies have increased. In 2021, nearly 28 of these "statewide" fishing tournaments were reported.

### **BASS TOURNAMENTS**

Bass tournament participation has dramatically increased since the WVDNR began monitoring them in 1975 (Figure 1). In 2021, anglers reported fishing in 644 bass tournaments (Table 1), which was 28% more tournaments than in 2020 and the most on record (Figure 1). Tournaments are categorized into traditional and non-traditional tournaments. Traditional tournaments typically have official weigh-ins and are held at a specific location on a given day. This tournament type has been and continues to be the most popular in West Virginia with 616 being reported in 2021 (Table 1). Non-traditional bass tournaments do not have weigh-ins and are held on multiple waterbodies on the same days. There were 28 non-traditional tournaments reported in 2021. Angler effort and location was not provided for non-traditional tournaments due to the difficulty for tournament organizers to obtain this information. The WVDNR is working with these tournament groups to better report the required information. Angler effort and angler catchrate (number of 12-inch and larger bass per hour) presented within this report includes data only from traditional tournaments as the data provided by non-traditional tournaments is insufficient.

Angler effort increased approximately 25% from 101,033 hours in 2020 to 135,231 hours in 2021 (Figure 1). Nearly 64% of the bass tournament effort in 2021 were on reservoirs with 407 tournaments and 86,215 hours being reported (Table 1). Ohio River had the most reported tournament angler hours for any waterbody in 2021 at 29,156, while Summersville Lake had the highest reported hours for reservoirs at 18,757 (Table 1 - 2). Pressure, defined as tournament hours per acre, was highest at East Lynn Lake and Beech Fork Lake in 2021 with 11.1 and 9.6 tournament hours per acre. In contrast, Ohio River and Bluestone Lake had the lowest pressure with 0.8 and 1.0 tournament hours per acre (Table 2). Ohio River is West Virginia's largest waterbody and accounts for nearly 50% of the State's water surface area; so even though the highest tournament hours are reported for Ohio River, it has the lowest reported tournament hours per acre. Bluestone Lake has been undergoing dam renovations causing the public boat launch areas to be closed, which has limited the number of tournaments. Bass tournament anglers reported 25,960 hours in May, which was the most of any month 2021 (Table 4).

Since 2006, annual catch-rates for bass tournament anglers have been greater than the average catch rate since 1975 (Figure 2). The overall annual bass tournament catch-rate for 2021 was 0.18 bass per hour (all black bass), which was slightly less than reported in 2020 (Figure 2). Anglers reported better overall success in reservoirs versus rivers during 2021 bass tournaments (Figure 3). Stephens Lake ranked first in 2021 for reported bass per hour of any waterbody with more than 1,000 tournament hours, whereas East Lynn Lake ranked last (Table 2). Over the last three years, Jennings Randolph Lake, Cheat Lake, Summersville Lake, Sutton Lake, Mt. Storm Lake, and Tygart Lake have had the highest reported bass tournament catch-rates (Table 3). The number of fish reported per hour varies from year to year and has shown to be highly variable in West Virginia's commercially navigable rivers (Kanawha, Monongahela, and Ohio; Figure 3). However, in 2021 tournament anglers reported higher than average catch-rates on both the Ohio and Monongahela rivers and a catch-rate that equaled the three-year average for Kanawha River (Table 3). The highest tournament catch-rates were reported for the months of November, June, and May at 0.22, 0.21, and 0.20 bass per hour respectively (Table 4).

The average weight per bass tournament increased in 2021 from 2020 but was still lower than most previous years (Figure 4). Generally, anglers reported heavier average weights per fish from reservoirs, small impoundments, and small rivers than in large rivers (Table 1). Beech Fork Lake, Burnsville Lake, East Lynn, R.D. Bailey, and Stonewall Jackson reported the heaviest average weight per bass at just under two pounds (Table 4). The heaviest average weights per tournament were reported in April during pre-spawn (Table 4).

