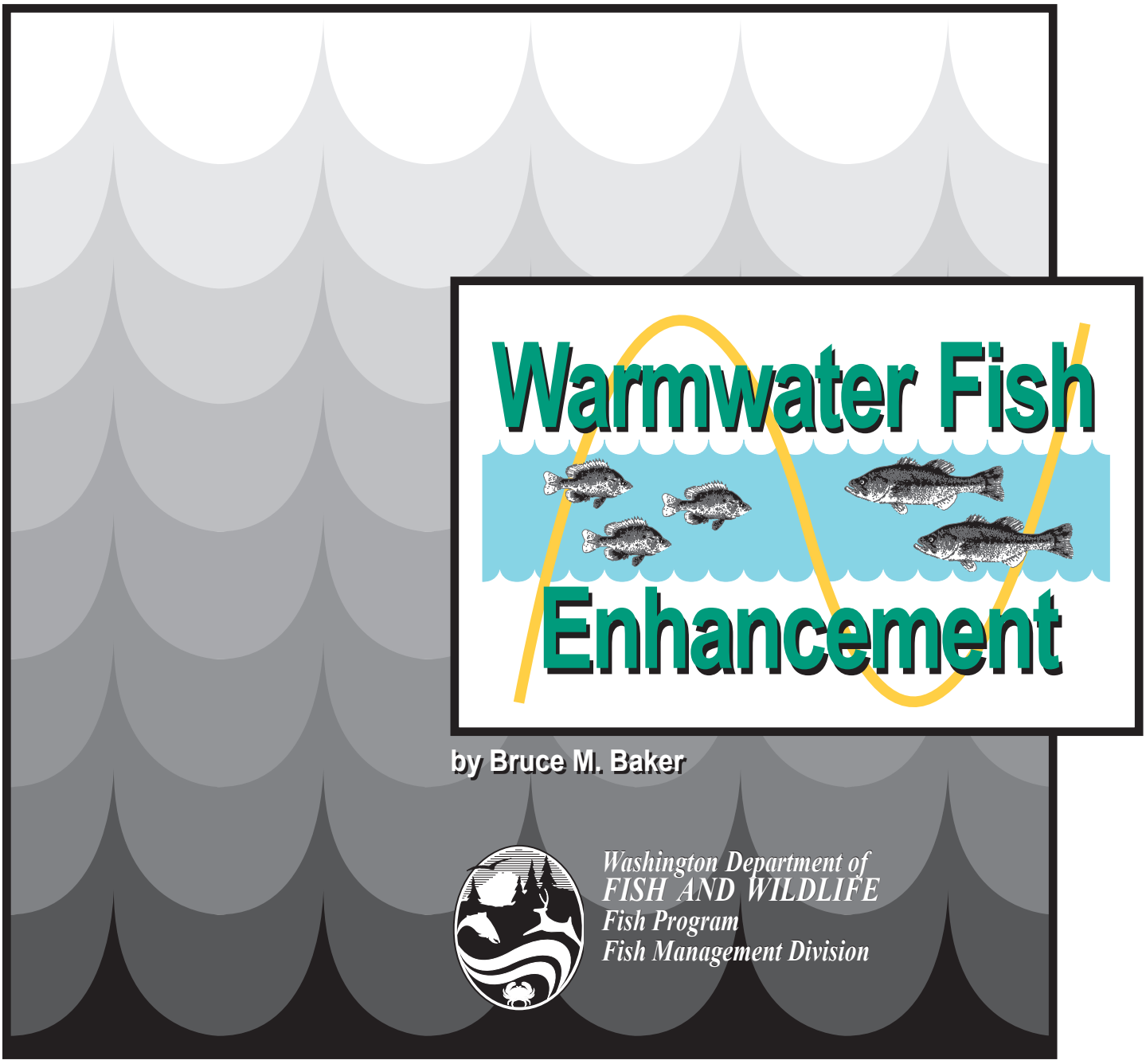
STATE OF WASHINGTON November 2007

Summary Report of Warmwater Volunteer Angler Diaries 2006



by Bruce M. Baker

Washington Department of
FISH AND WILDLIFE
Fish Program
Fish Management Division

FPA 07-03

Summary Report of Warmwater Volunteer Angler Diaries 2006

by

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Warmwater Fish Enhancement Program
600 Capitol Way North
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November 2007

Abstract

Twenty-nine registered anglers and 23 guest anglers participated in the Volunteer Anlger Diary Program in 2006. Useable data was submitted for 603 trips to 61 different bodies of water. A total of 22 black crappie were caught (15 were quality size) and 82% of these fish were released. A total of 10 channel catfish were caught (seven were quality size) and 100% of these fish were released. A total of 434 largemouth bass were caught (231 were quality size) and 99% of these fish were released. A total of 748 smallmouth bass (401 were quality size) and 95% of these fish were released. A total of 37 tiger muskie were caught (20 were quality size) and 100% of them were released. A total of 1,263 walleye were caught (811 were quality size) and 49% of these fish were released.

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Introduction

The Washington State Department of Fish and Wildlife (WDFW) initiated the warmwater Volunteer Angler Diary program in 1990 as a cooperative effort between the Department's Fish Management Division and Washington's warmwater anglers. The program's primary objectives have been to establish a database of catch information for warmwater fishes from a large cross-section of waters, and to improve communication and cooperation between the Department and the anglers. The program initially targeted bass and walleye. However, in 2000 the program was expanded to collect catch information on the six warmwater species managed under the Warmwater Enhancement Bill. Those species are: largemouth bass, smallmouth bass, walleye, black crappie, tiger muskie, and channel catfish.

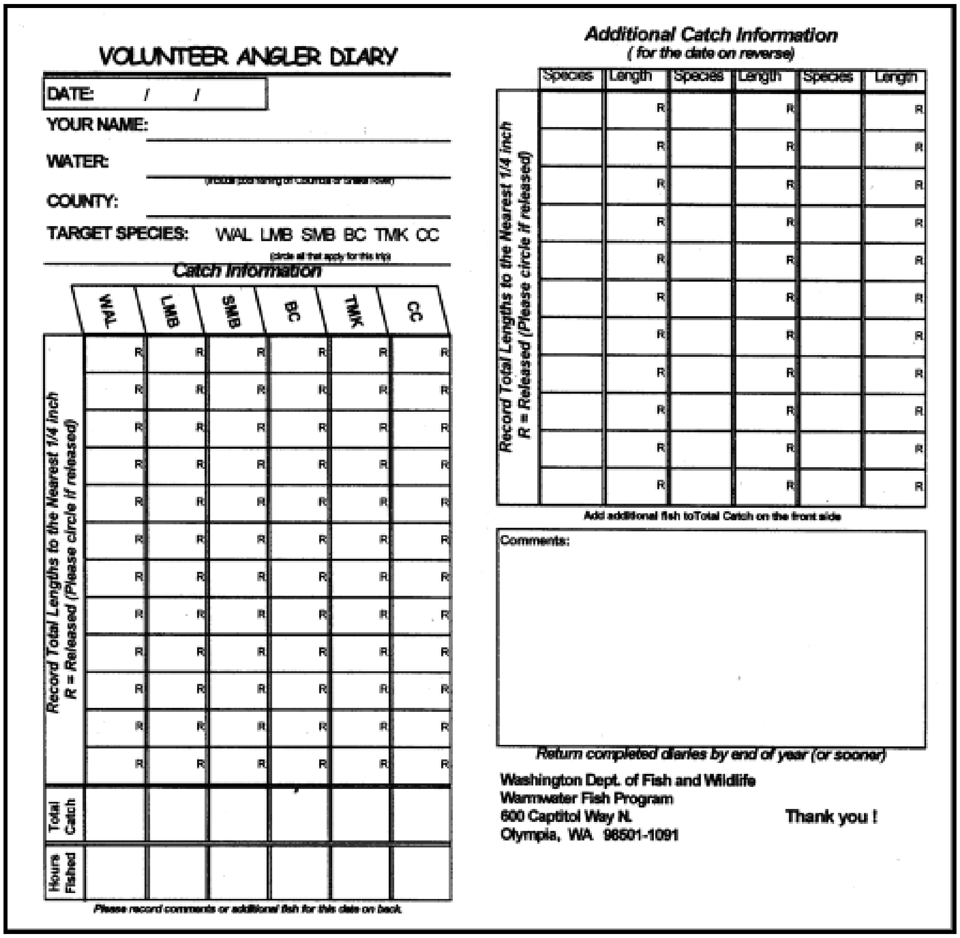
Volunteer angler diary data is used in conjunction with biological sampling and creel census information in order to monitor the condition of, and assess future management options for, warmwater fish populations in Washington State.

Methods

Participants in the Volunteer Angler Diary Program are issued a waterproof, 6-ring notebook with a set of removable data sheets, along with instructions on how to complete them (Figure 1). Volunteers agree to complete a data sheet for each fishing trip taken during the year for any of the six warmwater species. The anglers are to complete the sheets regardless of their fishing success. Anglers may also complete data sheets for friends and/or family that fish with them and are not actively participating in the program.

Volunteer anglers are asked to record their name, the date, water being fished, county, target species, number of each species caught, the length of each fish caught to the nearest quarter inch, the total number of hours fished for each species, and whether the fish caught are retained or released.

Completed data sheets are then to be returned to WDFW by the end of the year. New data sheets are automatically mailed to each volunteer returning completed forms. Volunteer Angler Diary data is then entered into a computer database. Catch summaries, including catch rates and hours fished, along with length frequency distribution graphs for each species are produced and published in an annual report.



VOLUNTEER ANGLER DIARY

DATE: / /

YOUR NAME:

WATER:

COUNTY:

TARGET SPECIES: WAL LMB SMB BC TMK CC

(circle all that apply for this trip)

Catch Information

	WAL	LMB	SMB	BC	TMK	CC
Record Total Lengths to the Nearest 1/4 inch R = Released (Please circle if released)	R	R	R	R	R	R
	R	R	R	R	R	R
	R	R	R	R	R	R
	R	R	R	R	R	R
	R	R	R	R	R	R
	R	R	R	R	R	R
	R	R	R	R	R	R
	R	R	R	R	R	R
	R	R	R	R	R	R
	R	R	R	R	R	R
	R	R	R	R	R	R
	R	R	R	R	R	R
Total Catch						
Hours Fished						

Please record comments or additional fish for this date on back.

Additional Catch Information

(for the date on reverse)

	Species	Length	Species	Length	Species	Length
Record Total Lengths to the Nearest 1/4 inch R = Released (Please circle if released)		R		R		R
		R		R		R
		R		R		R
		R		R		R
		R		R		R
		R		R		R
		R		R		R
		R		R		R
		R		R		R
		R		R		R
		R		R		R

Add additional fish toTotal Catch on the front side

Comments:

Return completed diaries by end of year (or sooner)

Washington Dept. of Fish and Wildlife
Warmwater Fish Program
600 Captitol Way N.
Olympia, WA 98501-1091

Thank you !

Figure 1. Volunteer Angler Diary pages.

Results

Summary of General Results

Participation in the Volunteer Angler Diary program has fluctuated since the program's inception in 1990 (Table 1). The goal of the program has been to enlist 100 anglers from all regions of the state that actively pursue warmwater game fish and to have them provide information about their fishing trips. We were only able to meet that goal from 2001-2004. However, during that time period there were many anglers that were assigned to the active status category, but were really of unknown status. It has proven to be more challenging to keep track of the anglers than expected. Modifications have been made to the database in order to improve that aspect, but there are still a few adjustments that need to be made. For example, there were 72 registered anglers at the end of 2005. Sixteen anglers joined the program this past year while eight anglers left, resulting in a net gain of 8 anglers. However, at the end of 2006, records show that there were only 76 registered anglers, not the expected 80. Since the inception of the Volunteer Angler Diary program, the number of anglers participating in any given year has ranged from a low of 12 anglers (1995) to a high of 56 anglers (2005). A participating angler is categorized as either a registered angler or a guest angler. A registered angler is defined as an angler that has signed up for the program and each year submits data sheets or expresses an interest to continue in the program. A guest angler is an angler that has not signed up for the program, but fishes with a registered angler on one or more occasions and fills out a data sheet for his/her fishing trip(s). A total of 52 anglers participated in the program this past year and 29 (56%) of these anglers were registered.

Table 1. Angler participation and number of trips from 1990-2006.

Year	No. of Registered Anglers	No. of Participating Anglers	No. of Registered Anglers Participating	No. of Guest Anglers Participating	Percent Registered Angers Participating	No. of Trips
1990	no data	14	14	0	no data	210
1991	no data	21	21	0	no data	482
1992	no data	27	27	0	no data	760
1993	62	27	27	0	44	655
1994	32	17	17	0	53	361
1995	27	12	12	0	44	235
1996	45	21	21	0	47	583
1997	47	14	14	0	30	281
1998	48	13	13	0	27	201
1999			no data			
2000	92	45	13	32	14	402
2001	113	33	28	5	25	271
2002	132	44	27	17	27	549
2003	146	42	26	16	18	493
2004	116	36	27	9	23	504
2005	72	56	28	28	39	509
2006	76	52	29	23	38	603

The 52 anglers submitted data for a total of 608 individual fishing trips. The data from five trips (less than 1%) had to be excluded because they were unusable. Therefore, the final dataset came from data from a total of 603 individual fishing trips conducted on 61 different bodies of water. A total of 434 largemouth bass, 748 smallmouth bass, 1263 walleye, 22 black crappie, 37 tiger muskie, and 10 channel catfish were reported being caught. Ninety-nine percent (N =433) of the largemouth bass caught were released. Ninety-five percent (N = 712) of the smallmouth bass caught were released. Forty-nine percent (N = 619) of the walleye caught were released. Eighty-one percent (N = 18) of the black crappie caught were released. One hundred percent (N=37) of the tiger muskie caught were released. And one hundred percent (N=10) of the channel catfish caught were released.

