

Wisconsin's 2012 open water sportfishing effort and harvest from Lake Michigan and Green Bay

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Abstract - The sport fishery in Wisconsin waters of Lake Michigan and Green Bay was documented from March 1, 2012 through December 31, 2012. Fishing effort, harvest and harvest-rates were determined from 1) a stratified-random creel survey of launched-boat, pier, shore and stream anglers; 2) a randomized mail survey of moored-boat anglers; and 3) mandatory charter-boat reporting. For a detailed description of methods see Eggold 1995.

Anglers spent an estimated 2,525,586 hours fishing on Lake Michigan and Green Bay during 2012 with boat-angler effort at 2,030,582 hours, or 80% of the total hours. Fishing effort during 2012 was 7% below the ten-year average and was nearly identical to effort in 2011.

The estimated harvest of 841,068 fish was dominated by Chinook salmon (390,385), followed by yellow perch (158,095), rainbow trout (75,981) and coho salmon (73,395). The boat fishery, comprised of launched-boat, moored-boat and charter-boat anglers, dominated the fishery by harvesting an estimated 788,661 fish, which was 94% of the total harvest and was led by Chinook salmon (371,039) and yellow perch (143,624). Pier, shore and stream anglers harvested primarily Chinook salmon and yellow perch, followed by brown trout and rainbow trout.

The 2012 Chinook harvest of 390,385 was the highest since the record breaking year of 2007, when 431,143 Chinooks were harvested. The harvest in 2012 was also 19% higher than the ten-year average Chinook harvest. The Chinook harvest-rate in 2012 was 0.1546 fish/hour, which was higher than the 2007 harvest-rate of 0.1408 fish/hour. Coho harvest in 2012 was 73,395, which was 8% above the ten-year average. The 2012 rainbow trout harvest of 75,981 was the highest since 1999 and 46% above the ten-year average. Brown trout harvest in 2012 was 21,337, which was within 1% of the ten-year average and was a 115% increase over the 2011 brown trout harvest. The 2012 harvest-rate for salmonids combined was 0.2337 fish/hour, which was the highest recorded since the start of the Wisconsin creel survey in 1969 and was 31% above the ten-year average salmonid harvest-rate.

The 2012 harvest of yellow perch in Green Bay was 148,980, which was the lowest harvest since 2004 and was 45% below the ten-year average. The Lake Michigan yellow perch harvest in 2012 was 9,115; the lowest on record and 79% below the ten-year average.

The standard weight of a 30 inch Chinook in 2012 was 8.89 pounds, which was 5% below the ten-year average. The standard weight for a 22 inch coho was 3.88 pounds and for a 25 inch lake trout was 5.33 pounds, which were 1% and 5% below their ten-year averages, respectively. The standard weight for a 22 inch rainbow was 4.28 pounds and for a 20 inch brown was 4.07 pounds. These were each 3% above their ten-year averages.

REFERENCES

Eggold, B.T. 1995. Wisconsin's 1995 open water sportfishing effort and catch from Lake Michigan and Green Bay. Wisconsin Department of Natural Resources, Plymouth, Wisconsin. 19 pages.



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Table 1. Estimated angler effort (hours) by location in Wisconsin waters of Lake Michigan and Green Bay during March through December of 2003 through 2012. Standard deviations are in Italics.