## NUMBER OF BASS TOURNAMENTS & ANGLER EFFORT, 1975-2021

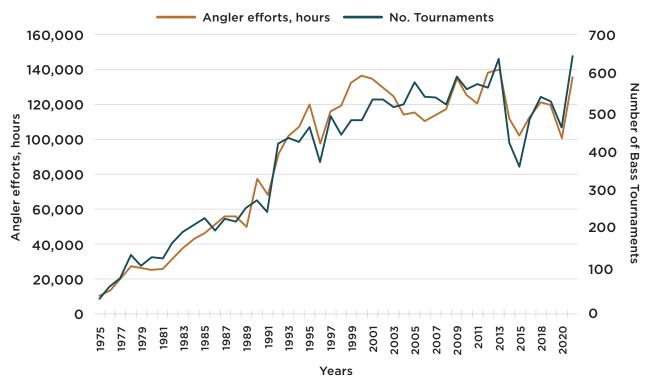


FIGURE 1. Reported number of West Virginia bass tournaments and angler hours from 1975 through 2021. Angler effort includes only traditional tournaments.

# WV BASS TOURNAMENT CATCH-RATES, 1975-2021

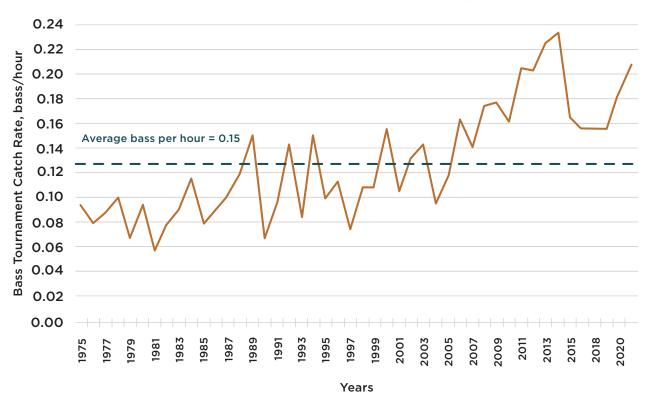


FIGURE 2. West Virginia bass tournament catch-rates defined as the number of 12-inch and larger black bass per hour reported from 1975 through 2021 for all waterbody types. The overall catch-rate from 1975 through 2021 equals 0.15 bass per hour and is represented by the brown dashed line.

## WV BASS TOURNAMENT CATCH-RATES IN RIVERS & RESERVOIRS 1975-2020

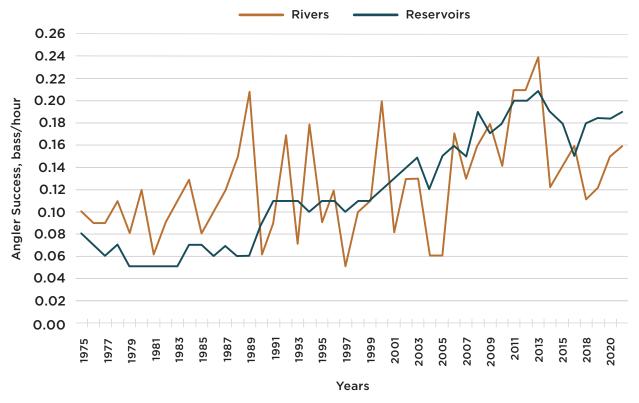


FIGURE 3. Bass tournament catch-rates for West Virginia's rivers and reservoirs from 1975 through 2021.