Largemouth Bass

Catch Data

A total of 434 largemouth bass were caught in 756.5 hours fished on 139 individual fishing trips to 45 different waters in 2006. Of that total, 231 were of quality size (12 inches or greater). Catch and release information was available for 108 trips. Anglers reported practicing catch and release fishing on 107 (99%) of those trips. All of the largemouth bass caught that were under the quality size were released and all but one (99%) of the quality sized bass caught were released.

A complete summary of catch, hours fished and catch rates for largemouth bass 12 inches or greater are listed for each individual water fished in 2006 (Table 2).

Table 2. Summary of catch, hours fished, and catch rates (catch per unit effort (CPUE)) for largemouth bass 12 inches or greater for each individual water fished in 2006.

Water	County	No. of Trips	Hours Fished	No. of Fish Caught	CPUE	Avg Trip Length (hrs)
Banks	Grant	2	12.0	5	0.42	6.0
Big	Skagit	1	8.0	0	0.00	8.0
Black	Thurston	5	27.0	10	0.37	5.4
Campbell	Skagit	6	25.5	5	0.20	4.3
Cavanaugh	Skagit	1	4.5	4	0.89	4.5
Chambers	Thurston	1	4.0	2	0.50	4.0
Clear	Pierce	2	15.0	8	0.53	7.5
Clear	Skagit	2	12.0	1	0.08	6.0
Cottage	King	1	2.0	1	0.50	2.0
Curlew	Ferry	2	6.0	0	0.00	3.0
Duck	Grays Harbor	12	91.5	57	0.62	7.6
Elbow	Thurston	1	8.0	3	0.38	8.0
Fio Rito	Kittitas	1	2.0	0	0.00	2.0
Heart	Skagit	1	4.0	1	0.25	4.0
Hicks	Thurston	1	6.0	4	0.67	6.0
I-82 Pond #5	Yakima	2	5.5	6	1.09	2.8
Joy	King	1	3.0	2	0.67	3.0
Kitsap	Kitsap	1	4.0	5	1.25	4.0
Lacamas	Clark	1	4.0		0.00	4.0
Lawrence	Thurston	1	6.5	0	0.00	6.5
Leland	Jefferson	6	52.0	4	0.08	8.7
Long	Kitsap	5	46.0	10	0.22	9.2
Long	Thurston	6	32.0	16	0.50	5.3
Lost	Mason	1	3.0	0	0.00	3.0
Mason	Mason	2	10.0	4	0.40	5.0
Merwin	Cowlitz	1	8.0	1	0.13	8.0
Nahwatzel	Mason	1	7.0	0	0.00	7.0
Newman	Spokane	2	2.5	1	0.40	1.3
Offutt	Thurston	1	9.0	2	0.22	9.0
Palmer	Okanogan	1	5.0	0	0.00	5.0
Pierre	Stevens	1	4.5	0	0.00	4.5
Potholes	Grant	7	42.0	15	0.36	6.0
Riffe	Lewis	1	7.0	0	0.00	7.0
Samish	Whatcom	2	10.5	3	0.29	5.3
Sammamish	King	1	9.5	1	0.11	9.5
Scooteney	Franklin	1	5.0	0	0.00	5.0
Silver	Cowlitz	12	90.5	12	0.13	7.5
Silver	Spokane	9	22.5	8	0.36	2.5
Spencer	Mason	3	24.0	0	0.00	8.0
St. Clair	Thurston	5	18.0	17	0.94	3.6
Swofford	Lewis	1	2.0	0	0.00	2.0
Terrell	Whatcom	20	70.0	19	0.27	3.5
Umatilla	Klickitat	1	6.0	1	0.17	6.0
Wallula	Benton	3	13.0	3	0.23	4.3
Whatcom	Whatcom	1	7.0	0	0.00	7.0
Totals		**139**	**756.5**	**231**	**0.31**	**5.4**

Length Frequency Distributions

A total of 13 largemouth bass, ranging from 7 inches to 20 inches, were caught on 5 fishing trips to Black Lake (Thurston County) in 2006 (Figure 2).

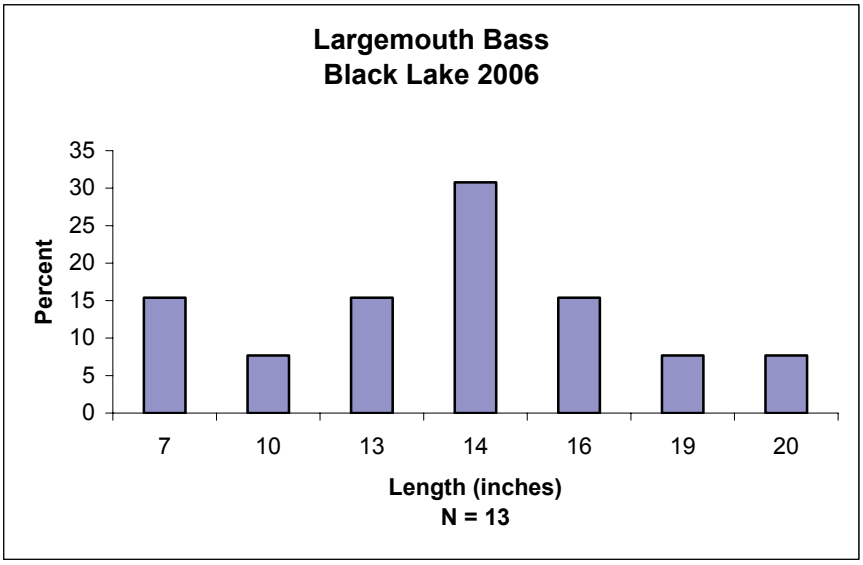


Figure 2. Length frequency distribution of largemouth bass in Black Lake (Thurston Co.) in 2006.

A total of 15 largemouth bass, ranging from 6 inches to 18 inches, were caught on 4 fishing trips to Campbell Lake (Skagit County) in 2006 (Figure 3).

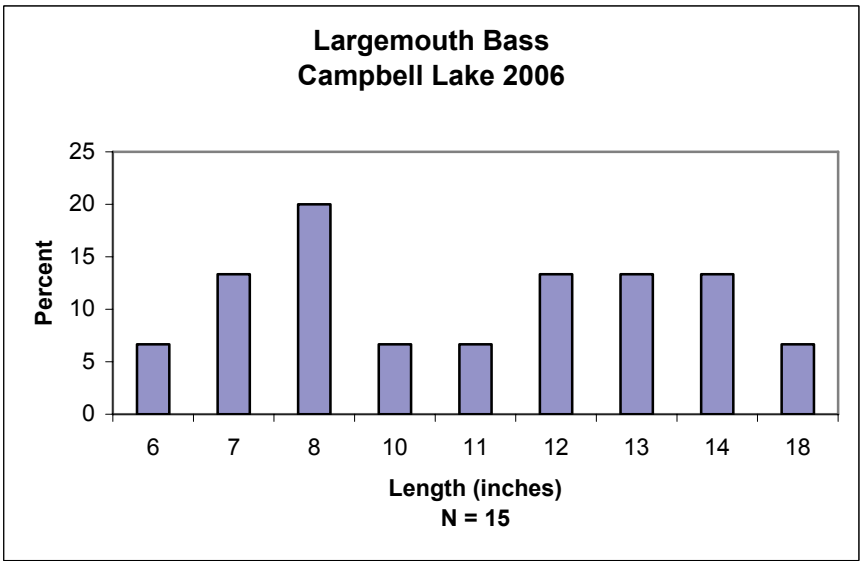


Figure 3. Length frequency distribution of largemouth bass in Campbell Lake (Skagit Co.) in 2006.

A total of 10 largemouth bass, ranging from 11 inches to 27 inches, were caught on 2 fishing trips to Clear Lake (Pierce County) in 2006 (Figure 4).

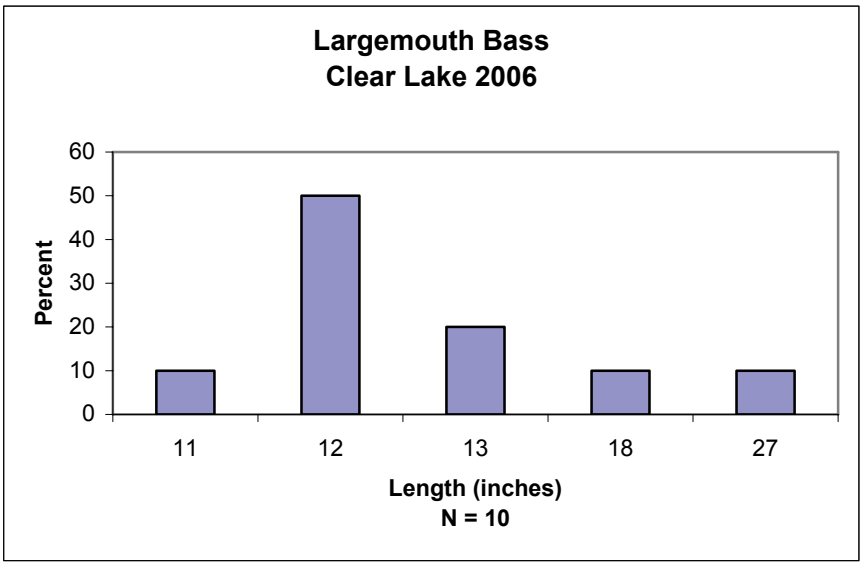


Figure 4. Length frequency distribution of largemouth bass in Clear Lake (Pierce Co.) in 2006.

A total of 10 largemouth bass, ranging from 6 inches to 12 inches, were caught on 2 fishing trips to Curlew Lake (Ferry County) in 2006 (Figure 5).

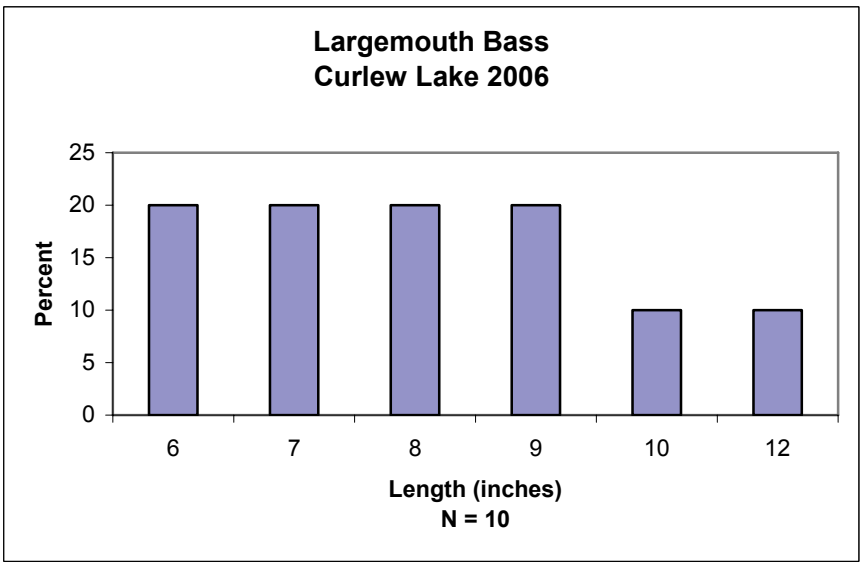


Figure 5. Length frequency distribution of largemouth bass in Curlew Lake (Ferry Co.) in 2006.

A total of 82 largemouth bass, ranging from 6 inches to 19 inches, were caught on 12 fishing trips to Duck Lake (Grays Harbor County) in 2006 (Figure 6).

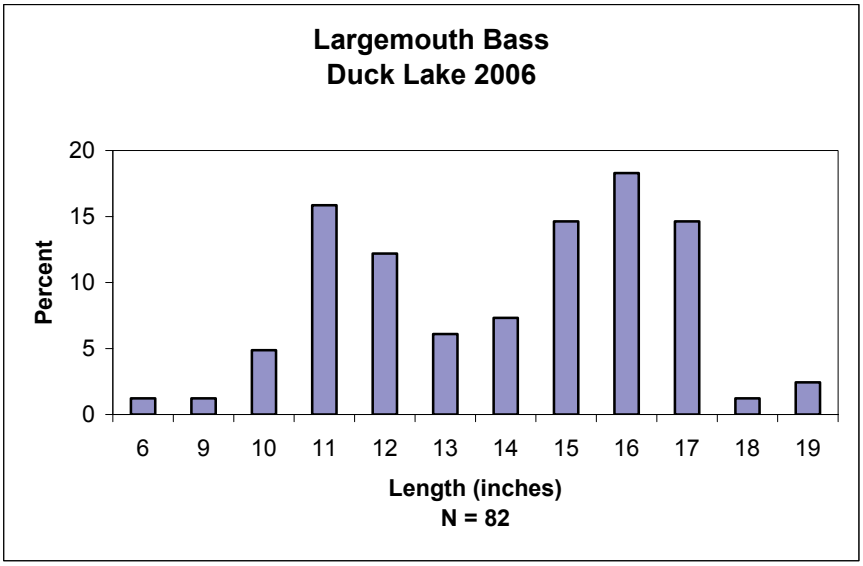


Figure 6. Length frequency distribution of largemouth bass in Duck Lake (Grays Harbor Co.) in 2006.

A total of 18 largemouth bass, ranging from 7 inches to 8 inches, were caught on 1 fishing trip to Fio Rito Lake (Kittitas County) in 2006 (Figure 7).