Location	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
Kenosha Co.	213,504 <i>11,531</i>	178,733 <i>6,785</i>	149,044 <i>6,744</i>	160,145 <i>7,114</i>	169,253 <i>7,378</i>	123,931 <i>5,748</i>	141,626 <i>8,197</i>	146,762 <i>8,287</i>	116,032 <i>5,801</i>	135,980 <i>2,851</i>	153,501 <i>7,350</i>
Racine Co.	154,568 <i>8,671</i>	166,653 <i>9,197</i>	157,571 <i>8,415</i>	148,919 <i>9,293</i>	154,228 <i>8,678</i>	120,828 <i>5,968</i>	175,220 <i>9,991</i>	161,959 <i>9,422</i>	151,135 <i>7,225</i>	131,342 <i>10,091</i>	152,242 <i>8,778</i>
Milwaukee Co.	338,672 <i>11,663</i>	323,797 <i>10,194</i>	277,583 <i>13,694</i>	289,698 <i>11,476</i>	355,727 <i>13,893</i>	244,716 <i>9,890</i>	302,368 <i>13,669</i>	340,503 <i>14,174</i>	276,843 <i>15,204</i>	324,011 <i>14,704</i>	307,392 <i>12,981</i>
Ozaukee Co.	245,038 <i>14,336</i>	199,405 <i>10,273</i>	219,929 <i>11,199</i>	190,431 <i>10,156</i>	221,062 <i>10,577</i>	178,438 <i>8,175</i>	209,223 <i>11,968</i>	215,809 <i>10,210</i>	256,961 <i>19,364</i>	208,450 <i>12,203</i>	214,475 <i>12,205</i>
Sheboygan Co.	254,426 <i>16,480</i>	183,880 <i>10,713</i>	224,373 <i>13,536</i>	236,400 <i>12,525</i>	269,932 <i>15,383</i>	214,928 <i>10,367</i>	222,741 <i>11,542</i>	238,132 <i>12,909</i>	199,350 <i>9,537</i>	225,384 <i>11,503</i>	226,955 <i>12,616</i>
Manitowoc Co.	187,928 <i>9,940</i>	244,227 <i>13,142</i>	246,770 <i>12,523</i>	208,400 <i>12,619</i>	233,155 <i>13,626</i>	162,851 <i>9,415</i>	198,420 <i>10,255</i>	206,362 <i>9,591</i>	179,525 <i>8,336</i>	212,739 <i>10,796</i>	208,038 <i>11,158</i>
Kewaunee Co.	401,840 <i>20,958</i>	428,023 <i>18,769</i>	463,532 <i>22,719</i>	401,030 <i>17,521</i>	480,792 <i>21,041</i>	409,096 <i>16,508</i>	405,917 <i>17,954</i>	382,614 <i>22,200</i>	323,860 <i>12,740</i>	311,407 <i>7,780</i>	400,811 <i>18,352</i>
E. Door Co.	255,264 <i>17,303</i>	222,330 <i>11,613</i>	233,079 <i>15,585</i>	260,107 <i>12,469</i>	246,522 <i>11,672</i>	167,331 <i>13,149</i>	184,720 <i>9,653</i>	213,147 <i>14,552</i>	151,136 <i>7,001</i>	204,549 <i>23,159</i>	213,819 <i>14,255</i>
Green Bay	650,571 <i>32,738</i>	671,652 <i>25,288</i>	819,005 <i>42,854</i>	880,607 <i>33,282</i>	930,708 <i>33,729</i>	874,362 <i>35,185</i>	1,017,143 <i>38,890</i>	936,050 <i>42,151</i>	886,143 <i>40,835</i>	771,724 <i>26,553</i>	843,797 <i>35,627</i>
Total Effort	2,701,811 <i>52,254</i>	2,618,700 <i>41,882</i>	2,790,886 <i>58,007</i>	2,775,737 <i>47,519</i>	3,061,379 <i>50,730</i>	2,496,481 <i>45,967</i>	2,857,378 <i>51,588</i>	2,841,338 <i>56,591</i>	2,540,985 <i>52,261</i>	2,525,586 <i>45,010</i>	2,721,028 <i>50,413</i>

Table 2. Estimated harvest and total harvest-rate (number per hour, all anglers combined) of salmonids in Wisconsin waters of Lake Michigan and Green Bay during March through December of 2003 through 2012. Standard deviations are in Italics.