# AVERAGE REPORTED WEIGHT PER BASS TOURNAMENT, 2001-2021

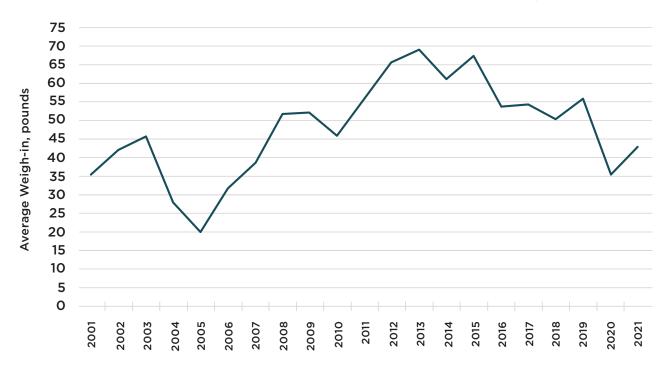


FIGURE 4. Average bass weight per tournament reported from 2001 through 2021 for all waterbody types.

Years

Location	No. Tournaments	Effort Hours		Reported Number of Bass					per Hour		Bass Weig	
		nours	All	Largemouth	Smallmouth	Spotted	All	Largemouth	Smallmouth	Spotted	Total Weight	Per B
Marmet Pool	8	444	151	9	142	0	0.34	0.02	0.32	0.00	143	0.9
Winfield Pool	49	11,651	1,303	386	782	135	0.11	0.03	0.07	0.01	1653	1.3
Kanawha	57	12,095	1,454	395	924	135	0.12	0.03	0.08	0.01	1,796	1.2
Opekisha Pool	26	5,641	1,152	910	181	70	0.20	0.16	0.03	0.01	1,452	1.3
Point Marion Pool	7	1,110	199	120	57	22	0.18	0.11	0.05	0.02	251	1.3
Monongahela	33	6,751	1,351	1,030	238	92	0.20	0.15	0.04	0.01	1,704	1.3
New Cumberland Pool	5	832	217	7	200	10	0.26	0.01	0.24	0.01	354	1.6
Pike Island Pool	17	2,086	442	9	420	13	0.21	0.00	0.20	0.01	537	1.2
Hannibal Pool	22	7,706	1,463	78	1,273	111	0.19	0.01	0.17	0.01	1,774	1.2
Willow Island Pool	8	6,223	944	292	547	105	0.15	0.05	0.09	0.02	537	0.
Belleville Pool	26	6,978	1,036	539	349	151	0.15	0.08	0.05	0.02	1,415	1.4
Racine Pool	7	3,781	600	354	141	92	0.16	0.09	0.04	0.02	537	0.5
R. C. Byrd Pool		1,551	409	58	315	43	0.26	0.04	0.20	0.03	469	1.1
Ohio	109	29,156	5,111	1,337	3,245	525	0.18	0.05	0.11	0.02	5,623	1.
All Large Rivers	199	48,002	7,916	2,762	4,407	752	0.16	0.06	0.09	0.02	9,122	1.3
Buffalo Creek	1	100	3	0	3	0	0.03	0.00	0.00	0.00	4	1.3
Greenbrier	2	529	20	0	20	0	0.04	0.00	0.04	0.00		
New River	3	248	78	0	78	0	0.31	0.00	0.31	0.00		
Shenandoah	1	54	12	5	7	0	0.22	0.09	0.13	0.00	21	1.1
S. Branch Potomac	1	45	8	0	8	0	0.18	0.00	0.18	0.00	12	1.5
West Fork River	2	39	9	4	4	1	0.23	0.10	0.10	0.00		
All Small Rivers	10	1,015	130	9	120	1	0.13	0.01	0.12	0.00	37	1.0
Beech Fork Lake	55	6,881	734	713	0	4	0.11	0.10	0.00	0.00	1,429	1.5
Bluestone Lake	7	1,960	268	97	157	11	0.14	0.05	0.08	0.01	462	1.7
Burnsville Lake	21	4,248	648	659	29	58	0.15	0.16	0.01	0.01	1,221	1.5
Cheat Lake	18	3,334	764	567	150	44	0.23	0.17	0.04	0.01	1,012	1.3
East Lynn Lake	60	11,185	1,168	1,116	2	50	0.10	0.10	0.00	0.00	2,271	1.5
Jennings Randolph	4	976	328	5	323	0	0.34	0.01	0.33	0.00	392	1.3
Mount Storm Lake	6	1,512	370	186	184	0	0.24	0.12	0.12	0.00	468	1.3
R. D. Bailey Lake	2	1,032	91	76	3	12	0.09	0.07	0.00	0.00	160	1.3
Stonecoal Lake	14	2,478	369	297	72	0	0.15	0.12	0.03	0.00	510	1.4
Stonewall Jackson	38	10,025	1,753	1,563	28	162	0.17	0.16	0.00	0.02	3,258	1.5
Summersville Lake	54	18,757	4,328	325	4,002	2	0.23	0.02	0.21	0.00	5,594	1.3
Sutton Lake	54	14,382	3,303	2,149	160	992	0.23	0.15	0.01	0.07	4,242	1.3
Tygart Lake	30	4,619	1,129	57	1,072	0	0.24	0.01	0.23	0.00	1,199	1.
All Reservoirs	363	81,387	15,253	7,810	6,182	1,335	0.19	0.10	0.08	0.02	22,218	1.5
Conaway Lake	1	78	30	30	0	0	0.38	0.38	0.00	0.00		
Curtisville Lake	1	91	24	24	0	0	0.26	0.26	0.00	0.00		
Dog Run Lake	2	45	18	18	0	0	0.40	0.40	0.00	0.00		
Elk Fork Lake	5	662	112	112	0	0	0.17	0.17	0.00	0.00		
North Bend Lake	8	915	160	151	0	9	0.17	0.17	0.00	0.01		
O'Brian Lake	3	392	49	49	0	0	0.13	0.13	0.00	0.00		
Plum Orchard Lake	10	629	340	340	0	0	0.54	0.54	0.00	0.00	433	1.3
Stephens Lake	11	1,320	453	453	0	0	0.34	0.34	0.00	0.00	650	1.4
Upper Mud Lake	3	696	85	85	0	0	0.12	0.12	0.00	0.00		
All Impoundments	44	4,828	1,271	1,262	0	9	0.26	0.26	0.00	0.00	1,083	1.4
Statewide - kayak*	28		3,505	1,435	1,508	0						
Statewide - Kayak	20		5,505	1,455	1,500							