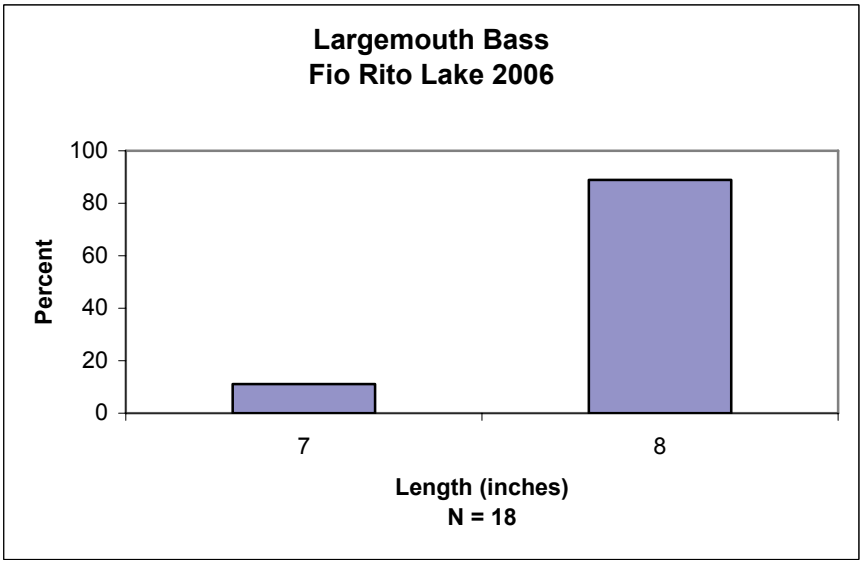


Figure 7. Length frequency distribution of largemouth bass in Fio Rito (Kittitas Co.) in 2006.

A total of 10 largemouth bass, ranging from 7 inches to 14 inches, were caught on 2 fishing trips to I-82 Pond #5 (Yakima County) in 2006 (Figure 8).

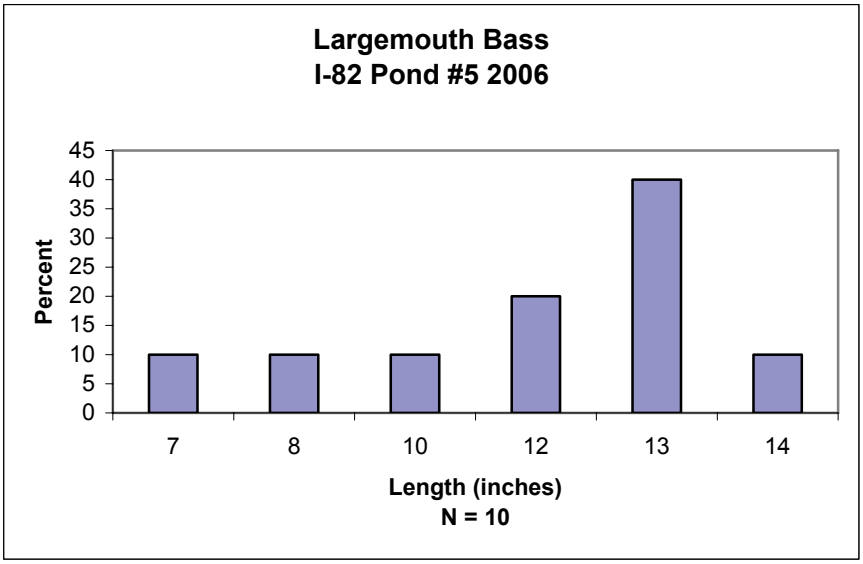


Figure 8. Length frequency distribution of largemouth bass in I-82 Pond #5 (Yakima Co.) in 2006.

A total of 10 largemouth bass, ranging from 5 inches to 21 inches, were caught on 5 fishing trips to Leland Lake (Jefferson County) in 2006 (Figure 9).

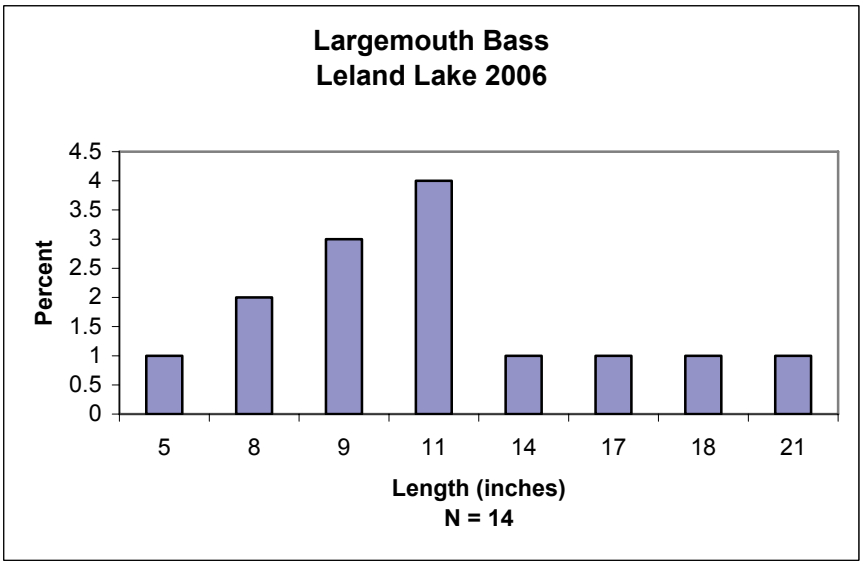


Figure 9. Length frequency distribution of largemouth bass in Leland Lake (Jefferson Co.) in 2006.

A total of 10 largemouth bass, ranging from 17 inches to 24 inches, were caught on 4 fishing trips to Long Lake (Kitsap County) in 2006 (Figure 10).

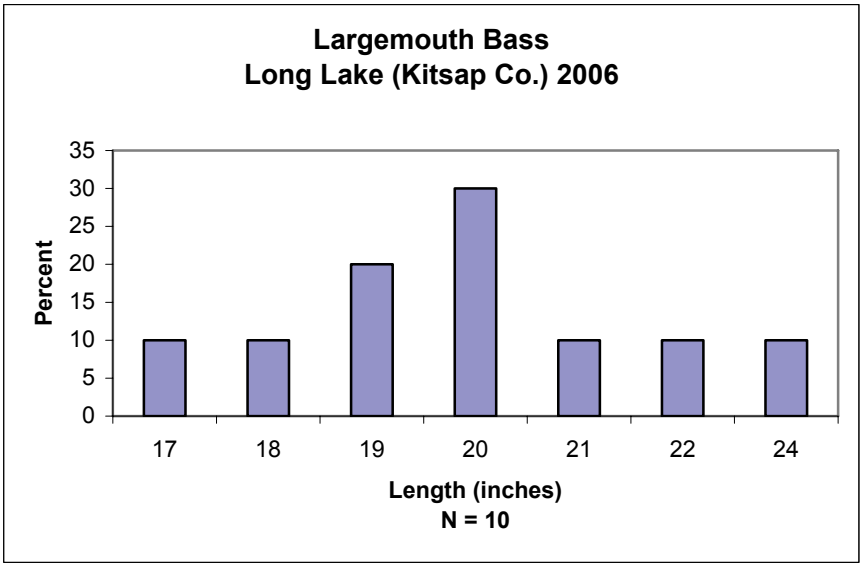


Figure 10. Length frequency distribution of largemouth bass in Long Lake (Kitsap Co.) in 2006.

A total of 21 largemouth bass, ranging from 10 inches to 21 inches, were caught on 4 fishing trips to Long Lake (Thurston County) in 2006 (Figure 11).

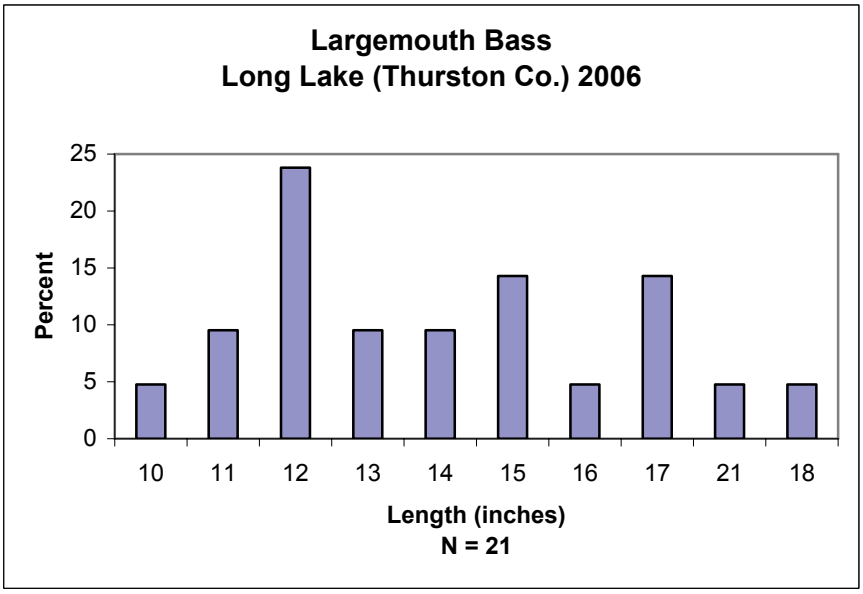


Figure 11. Length frequency distribution of largemouth bass in Long Lake (Thurston Co.) in 2006.

A total of 11 largemouth bass, ranging from 8 inches to 10 inches, were caught on 1 fishing trip to Pierre Lake (Stevens County) in 2006 (Figure 12).

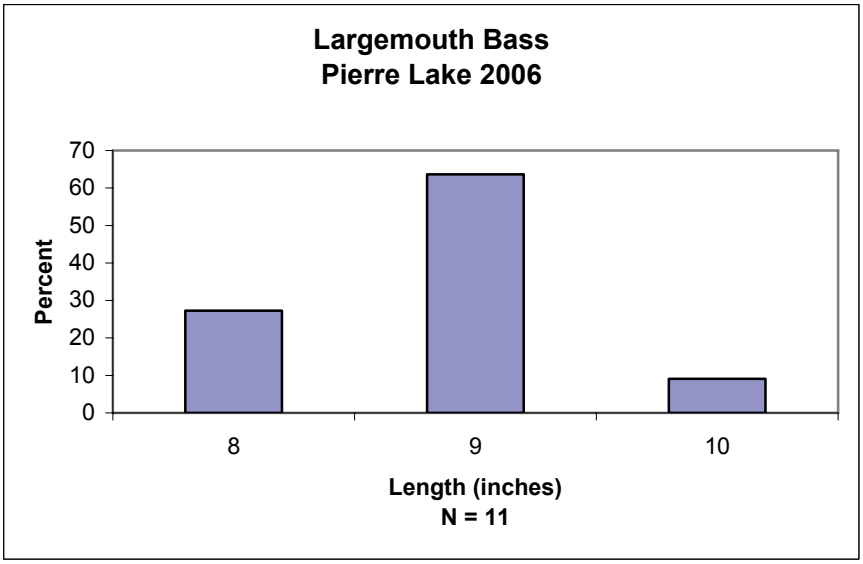


Figure 12. Length frequency distribution of largemouth bass in Pierre Lake (Stevens Co.) in 2006.

A total of 16 largemouth bass, ranging from 11 inches to 21 inches, were caught on 5 fishing trips to Potholes Reservoir (Grant County) in 2006 (Figure 13).

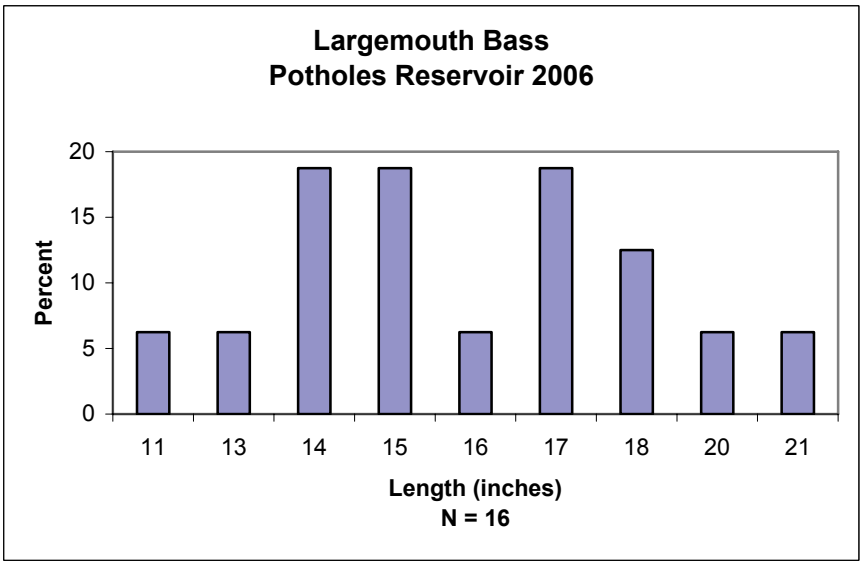


Figure 13. Length frequency distribution of largemouth bass in Potholes Reservoir (Grant Co.) in 2006.

A total of 14 largemouth bass, ranging from 5 inches to 16 inches, were caught on 2 fishing trips to Samish Lake (Whatcom County) in 2006 (Figure 14).