Species	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
Coho Salmon	50,625 <i>2,052</i>	76,944 <i>2,792</i>	59,244 <i>2,690</i>	56,136 <i>2,693</i>	94,677 <i>3,776</i>	25,453 <i>1,222</i>	42,690 <i>1,989</i>	42,445 <i>2,039</i>	157,367 <i>11,432</i>	73,395 <i>3,114</i>	67,898 <i>4,367</i>
Chinook Salmon	317,619 <i>9,385</i>	360,991 <i>8,260</i>	418,918 <i>10,781</i>	398,905 <i>8,658</i>	431,143 <i>10,425</i>	256,796 <i>6,658</i>	214,621 <i>5,645</i>	315,294 <i>8,164</i>	169,752 <i>4,083</i>	390,385 <i>9,058</i>	327,442 <i>8,353</i>
Rainbow Trout	48,548 <i>2,077</i>	25,529 <i>1,194</i>	48,490 <i>3,539</i>	48,420 <i>1,700</i>	62,249 <i>2,212</i>	41,552 <i>1,635</i>	46,529 <i>2,063</i>	49,121 <i>2,023</i>	75,442 <i>2,588</i>	75,981 <i>2,592</i>	52,186 <i>2,247</i>
Brown Trout	23,654 <i>2,056</i>	20,918 <i>1,457</i>	27,489 <i>6,235</i>	17,769 <i>1,102</i>	37,947 <i>2,580</i>	23,763 <i>2,146</i>	15,792 <i>958</i>	13,029 <i>1,114</i>	9,936 <i>846</i>	21,337 <i>1,768</i>	21,163 <i>2,524</i>
Brook Trout	126 <i>54</i>	1 <i>0</i>	18 <i>12</i>	17 <i>8</i>	62 <i>24</i>	13 <i>14</i>	27 <i>0</i>	0 <i>0</i>	26 <i>0</i>	18 <i>0</i>	31 <i>20</i>
Lake Trout	23,881 <i>1,142</i>	14,209 <i>709</i>	14,139 <i>737</i>	10,638 <i>533</i>	19,281 <i>893</i>	12,763 <i>554</i>	14,946 <i>803</i>	17,483 <i>775</i>	17,788 <i>1,236</i>	29,094 <i>1,261</i>	17,422 <i>900</i>
Total Harvest	464,453 <i>10,106</i>	498,592 <i>8,948</i>	568,298 <i>13,244</i>	531,885 <i>9,306</i>	645,359 <i>11,631</i>	360,340 <i>7,308</i>	334,605 <i>6,453</i>	437,372 <i>8,760</i>	430,311 <i>12,502</i>	590,210 <i>10,158</i>	486,143 <i>10,054</i>
Harvest-Rate	0.1719	0.1904	0.2036	0.1916	0.2108	0.1443	0.1171	0.1539	0.1693	0.2337	0.1787

4

Table 3. Estimated harvest and total harvest-rate (number per hour, all anglers combined) of yellow perch in Wisconsin waters of Lake Michigan and Green Bay during March through December of 2003 through 2012. Standard deviations are in Italics.

Location	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
Green Bay	89,889 <i>6,819</i>	66,343 <i>6,261</i>	274,956 <i>19,231</i>	757,698 <i>55,220</i>	501,646 <i>36,032</i>	196,852 <i>15,560</i>	204,209 <i>19,361</i>	225,995 <i>21,042</i>	254,942 <i>24,973</i>	148,980 <i>13,685</i>	272,151 <i>25,834</i>
Harvest-Rate	0.1382	0.0988	0.3357	0.8604	0.5390	0.2251	0.2008	0.2414	0.2877	0.1930	0.3120
Lake Michigan	66,432 <i>13,023</i>	41,950 <i>5,105</i>	32,848 <i>8,472</i>	67,660 <i>9,285</i>	66,240 <i>5,327</i>	20,648 <i>2,562</i>	50,744 <i>5,122</i>	51,265 <i>4,787</i>	16,982 <i>2,296</i>	9,115 <i>1,071</i>	42,388 <i>6,664</i>
Harvest-Rate	0.0324	0.0215	0.0167	0.0357	0.0311	0.0127	0.0276	0.0269	0.0103	0.0052	0.0220
Total Harvest	156,321 <i>14,700</i>	108,293 <i>8,078</i>	307,804 <i>21,015</i>	825,358 <i>55,995</i>	567,886 <i>36,424</i>	217,500 <i>15,769</i>	254,953 <i>20,027</i>	277,260 <i>21,579</i>	271,924 <i>25,078</i>	158,095 <i>13,727</i>	314,539 <i>26,680</i>
Harvest-Rate	0.0579	0.0414	0.1103	0.2973	0.1855	0.0871	0.0892	0.0976	0.1070	0.0626	0.1136

Note: Table 3 reflects that Door County ramp and shore sites represent Green Bay for yellow perch harvest statistics.

Table 4. Estimated harvest-rate (harvest per hour), harvest and effort for all survey areas and **ALL FISHERY TYPES** for Wisconsin waters of Lake Michigan and Green Bay during 2012. Standard deviations are in *Italics*.