TABLE 1. Results for West Virginia bass tournaments held in 2021. Data represents 12-inch and larger bass. \*Angler effort hours not provided by non-traditional tournaments.  ${}^{**}\mathsf{Excludes}$  non-traditional angler effort and number of bass reported.

Rank	Waterbody	Bass per Hour	Tournament Hours	Surface Acres	Tournament Hours per Acre
1	Stephens Lake	0.34	1,320	272	4.9
2	Mount Storm Lake	0.24	1,512	1,200	1.3
2	Tygart Lake	0.24	4,619	1,750	2.6
3	Cheat Lake	0.23	3,334	1,730	1.9
3	Summersville Lake	0.23	18,757	2,700	6.9
3	Sutton Lake	0.23	14,382	1,520	9.5
4	Monongahela River	0.20	6,751	1,254	5.4
5	Ohio River	0.18	29,156	36,470	0.8
6	Stonewall Jackson Lake	0.17	10,025	2,650	3.8
7	Stonecoal Lake	0.15	2,478	550	4.5
7	Burnsville Lake	0.15	4,248	968	4.4
8	Bluestone Lake	0.14	1,960	2,040	1.0
9	Kanawha River	0.12	12,095	5,257	2.3
10	Beech Fork Lake	0.11	6,881	720	9.6
12	East Lynn Lake	0.10	11,185	1,005	11.1

**TABLE 2.** 2021 rankings for West Virginia waterbodies having ≥ 1,000 bass tournament hours. Does not include non-traditional tournaments.