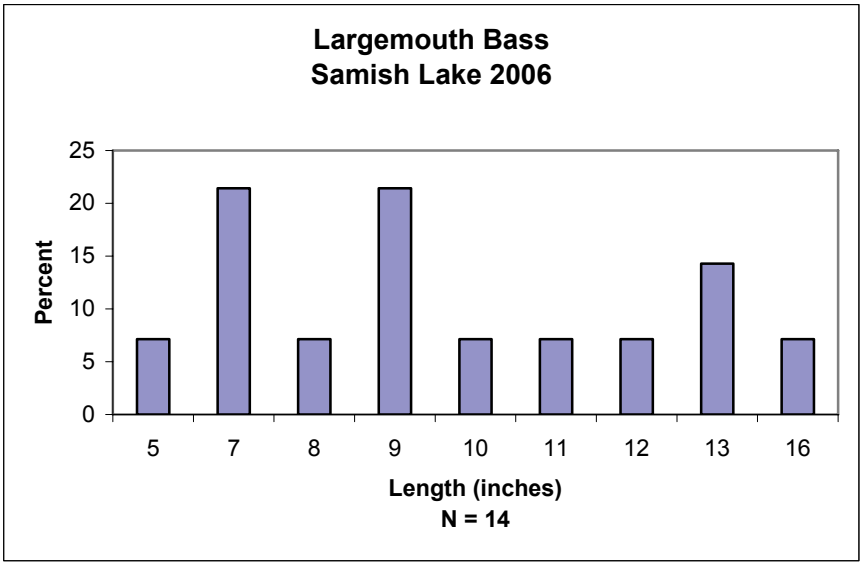


Figure 14. Length frequency distribution of largemouth bass in Samish Lake (Whatcom Co.) in 2006.

A total of 19 largemouth bass, ranging from 6 inches to 24 inches, were caught on 7 fishing trips to Silver Lake (Cowlitz County) in 2006 (Figure 15).

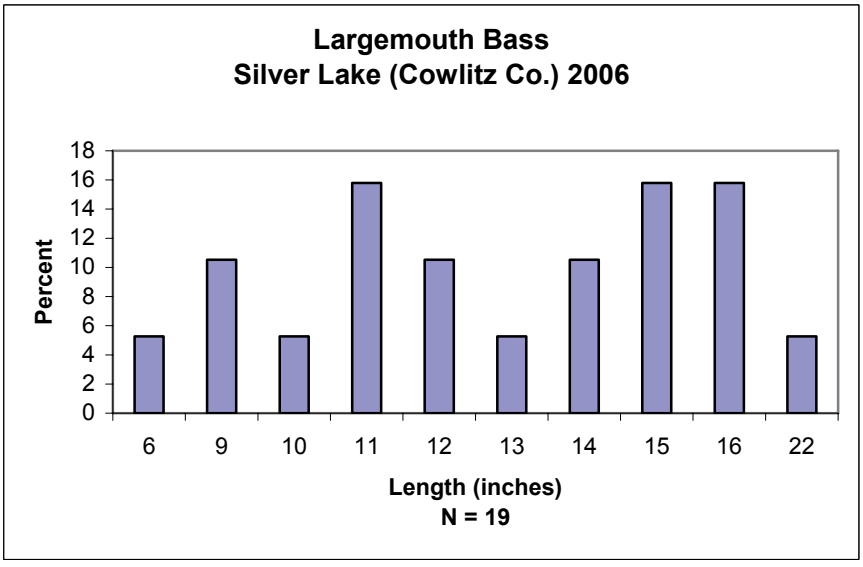


Figure 15. Length frequency distribution of largemouth bass in Silver Lake (Cowlitz Co.) in 2006.

A total of 24 largemouth bass, ranging from 7 inches to 18 inches, were caught on 8 fishing trips to Silver Lake (Spokane County) in 2006 (Figure 16).

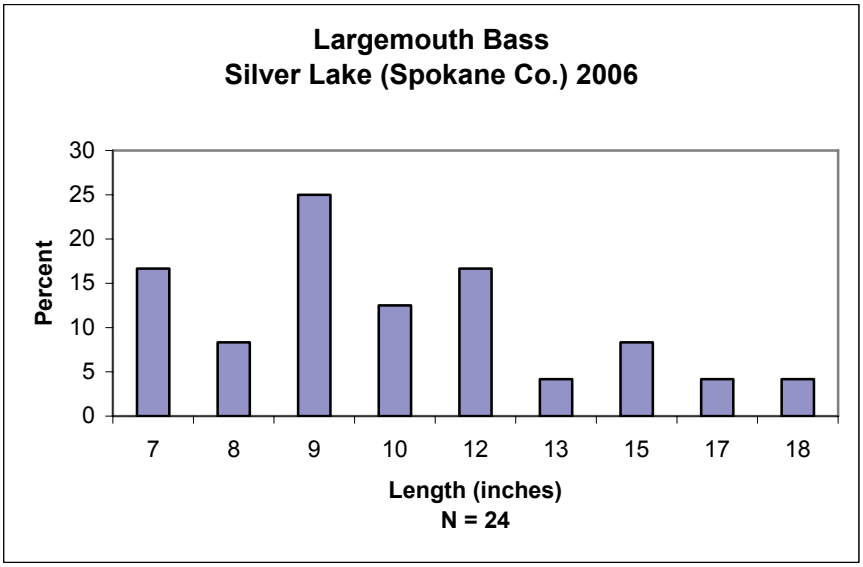


Figure 16. Length frequency distribution of largemouth bass in Silver Lake (Spokane Co.) in 2006.

A total of 30 largemouth bass, ranging from 7 inches to 17 inches, were caught on 5 fishing trips to Lake St. Clair (Thurston County) in 2006 (Figure 17).

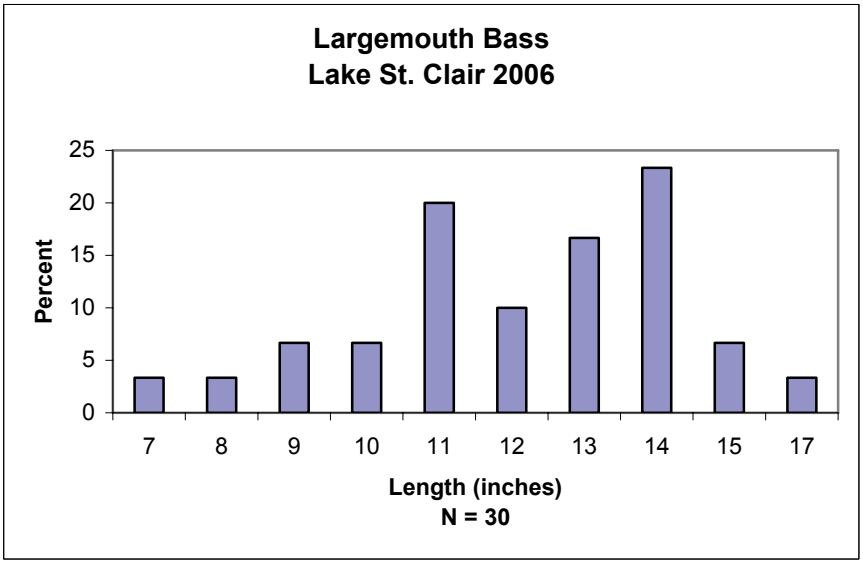


Figure 17. Length frequency distribution of largemouth bass in Lake St. Clair (Thurston Co.) in 2006.

A total of 49 largemouth bass, ranging from 5 inches to 21 inches, were caught on 13 fishing trips to Terrell Lake (Whatcom County) in 2006 (Figure 18).

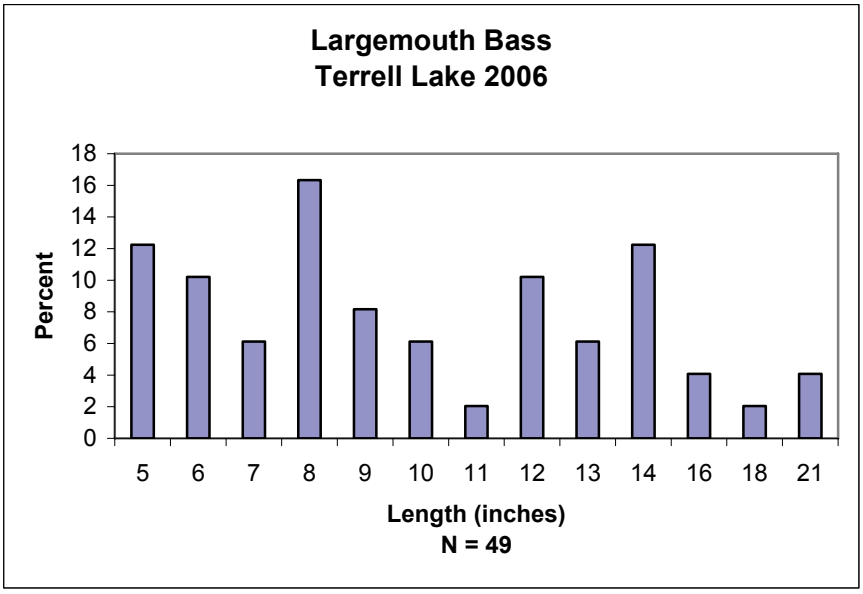


Figure 18. Length frequency distribution of largemouth bass in Terrell Lake (Whatcom Co.) in 2006

Comparative Catch Information

The statewide catch rate or catch per unit effort (CPUE) for largemouth bass of any size was 0.73 fish per hour in 2006. The statewide CPUE for largemouth bass of any size was highest in 2004 at 1.11 per hour. The CPUE for other years in which data was collected, ranged from 0.39 to 0.96 (Table 3). The statewide CPUE for largemouth bass 12 inches or greater was 0.39 fish per hour in 2006. The statewide catch rate for largemouth bass 12 inches or greater was highest in 1993 at 0.59 fish per hour. The CPUE for other years in which data was collected, ranged from 0.16 to 0.51 (Table 3).

Table 3. Annual volunteer angler catch rate (catch per unit effort (CPUE)) for largemouth bass caught of any size and for largemouth bass 12 inches or greater, 1990-2006.

			All Sizes		>= 12 inches	
Year	No. of Waters	Hours Fished	No. Caught	CPUE	No. Caught	CPUE
1990	27	805.0	573	0.71	291	0.36
1991	48	1,985.0	1,148	0.58	589	0.30
1992	42	2,408.0	1,574	0.65	1,227	0.51
1993	40	1,953.0	1,505	0.77	1,149	0.59
1994	23	1,047.0	573	0.55	402	0.38
1995	16	617.5	290	0.47	186	0.30
1996	25	925.0	494	0.53	295	0.32
1997	23	751.0	316	0.42	145	0.19
1998	16	454.0	178	0.39	71	0.16
1999			no data			
2000	17	226.5	122	0.54	40	0.18
2001	30	462.8	336	0.73	168	0.36
2002	45	755.8	531	0.70	337	0.45
2003	47	792.4	744	0.94	369	0.47
2004	32	608.9	673	1.11	203	0.33
2005	37	586.3	564	0.96	253	0.43
2006	39	595.0	434	0.73	231	0.39

Smallmouth Bass

Catch Data

A total of 401 smallmouth bass, 11 inches or greater, were caught in 1006.8 hours fished on 173 individual fishing trips to 21 different waters in 2006. Catch and release information was available for all trips. Anglers reported practicing catch and release on 156 (90%) trips. Catch and release information was available for 748 individual smallmouth bass of all sizes caught. Ninety-five percent (712) of those fish were released. Catch and release information was also available for 401 individual largemouth bass 11 inches or greater caught. Ninety-five percent (379) of those fish were released.

A complete summary of catch, hours fished and catch rates for smallmouth bass 11 inches or greater are listed for each individual water fished in 2006 (Table 4).

Table 4. Summary of catch, hours fished, and catch rates (catch per unit effort (CPUE)) for smallmouth bass 11 inches or greater for each individual water fished in 2006.

Water	County	No. Of trips	Hours fished	No. Fish caught	CPUE	Avg. Trip length (hrs)
Banks	Grant	14	66.3	52	0.78	4.7
Black	Thurston	3	13.5	3	0.22	4.5
Columbia*	Clark	5	18.5	0	0.00	3.7
Goodwin	Snohomish	1	6.0	1	0.17	6.0
Joy	King	1	3.0	0	0.00	3.0
Long	Spokane	3	14.5	7	0.48	4.8
Lost	Mason	1	3.0	1	0.33	3.0
Moses	Grant	4	8.5	2	0.24	2.1
Palmer	Okanogan	4	15.5	3	0.19	3.9
Potholes	Grant	6	32.5	11	0.34	5.4
Priest Rapids	Grant	2	4.0	3	0.75	2.0
Riffe	Lewis	2	10.0	19	1.90	5.0
Roosevelt	Stevens	11	139.5	27	0.19	12.7
Rufus Woods	Okanogan	1	1.5	0	0.00	1.5
Sacajawea	Walla Walla	1	5.0	3	0.60	5.0
Samish	Whatcom	2	10.5	2	0.19	5.3
Sammamish	King	2	14.0	6	0.43	7.0
Scooteney	Franklin	1	5.0	2	0.40	5.0
Tapps	Pierce	56	178.5	94	0.53	3.2
Umatilla	Klickitat	28	225.0	69	0.31	8.0
Wallula	Benton	13	63.0	20	0.32	4.8
Washington	King	7	43.0	23	0.53	6.1
Whatcom	Whatcom	32	131.0	53	0.40	4.1
Totals		**200**	**1011.3**	**401**	**0.40**	**5.1**

Length Frequency Distributions

A total of 103 smallmouth bass, ranging from 7 inches to 18 inches, were caught on 12 fishing trips to Banks Lake (Grant County) in 2006 (Figure 19).