Rank	Mataria du		Tournament Success, bass per day							
капк	Waterbody	3-year average	2021	2020	2019					
1	Jennings Randolph Lake	0.34	0.34	0.36	0.33					
2	Cheat Lake	0.25	0.23	0.25	0.28					
3	Summersville Lake	0.24	0.23	0.24	0.25					
4	Sutton Lake	0.23	0.23	0.27	0.18					
5	Mount Storm Lake	0.22	0.24	0.29	0.14					
5	Tygart Lake	0.22	0.24	0.20	0.21					
6	Monongahela River	0.19	0.20	0.15	0.23					
7	Burnsville Lake	0.16	0.15	0.11	0.23					
8	Stonewall Jackson Lake	0.15	0.17	0.15	0.14					
8	Stonecoal Lake	0.15	0.15	0.16	0.15					
8	R.D. Bailey Lake	0.15	0.09	0.22	0.14					
9	Ohio River	0.14	0.18	0.13	0.11					
10	Bluestone Lake	0.13	0.14	0.10	0.15					
12	Beech Fork Lake	0.12	O.11	0.12	0.13					
10	Kanawha River	0.12	0.12	0.13	0.10					
13	East Lynn Lake	0.10	0.10	0.09	0.11					

TABLE 3. Three (3) year catch-rate for selected waterbodies with annual catch-rates for 2019 - 2021. Does not include non-traditional tournaments.

Month	No. Tournaments	Tournament Hrs.	Reported No. of Bass	Bass per Hr.	Reported Weight, lbs	Average Weight per Tournament
March	11	2,223	309	0.14	486	44
April	56	16,195	2,548	0.16	3,788	68
May	109	25,960	5,237	0.20	7,211	66
June	109	21,829	4,494	0.21	7,223	66
July	99	17,947	3,308	0.18	4,439	45
August	86	15,210	2,498	0.16	3,221	37
September	64	15,913	2,614	0.16	3,690	58
October	66	17,279	2,977	0.17	3,816	58
November	16	2,676	585	0.22	830	52
Total	616	135,231	24,570	0.18	34,704	56

TABLE 4. West Virginia bass tournament results by month in 2021. Does not include non-traditional tournaments.

### **CATFISH TOURNAMENTS**

The WVDNR began monitoring catfish tournaments in 2008 as catfish popularity was increasing with tournament anglers. Sixty-eight catfish tournaments were held in 2021, which was more than in any year prior. Additionally, the number of angler hours (17,372) in 2021 was second highest on record (Table 5). Most catfish tournaments were held on the Ohio River with 43 reported tournaments resulting in 12,140 angler hours (Table 6). The Willow Island Pool of Ohio River held the most tournaments and had the most angler effort, while the Racine Pool saw the fewest tournaments and angler hours (Table 6). Of note in the 2021 catfish tournaments was the success in terms of both a high catch-rate and pounds per tournament that were reported in the R.C. Byrd Pool (Table 6).

Flathead Catfish continue to be the dominant species reported by tournament anglers (Table 5). Anglers reported fewer Blue Catfish in 2021 than in the previous year, but this species has represented a significant portion of the total tournament catch for the last three years (Table 5). Nearly 29% of the R.C. Byrd pool reported catch were Blue Catfish (Table 6). Tournaments reported weighing 15,279 pounds of catfish for an average of 268 pounds per tournament and 11.3 pounds per catfish. Kanawha River continued providing heavy tournament weigh-ins with 744 pounds per tournament being reported (Table 6). The heaviest weight per tournament was reported in the R.C. Byrd pool of Ohio River with 970 pounds on average (Table 6).