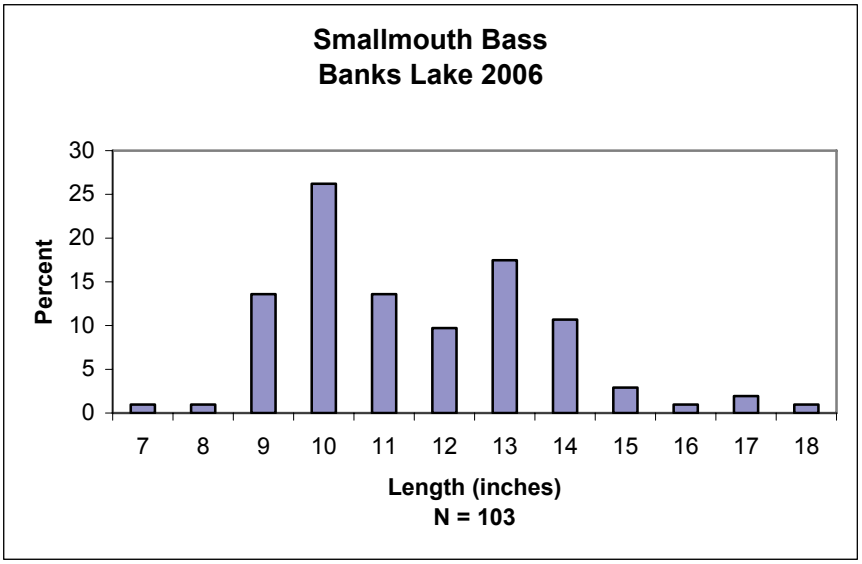


Figure 19. Length frequency distribution of smallmouth bass in Banks Lake (Grant Co.) in 2006.

A total of 12 smallmouth bass, ranging from 9 inches to 13 inches, were caught on 2 fishing trips to Long Lake (Spokane County) in 2006 (Figure 20).

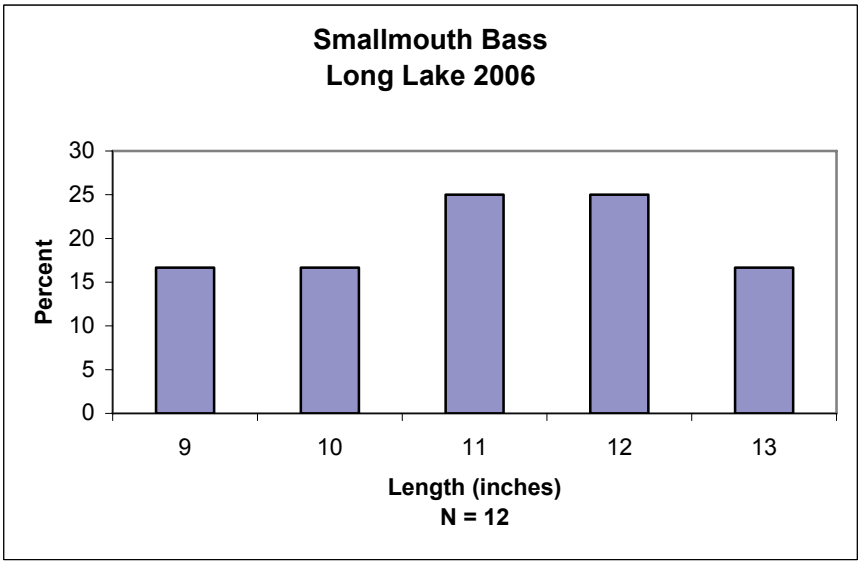


Figure 20. Length frequency distribution of smallmouth bass in Long Lake (Spokane Co.) in 2006.

A total of 10 smallmouth bass, ranging from 8 inches to 13 inches, were caught on 4 fishing trips to Moses Lake (Grant County) in 2006 (Figure 21).

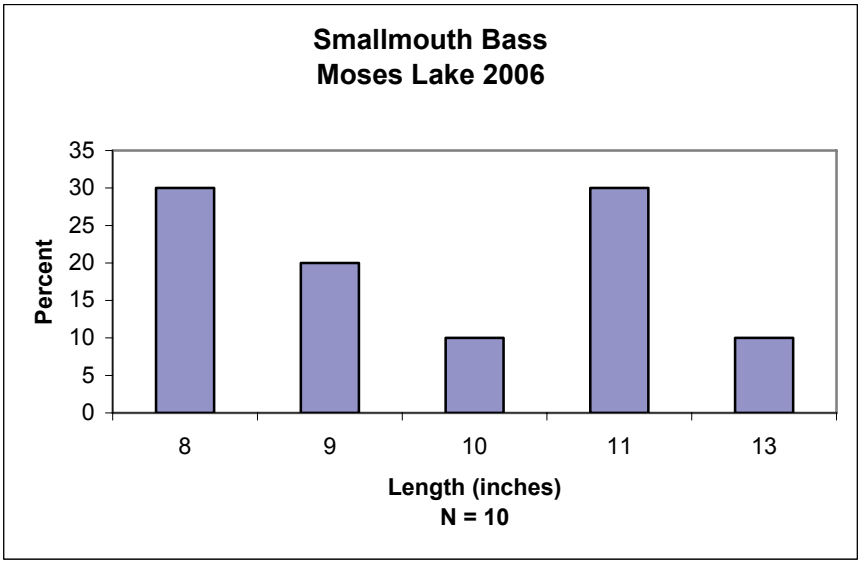


Figure 21. Length frequency distribution of smallmouth bass in Moses Lake (Grant Co.) in 2006.

A total of 13 smallmouth bass, ranging from 9 inches to 16 inches, were caught on 5 fishing trips to Potholes Reservoir (Grant County) in 2006 (Figure 22).

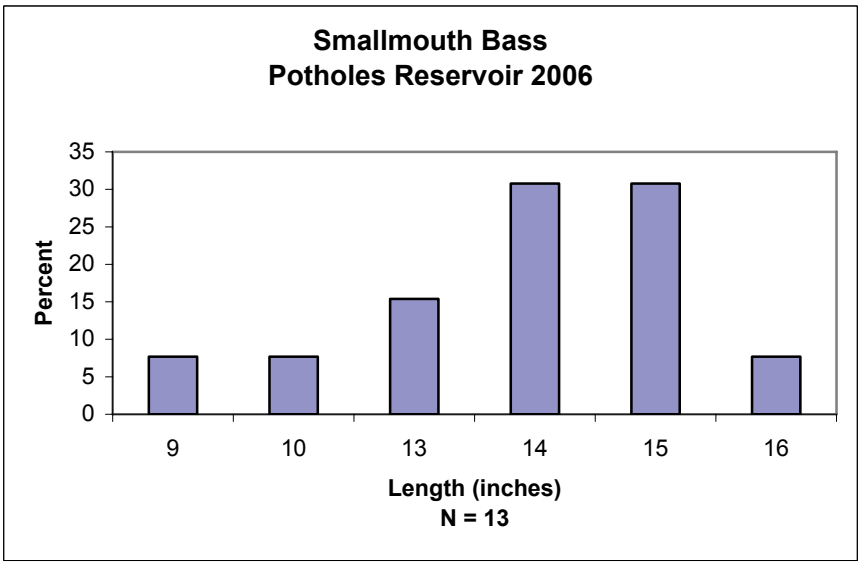


Figure 22. Length frequency distribution of smallmouth bass in Potholes Reservoir (Grant Co.) in 2006 .

A total of 38 smallmouth bass, ranging from 8 inches to 18 inches, were caught on 2 fishing trips to Riffe Lake (Lewis County) in 2006 (Figure 23).

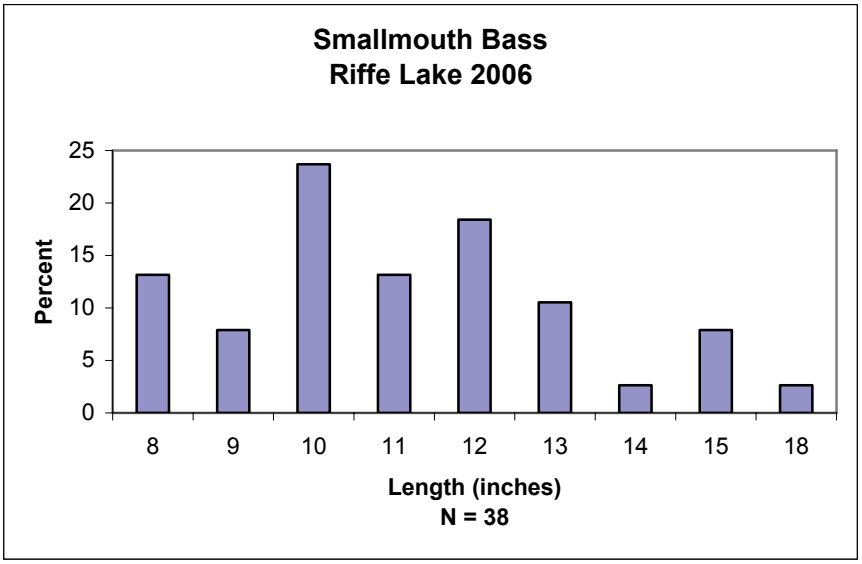


Figure 23. Length frequency distribution of smallmouth bass in Riffe Lake (Lewis Co.) in 2006.

A total of 42 smallmouth bass, ranging from 6 inches to 18 inches, were caught on 10 fishing trips to Lake Roosevelt (Ferry, Grant, Lincoln, Okanogan, Spokane, and Stevens Counties) in 2006 (Figure 24).

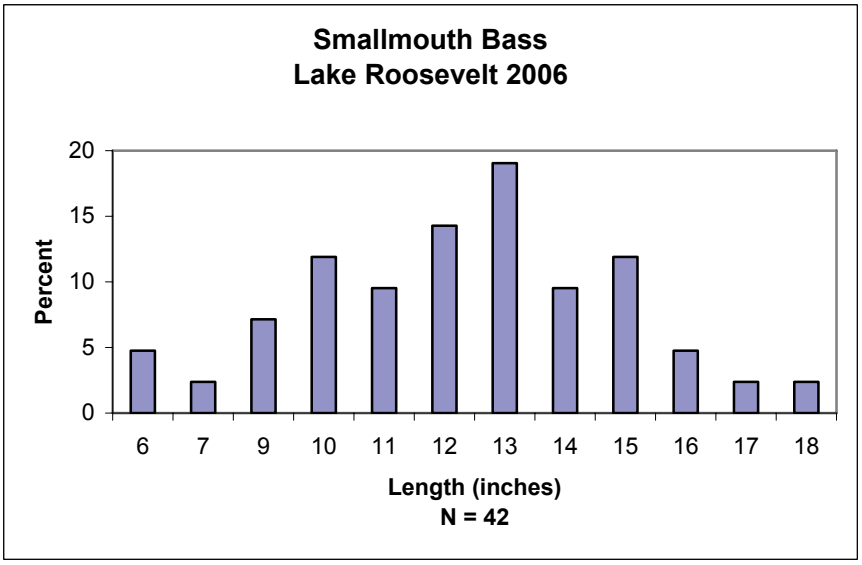


Figure 24. Length frequency distribution of smallmouth bass in Lake Roosevelt (Ferry, Grant, Lincoln, Okanogan, Spokane, and Stevens Cos.) in 2006.

A total of 202 smallmouth bass, ranging from 6 inches to 21 inches, were caught on 45 fishing trips to Lake Tapps (Pierce County) in 2006 (Figure 25).

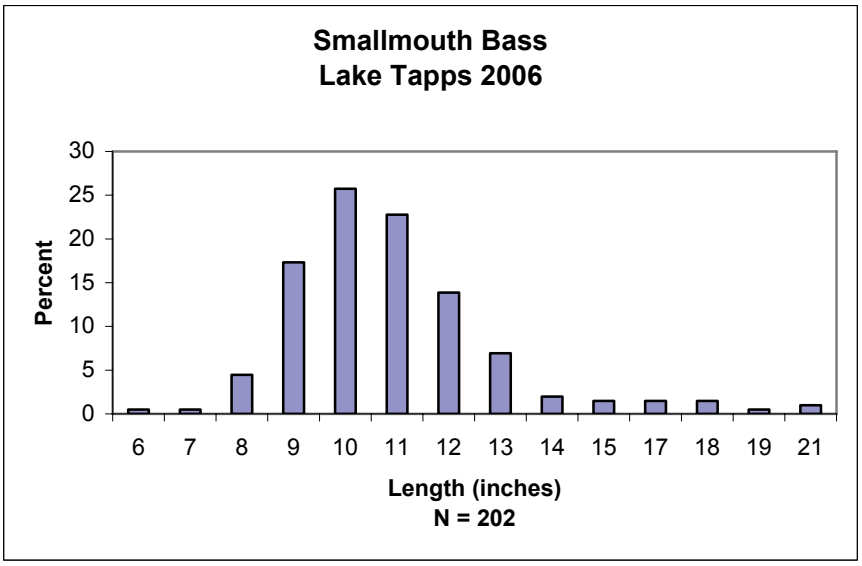


Figure 25. Length frequency distribution of smallmouth bass in Lake Tapps (Pierce Co.) in 2006.

A total of 129 smallmouth bass, ranging from 4 inches to 20 inches, were caught on 28 fishing trips to Lake Umatilla (Benton and Klickitat Counties) in 2006 (Figure 26).