<b>V</b>	N. T	Effect Here	G-Mills II	Repo	rted Numb	er of Catfish		% of R	eported Cat	fish	Reported
Year	No. Tournaments	Effort Hours	Catfish per Hour	All Catfish	Channel	Flathead	Blue	Channel	Flathead	Blue	Weight, Ibs
2008	40	14,526	0.07	1,032	348	684	0	34	66	0	3,988
2009	18	14,158	0.06	824	351	471	2	43	57	0	3,367
2010	31	16,448	0.05	818	274	524	20	33	64	2	
2011	38	14,846	0.07	968	364	569	35	38	59	4	3,531
2012	57	16,540	0.06	1,036	357	644	35	34	62	3	7,469
2013	56	19,271	0.11	2,054	638	1,342	74	31	65	4	16,113
2014	43	16,071	0.09	1,519	524	949	46	34	62	3	13,334
2015	42	15,535	0.08	1,213	459	676	78	38	56	6	9,173
2016	38	13,064	0.08	1,022	335	639	48	33	63	5	8,370
2017	34	11,714	0.08	913	391	483	39	43	53	4	7,416
2018	48	11,136	0.09	991	367	555	69	37	56	7	8,446
2019	50	14,838	0.10	1,512	399	881	232	26	58	15	13,896
2020	30	10,693	0.08	827	204	427	296	25	52	36	10,879
2021	68	17,372	0.09	1,609	405	1,117	251	25	69	16	15,279
Total	445	206,212	0.08	16,338	5,416	9,961	1,225	33	61	7	113,906

TABLE 5. Annual summary of West Virginia Catfish tournaments from 2008 through 2021. \*Weights not calculated.

	N -				No.	per Spe	ecies			Average Weight per	
Waterbody	No. Tournaments	Effort Hours	No. Catfish	Catfish per Hour	BLC	снс	FLC	Weight, Ibs	Average Weight per Catfish, lbs	Tournament, Ibs	
New Cumberland Pool	8	2,532	74	0.03	0	29	45				
Hannibal Pool	1	744	44	0.06	0	12	32	243	5.5	243	
Willow Island Pool	13	2,608	77	0.03	0	38	39	923	12.0	71	
Belleville Pool	10	2,384	133	0.06	27	33	236	1,714	12.9	171	
Racine Pool	1	360	71	0.20	19	9	43	805	11.3	805	
R.C. Byrd Pool	7	2,376	418	0.18	120	45	253	6,793	16.3	970	
Greenup Pool	3	1,136	111	0.10	36	10	65	1,536	13.8	512	
Ohio River	43	12,140	928	0.08	202	176	713	12,014	12.9	279	
Winfield Pool	4	1,432	241	0.17	33	30	179	2,975	12.3	744	
Kanawha River	4	1432	241	0.17	33	30	179	2,975	12.3	744	
Pt. Marion Pool	1	80	8	0.10	0	6	2				
Monongahela River	1	80	8	0.10	0	6	2				
North Bend Lake	3	632	56	0.09	0	53	3	236	4.2	4	
Statewide	17	3,088	376	0.12	16	140	220				
Total	68	17,372	1,609	0.09	251	405	1,117	18,199	11.3	268	

 TABLE 6. Results for all West Virginia waterbodies where catfish tournaments were held in 2021.

### MUSKELLUNGE, CRAPPIE, TROUT AND BOWFISHING TOURNAMENTS

Twenty-nine Muskellunge tournaments were reported in 2021 accounting for 3,243 angler hours from multiple waterbodies across the state. Anglers reported catching and releasing 38 Muskellunge during these tournaments. Four Crappie tournaments were held in 2021 at Burnsville Lake, Stonewall Jackson Lake, and Sutton Lake with 109 Crappie reported. Crappie angler effort was 816 hours, which resulted in a catch-rate of 0.32 fish caught per hour. One trout tournament was held at Laurel Lake and a second at Stonecoal Lake in 2021. These tournaments had a combined angler effort of 888 hours, reported 184 trout being caught, resulting in a catch-rate of 0.18 trout per hour. Three bowfishing tournaments were held in 2021 along Ohio River. These tournaments reported 366 hours of angler effort with an average catch-rate of 1.80 fish per hour. A total of 660 Carp with a combined weight of 2,140 pounds were reported from the bowfishing tournaments.