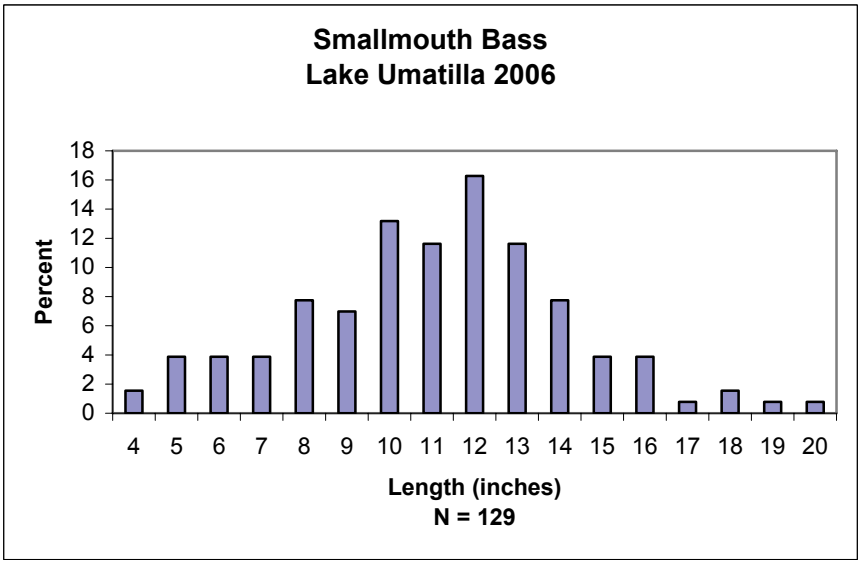


Figure 26. Length frequency distribution of smallmouth bass in Lake Umatilla (Benton and Klickitat Cos.) in 2006.

A total of 51 smallmouth bass, ranging from 5 inches to 26 inches, were caught on 12 fishing trips to Lake Wallula (Benton, Franklin, Grant, and Walla Walla Counties) in 2006 (Figure 27).

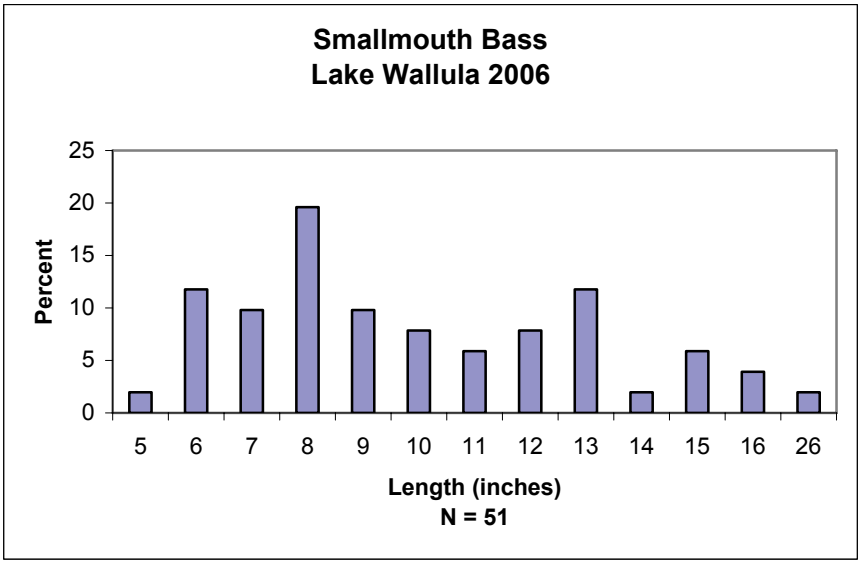


Figure 27. Length frequency distribution of smallmouth bass in Lake Wallula (Benton, Franklin, Grant, and Walla Walla Cos.) in 2006.

A total of 25 smallmouth bass, ranging from 10 inches to 19 inches, were caught on 7 fishing trips to Lake Washington (King County) in 2006 (Figure 28).

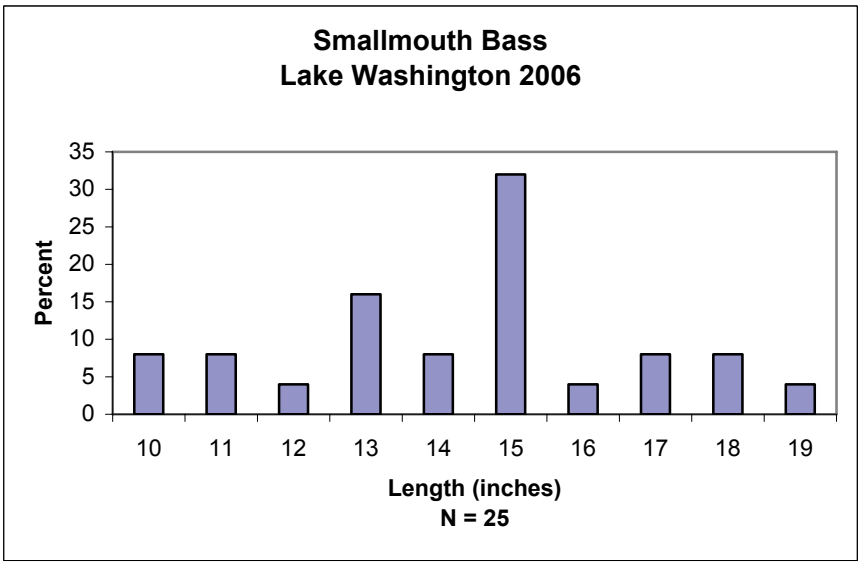


Figure 28. Length frequency distribution of smallmouth bass in Lake Washington (King Co.) in 2006.

A total of 90 smallmouth bass, ranging from 5 inches to 23 inches, were caught on 28 fishing trips to Lake Whatcom (Whatcom County) in 2006 (Figure 29).

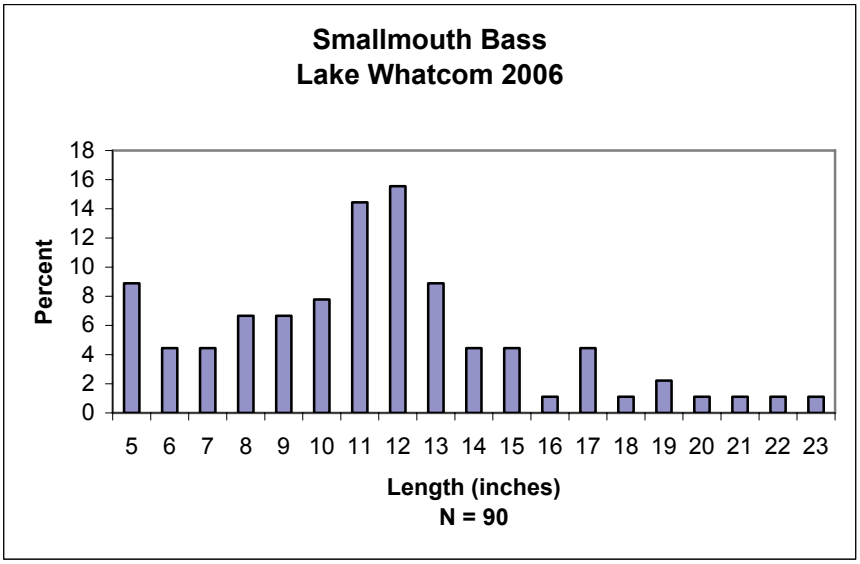


Figure 29. Length frequency distribution of smallmouth bass in Lake Whatcom (Whatcom Co.) in 2006.

Comparative Catch Information

The statewide CPUE for smallmouth bass of any size was 0.74 fish per hour in 2006. The statewide CPUE for smallmouth bass of any size was highest in 1995 at 1.31 fish per hour. The CPUE for all other years in which data was collected, ranged from 0.34 to 1.23 (Table 5). The statewide CPUE for smallmouth bass 11 inches or greater was 0.40 fish per hour in 2006. The statewide CPUE for smallmouth bass 11 inches or greater was highest in 1995 at 1.11 fish per hour. The CPUE for other years in which data was collected, ranged for 0.25 to 1.01 fish per hour (Table 5).

Table 5. Annual volunteer angler catch rate (catch per unit effort (CPUE)) for smallmouth bass caught of any size and for smallmouth bass 11 inches or greater, 1990-2006.

			All Sizes		>= 11 inches	
Year	No. of Waters	Hours Fished	No. Caught	CPUE	No. Caught	CPUE
1990	19	432.0	378	0.88	240	0.56
1991	25	864.0	525	0.61	315	0.36
1992	19	610.0	525	0.86	403	0.66
1993	21	851.0	900	1.06	609	0.72
1994	17	535.0	294	0.55	227	0.42
1995	6	227.0	297	1.31	253	1.11
1996	14	609.0	563	0.92	512	0.84
1997	11	548.5	344	0.63	253	0.46
1998	8	282.5	96	0.34	71	0.25
1999			no data			
2000	14	529.5	418	0.79	295	0.56
2001	21	417.5	323	0.77	190	0.46
2002	33	1,435.5	959	0.67	815	0.57
2003	28	846.0	787	0.93	648	0.77
2004	23	742.0	420	0.57	290	0.39
2005	22	488.5	366	0.75	264	0.54
2006	23	1103.3	748	0.68	404	0.37

Walleye

Catch Data

A total of 811 walleye, 15 inches or greater, were caught in 1142.3 hours fished on 184 individual fishing trips to 10 different waters in 2006. Catch and release information was available for all trips. Anglers reported practicing catch and release fishing on walleye on 49 (27%) trips. Catch and release information was available for 1263 walleye of all sizes caught. Forty-nine percent (619) of those fish were released. Catch and release information was also available for 811 walleye 15 inches or greater caught. Thirty-nine percent (312) of those fish were released.

A complete summary of catch, hours fished and catch rates for walleye 15 inches or greater are listed for each individual water fished in 2006 (Table 6).

Table 6. Summary of catch, hours fished, and catch rates (catch per unit effort (CPUE) for walleye 15 inches or greater for each individual water fished in 2006.

Water	County	No. Of trips	Hours fished	No. Fish caught	CPUE	Avg. Trip length (hrs)
Banks	Grant	13	50.0	14	0.28	3.8
Celilo	Klickitat	2	22.0	7	0.32	11.0
Columbia*	Clark, Cowlitz, Wahkiakum	9	40.0	0	0.00	4.4
Evergreen	Grant	1	2.0	0	0.00	2.0
Herbert G. West	Columbia, Franklin	1	6.0	0	0.00	6.0
Moses	Grant	14	41.5	10	0.24	3.0
Potholes	Grant	30	196.0	29	0.15	6.5
Roosevelt	Ferry, Grant, Stevens, Lincoln, Okanogan	113	620.8	571	0.92	5.5
Rufus Woods	Douglas, Okanogan	2	5.5	0	0.00	2.8
Sacajawea	Walla Walla	2	10.0	0	0.00	5.0

Length Frequency Distributions

A total of 14 walleye, ranging from 16 inches to 22 inches, were caught on 7 fishing trips to Banks Lake (Grant County) in 2006 (Figure 30).

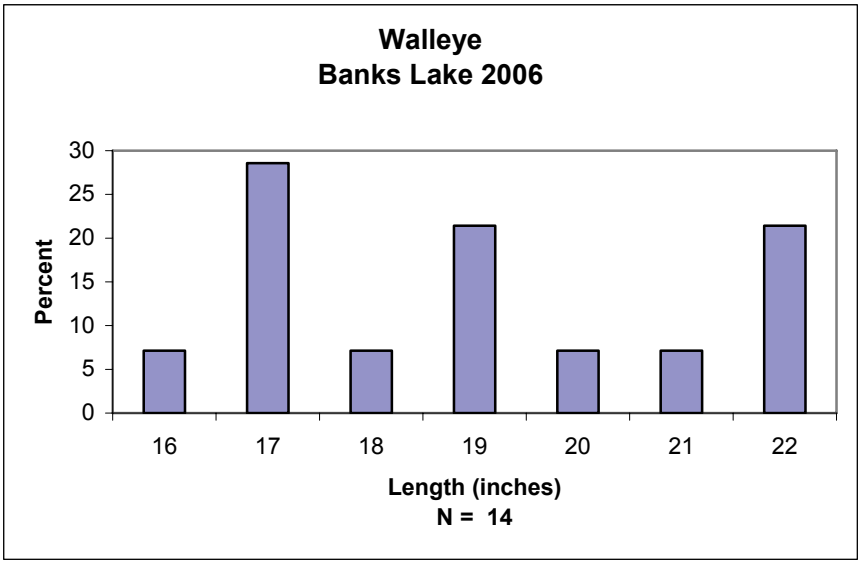


Figure 30. Length frequency distribution of walleye in Banks Lake (Grant Co.) in 2006.

A total of 25 walleye, ranging from 13 inches to 28 inches, were caught on 12 fishing trips to Moses Lake (Grant County) in 2006 (Figure 31).

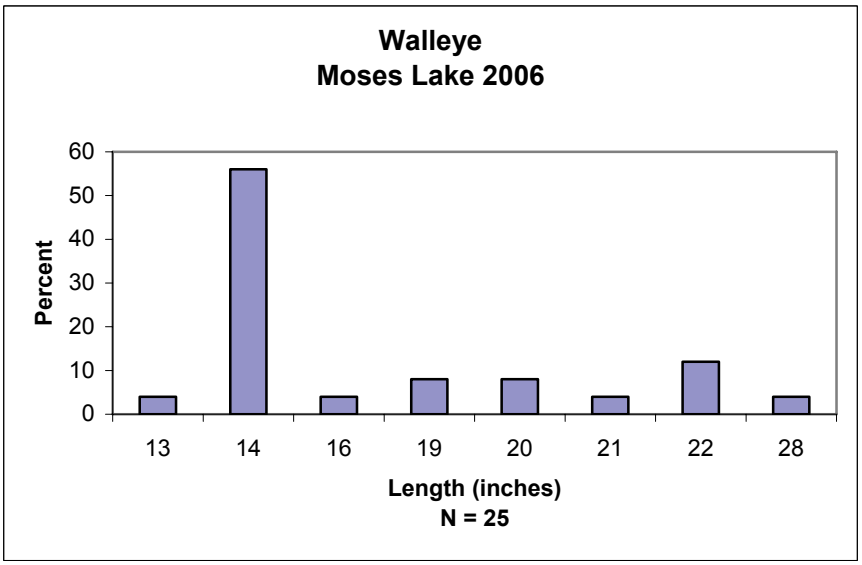


Figure 31. Length frequency distribution of walleye in Moses Lake (Grant Co.) in 2006.

A total of 55 walleye, ranging from 10 inches to 24 inches, were caught on 13 fishing trips to Potholes Reservoir (Grant County) in 2006 (Figure 32).

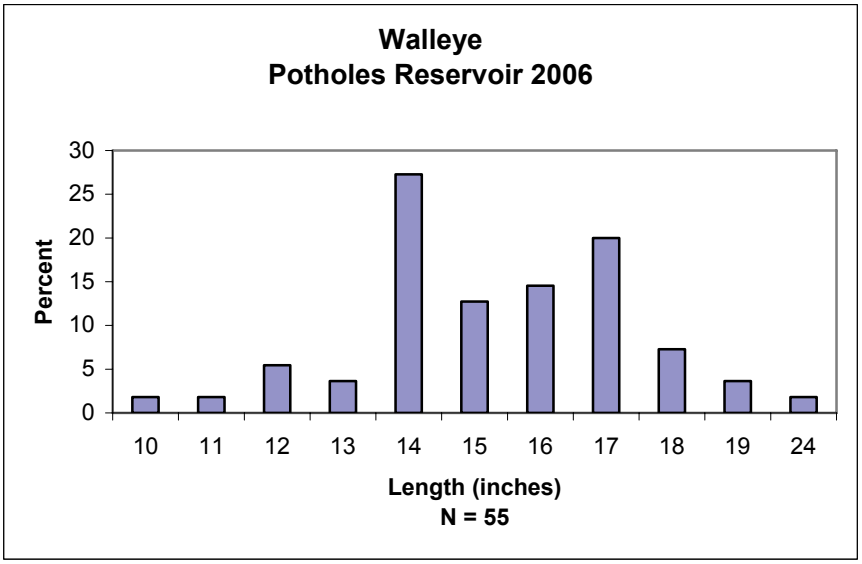


Figure 32. Length frequency distribution of walleye in Potholes Reservoir (Grant Co.) in 2006.

A total of 959 walleye, ranging from 9 inches to 30 inches, were caught on 108 fishing trips to Lake Roosevelt (Ferry, Grant, Lincoln, Okanogan, Spokane, and Stevens Counties) in 2006 (Figure 33).

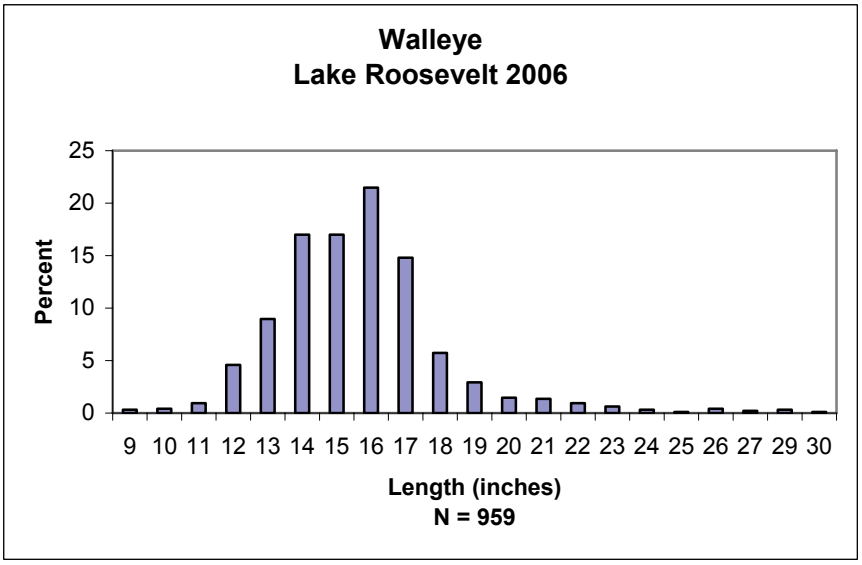


Figure 33. Length frequency distribution of walleye in Lake Roosevelt (Ferry, Grant, Lincoln, Okanogan, Spokane, and Stevens Cos.) in 2006.

A total of 171 walleye, ranging from 7 inches to 30 inches, were caught on 32 fishing trips to Lake Umatilla (Benton and Klickitat Counties) in 2006 (Figure 34).

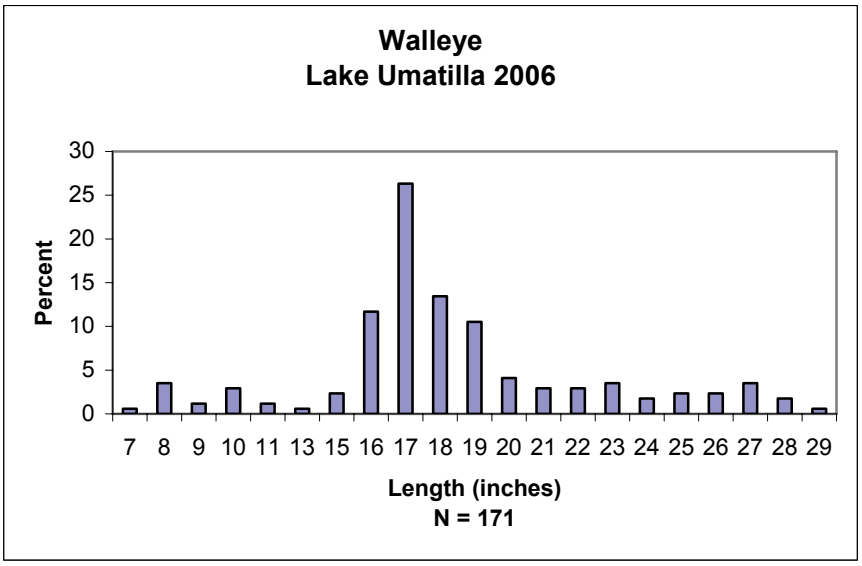


Figure 34. Length frequency distribution of walleye in Lake Umatilla (Benton and Klickitat Cos.) in 2006.

A total of 29 walleye, ranging from 14 inches to 31 inches, were caught on 8 fishing trips to Lake Wallula (Benton, Franklin, Grant, and Walla Walla Counties) in 2006 (Figure 35).

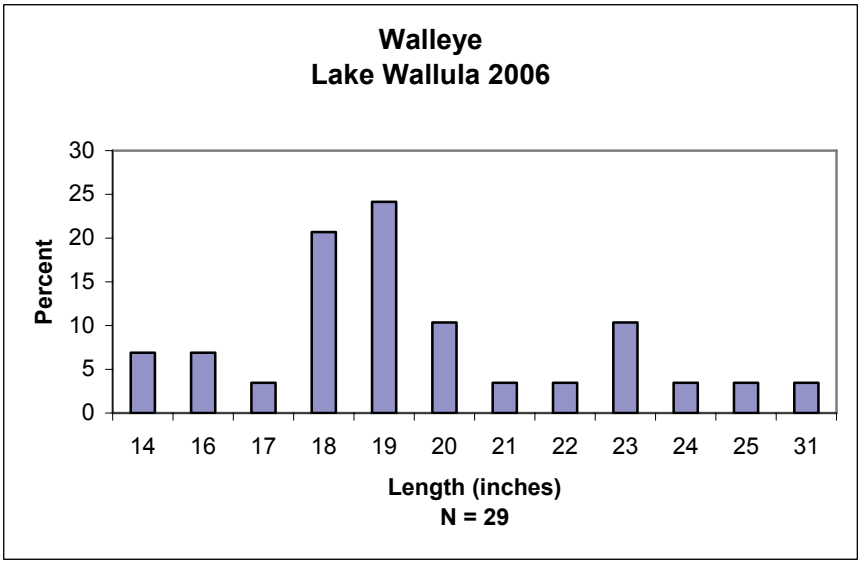


Figure 35. Length frequency distribution of walleye in Lake Wallula (Benton, Franklin, Grant, and Walla Walla Cos.) in 2006.

Comparative Catch Information

The statewide CPUE for walleye of any size was 1.11 fish per hour in 2006. The statewide CPUE for walleye of any size was highest in 1994 at 1.34 fish per hour. The CPUE for all other years, in which data was collected, has ranged from 0.24 to 1.20 (Table 7). The statewide CPUE for walleye 15 inches or greater was 0.71 fish per hour in 2006. The CPUE for walleye 16 inches and greater was highest in 2005 at 0.75 fish per hour. The CPUE for other years in which data was collected, ranged for 0.14 to 0.68 fish per hour (Table 7).

Table 7. Annual volunteer angler catch rate (catch per unit effort (CPUE)) for walleye caught of any size and for walleye 15 inches or greater, 1990-2006.

			All Sizes		>= 15 inches	
Year	No. of Waters	Hours Fished	No. Caught	CPUE	No. Caught	CPUE
1990	7	272.0	89	0.33	78	0.29
1991	9	323.0	440	1.36	160	0.50
1992	9	1,607.0	1,680	1.05	810	0.50
1993	13	1,584.0	1,335	0.84	804	0.51
1994	10	691.0	927	1.34	466	0.67
1995	7	436.0	506	1.16	297	0.68
1996	10	1,721.0	1539	0.89	1,003	0.58
1997	5	568.0	311	0.55	214	0.38
1998	9	588.3	349	0.59	197	0.33
1999			no data			
2000	13	1,382.8	334	0.24	210	0.15
2001	11	641.0	163	0.25	88	0.14
2002	17	856.3	342	0.40	261	0.30
2003	12	916.5	541	0.59	370	0.40
2004	10	1,179.5	994	0.84	554	0.47
2005	9	1233.0	1096	0.89	690	0.56
2006	14	1383.0	1263	0.91	811	0.59

Black Crappie

Catch Data

A total of 15 black crappie, 8 inches or greater, were caught in 28.5 hours fished on eight individual trips to 5 different waters in 2006. Catch and release information was available for all trips. Anglers reported practicing catch and release fishing on black crappie on six (75%) trips. Catch and release information was available for 22 black crappie of any size. Eighty-two percent (18) of those fish were released. Catch and release information was also available for 15 black crappie 8 inches or greater caught. Seventy-three (11) of those fish were released.

A complete summary of catch, hours fished and catch rates for black crappie 8 inches or greater are listed for each individual water fished in 2006 (Table 8).

Table 8. Summary of catch, hours fished, and catch rates (catch per unit effort (CPUE)) for black crappie 8 inches or greater for each individual water fished in 2006.

Water	County	No. Of trips	Hours fished	No. Fish caught	CPUE	Avg trip length (hrs)
Banks	Grant	1	1.0	2	2.00	1.0
Evergreen	Grant	1	1.0	1	1.00	1.0
I-82 Pond #5	Yakima	1	3.0	1	0.33	3.0
Long	Spokane	6	34.5	10	0.48	5.8
Moses	Grant	1	1.5	0	0.00	1.5
Silver	Spokane	1	2.5	1	0.40	2.5
Totals		**11**	**43.5**	**15**	**0.34**	**4.0**

Length Frequency Distribution

A total of 10 black crappie, ranging from 12 inches to 14 inches, were caught on 4 fishing trips to Long Lake (Spokane and Stevens Counties) in 2006 (Figure 36).

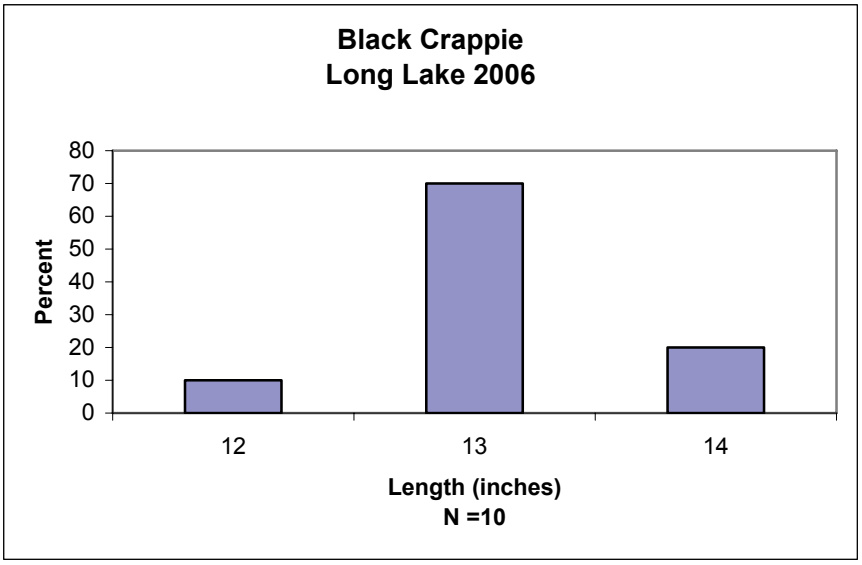


Figure 36. Length frequency distribution of black crappie in Long Lake (Spokane and Stevens Cos.) in 2006.

Comparative Catch Information

The statewide CPUE for black crappie of any size was 0.77 fish per hour in 2006. The statewide CPUE for black crappie of any size was highest in 2001 at 2.36 fish per hour. The CPUE for the other years in which data was collected, ranged from 1.03 to 1.88 fish per hour (Table 9). The statewide CPUE for black crappie 8 inches or greater was 0.53 fish per hour in 2006. The statewide CPUE for black crappie 8 inches or greater was highest in 2001 at 1.25 fish per hour. The CPUE for the other years in which data was collected, ranged from 0.13 to 1.22 fish per hour (Table 9).

Table 9. Annual average volunteer angler catch rate (catch per unit effort (CPUE) for black crappie caught of any size and for black crappie 8 inches or greater, 2001-2005 (no data was available prior to 2001).

			All Sizes		>= 8 inches	
Year	No. of Waters	Hours Fished	No. Caught	CPUE	No. Caught	CPUE
2000	0					
2001	4	81.8	193	2.36	102	1.25
2002	5	46.0	65	1.41	56	1.22
2003	6	37.8	71	1.88	5	0.13
2004	3	47.5	49	1.03	39	0.82
2005	6	61.0	64	1.05	37	0.61
2006	5	28.5	22	0.77	15	0.53

Tiger Muskie

Catch Data

A total of 20 tiger muskie, 36 inches or greater, were caught in 163.0 hours on 31 individual trips to 4 different bodies of water. Catch and release information was available for all trips. Anglers reported practicing catch and release fishing on tiger muskie on 31 (100%) trips. Catch and release information was available for 37 tiger muskie of any size. One-hundred percent (37) of those fish were released. Catch and release information was also available for 20 tiger muskie 36 inches or greater caught. One-hundred percent (20) of those fish were also released.

A complete summary of catch, hours fished and catch rates for tiger muskie 36 inches or greater are listed for each individual water fished in 2006 (Table 10).

Table 10. Summary of catch, hours fished, and catch rates (catch per unit effort (CPUE)) for tiger muskie 36 inches or greater for each individual water fished in 2006.

Water	County	No. Of trips	Hours fished	No. Fish caught	CPUE	Avg. Trip length (hrs)
Curlew	Ferry	2	12.0	0	0.00	6.0
Evergreen	Grant	1	6.0	0	0.00	6.0
Mayfield	Lewis	3	22.0	0	0.00	7.3
Merwin	Cowlitz	69	451.5	8	0.02	6.5
Newman	Spokane	5	29.0	0	0.00	5.8
Silver	Spokane	15	57.5	0	0.00	3.8
Tapps	Pierce	53	173.0	12	0.07	3.3
Totals		**148**	**751.0**	**20**	**0.03**	**5.1**

Length Frequency Distribution

A total of 13 tiger muskie, ranging from 22 inches to 46 inches, were caught on 12 fishing trips to Lake Merwin (Cowlitz County) in 2006 (Figure 37).

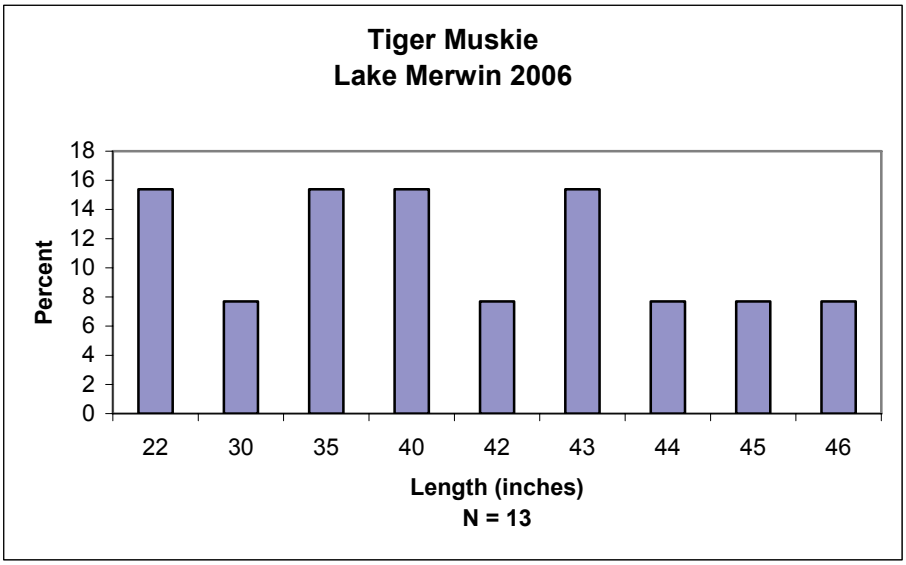


Figure 37. Length frequency distribution of tiger muskie in Lake Merwin (Cowlitz Co.) in 2006.

A total of 17 tiger muskie, ranging from 26 inches to 44 inches, were caught on 12 fishing trips to Lake Tapps (Pierce County) in 2006 (Figure 38).

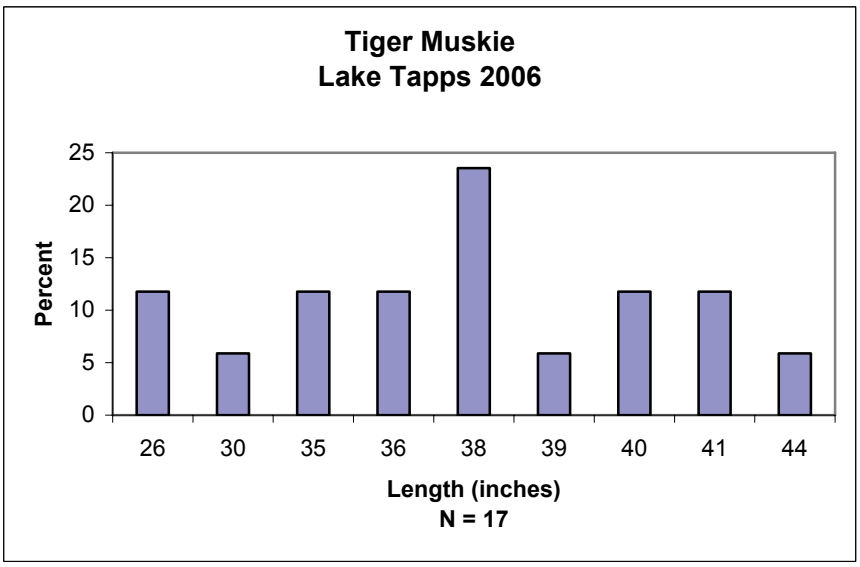


Figure 38. Length frequency distribution of tiger muskie in Lake Tapps (Pierce Co.) in 2006.

Comparative Catch Information

The statewide CPUE for tiger muskie of any size was 0.23 fish per hour in 2006. The statewide CPUE for tiger muskie of any size was highest in 2002 at 0.50 fish per hour. The CPUE for other years in which data was collected ranged from 0.10 to 0.33 fish per hour (Table 11). The statewide CPUE for tiger muskie 36 inches or greater was 0.12 fish per hour in 2006. The statewide CPUE for tiger muskie 36 inches or greater was highest in 2002 at 0.50 fish per hour. The CPUE for other years in which data was collected, ranged from 0.08 to 0.20 fish per hour (Table 11).

Table 11. Annual volunteer angler catch rate (catch per unit effort (CPUE)) for tiger muskie caught of any size and for tiger muskie 36 inches or greater, 2000-2006 (no data collected prior to 2000).

			All Sizes		>= 36 inches	
Year	No. of Waters	Hours Fished	No. Caught	CPUE	No. Caught	CPUE
2000	0					
2001	2	51.0	5	0.10	4	0.08
2002	1	4.0	1	0.25	1	0.25
2003	2	24.0	0	0.00	0	0.00
2004	4	65.5	13	0.20	3	0.05
2005	5	153.6	17	0.11	14	0.09
2006	7	751.0	37	0.05	20	0.03

Channel Catfish

Catch Data

A total of six channel catfish, 16 inches or greater, were caught in 38.0 hours on seven individual trips to three different bodies of water. Catch and release information was available for all trips. Anglers reported practicing catch and release fishing on channel catfish on seven (100%) trips. Catch and release information was available for 10 channel catfish of any size. One hundred percent (10) of those fish were released. Catch and release information was also available for seven channel catfish 16 inches or greater caught. One hundred percent (7) of those fish were also released.

A complete summary of catch, hours fished and catch rates for channel catfish 16 inches or greater are listed for each individual water fished in 2006 (Table 12).

Table 12. Summary of catch, hours fished, and catch rates (catch per unit effort (CPUE) for channel catfish 16 inches or greater for each individual water fished in 2006.

Water	County	No. Of trips	Hours fished	No. Fish caught	CPUE	Avg. Trip length (hrs)
Sacajawea	Walla walla	1	5.0	0	0.00	5.0
Umatilla	Klickitat	3	19.5	3	0.15	6.5
Wallula	Benton	3	13.5	3	0.22	4.5
Totals		**7**	**38.0**	**6**	**0.16**	**5.4**

Length Frequency Distribution

There were not enough fish caught in any of the three bodies of water to provide any meaningful information.

Comparative Catch Information

The statewide CPUE for channel catfish of any size was 0.26 fish per hour in 2006. The statewide CPUE for channel catfish of any size was highest in 2003 at 1.88 fish per hour. The CPUE for other years in which data was collected ranged from 0.00 to 1.20 fish per hour (Table 13). The statewide CPUE for channel catfish 16 inches or greater was 0.16 fish per hour in 2006. The statewide CPUE for channel catfish 16 inches or greater was highest in 2002 at 1.00 fish per hour. The CPUE for other years in which data was collected, ranged from 0.00 to 0.130 fish per hour (Table 13).

Table 13. Annual volunteer angler catch rate (catch per unit effort (CPUE) for channel catfish caught of any size and for channel catfish 16 inches or greater, 2000-2006 (No data collected prior to 2000).

			All Sizes		>= 16 inches	
Year	No. of Waters	Hours Fished	No. Caught	CPUE	No. Caught	CPUE
2000	0					
2001	1	7.0	0	0.00	0	0.00
2002	1	10.0	12	1.20	10	1.00
2003	1	37.8	71	1.88	5	0.13
2004	0					
2005	0					
2006	3	38.0	10	0.26	6	0.16

Discussion

There were 603 individual angler trips during 2006. That number is based on the number of valid data sheets received. However, these trips did not always target a specific species. In fact, there were many trips that targeted two or more species. In some instances a non-targeted species was caught. For example, an angler was targeting both largemouth and smallmouth bass, or targeted largemouth and happened to catch a smallmouth, that would be recorded as one largemouth trip and one smallmouth trip for those species. Thus, one angler trip produced two species trips.

In 2006, there were 139 fishing trips for largemouth bass and it can be broken down into 103 trips specifically targeting largemouth bass, 27 trips targeting largemouth bass and one or more other species, and 9 trips in which largemouth were caught, but were not the targeted species. Smallmouth bass trips totaled 200 trips in 2006. Of those 200 trips, 90 targeted smallmouth bass, 56 trips targeted smallmouth and another species, and 54 trips did not target smallmouth, yet they were caught. There were a total of 241 fishing trips reported for walleye and 221 of those trips specifically targeted walleye. Nineteen trips targeted walleye and at least one other species and there was one trip where a walleye were caught, but walleye were not targeted. There were no trips targeting channel catfish, but there were seven trips in which they were caught. There were 13 trips targeting black crappie, but only three of them were black crappie only trips and there were an additional seven trips in which black crappie were caught when not being targeted. There were 115 fishing trips that were tiger muskie only trips. An additional 32 trips targeted tiger muskies and at least one other species and there was one trip where a tiger muskie was caught, but not targeted.

One of the goals of the program was to get data from a large cross-section of lakes. It is difficult to conclude whether or not the program has been successful in that endeavor. For some species of fish, such as tiger muskies, there are only a handful of lakes that can be fished. Some anglers are adventurous and seek new waters to fish and other anglers stay with their tried and true bodies of water. Regardless of the number of different bodies of water that are fished, the key is angler participation. If a good cross-section of anglers are participating, then it should follow that a good cross-section of bodies of water will be fished. It looks like the program has been successful in that regard. There is almost an equal number of participating anglers from the eastern and western sides of the state, with the west side of the state having a slight edge. However, within both areas there is some disparity among the regions. In eastern Washington the majority of anglers are from Region 1. In western Washington, the majority of anglers reside in Region 6.

There has recently been a big surge in tiger muskie fishing. In 2002 there were only two trips in which tiger muskie were either targeted or incidentally caught. In 2003, that number went up to four. In 2004 that number nearly quadrupled to 17 and that number was doubled in 2005. However, in 2006 there was a very large increase in fishing effort as the trip count went up to 148 for those trips that targeted tiger muskies and for trips that incidentally caught tiger muskies.

Angling for both black crappie and channel catfish has consistently occurred at low levels since the program was expanded in 2000 to include these two species. During this time period there has been an average of two angling trips per year in which channel catfish have been caught. Black crappie have been slightly more popular, averaging about 10 angling trips per year. One possible explanation is that there are not any fishing clubs specifically for crappie or channel catfish. The majority of clubs the program contacts are bass and walleye clubs. So unless some of these anglers target these two species, or those non-club anglers become aware of the program, the angling effort on will continue to be low.

Angling for bass and walleye has been pretty consistent over the years. From 2000-2006, the average number of trips per year has been 113, 128, 176 respectively for largemouth bass, smallmouth bass, and walleye. This is to be expected because of their popularity. There are many bass and walleye clubs in Washington and there are many tournaments held throughout the year. Thus, it would be natural for these anglers to also pursue these fish when they are recreationally fishing.

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