Species	Harvest per Hour	Jan/Feb Mar/Apr	May	June	July	August	Sept/Oct	Nov/Dec	Season
Coho Salmon	0.0291	311 <i>92</i>	19,532 <i>1,804</i>	28,331 <i>1,983</i>	16,814 <i>1,428</i>	6,494 <i>631</i>	1,913 <i>244</i>	0 <i>0</i>	73,395 <i>3,114</i>
Chinook Salmon	0.1546	738 <i>123</i>	43,049 <i>4,528</i>	103,645 <i>4,656</i>	137,372 <i>5,263</i>	69,593 <i>2,725</i>	35,988 <i>2,175</i>	0 <i>0</i>	390,385 <i>9,058</i>
Rainbow Trout	0.0301	2,068 <i>326</i>	5,840 <i>736</i>	25,118 <i>1,768</i>	28,789 <i>1,458</i>	10,045 <i>601</i>	4,114 <i>678</i>	7 <i>0</i>	75,981 <i>2,592</i>
Brown Trout	0.0084	9,945 <i>1,527</i>	1,141 <i>212</i>	2,546 <i>386</i>	3,343 <i>647</i>	1,582 <i>234</i>	2,687 <i>354</i>	93 <i>0</i>	21,337 <i>1,768</i>
Brook Trout	0.0000	0 <i>0</i>	8 <i>0</i>	10 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	18 <i>0</i>
Lake Trout	0.0115	545 <i>244</i>	4,732 <i>574</i>	7,760 <i>634</i>	7,135 <i>505</i>	5,956 <i>457</i>	2,966 <i>579</i>	0 <i>0</i>	29,094 <i>1,261</i>
Splake	0.0000	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>
Northern Pike	0.0011	1,402 <i>774</i>	439 <i>226</i>	24 <i>22</i>	451 <i>215</i>	163 <i>68</i>	247 <i>90</i>	0 <i>0</i>	2,726 <i>842</i>
White Perch	0.0008	0 <i>0</i>	0 <i>0</i>	22 <i>22</i>	144 <i>114</i>	1,445 <i>1,244</i>	359 <i>227</i>	0 <i>0</i>	1,970 <i>1,270</i>
Smallmouth Bass	0.0035	65 <i>69</i>	1,887 <i>565</i>	1,707 <i>390</i>	2,205 <i>687</i>	2,717 <i>1,290</i>	154 <i>61</i>	0 <i>0</i>	8,735 <i>1,617</i>
Yellow Perch	0.0626	247 <i>200</i>	3,043 <i>1,247</i>	16,428 <i>2,828</i>	37,687 <i>5,978</i>	55,894 <i>9,137</i>	44,796 <i>7,721</i>	0 <i>0</i>	158,095 <i>13,727</i>
Walleye	0.0314	5,193 <i>1,063</i>	35,646 <i>4,623</i>	16,124 <i>3,497</i>	15,088 <i>3,052</i>	6,817 <i>1,633</i>	464 <i>194</i>	0 <i>0</i>	79,332 <i>6,837</i>
Total Harvest	0.3330	20,514 <i>2,072</i>	115,317 <i>6,926</i>	223,472 <i>8,816</i>	249,028 <i>8,839</i>	160,706 <i>9,890</i>	93,688 <i>8,089</i>	100 <i>0</i>	841,068 <i>18,528</i>
Angler Hours		204,213 <i>9,979</i>	328,580 <i>25,628</i>	542,643 <i>18,794</i>	647,814 <i>22,746</i>	407,613 <i>15,944</i>	394,459 <i>12,027</i>	264 <i>0</i>	2,525,586 <i>45,010</i>

Table 5. Estimated harvest-rate (harvest per hour), harvest and effort for the **BOAT FISHERY** with all survey areas combined for Wisconsin waters of Lake Michigan and Green Bay during 2012. Standard deviations are in *Italics*.

Species	Harvest per hour	Jan/Feb Mar/Apr	May	June	July	August	Sept/Oct	Nov/Dec	Season
Coho Salmon	0.0356	289 <i>91</i>	19,259 <i>1,802</i>	28,142 <i>1,982</i>	16,771 <i>1,428</i>	6,492 <i>631</i>	1,324 <i>204</i>	0 <i>0</i>	72,277 <i>3,109</i>
Chinook Salmon	0.1827	718 <i>123</i>	41,906 <i>4,518</i>	103,047 <i>4,654</i>	137,021 <i>5,262</i>	69,231 <i>2,724</i>	19,116 <i>1,769</i>	0 <i>0</i>	371,039 <i>8,963</i>
Rainbow Trout	0.0355	87 <i>23</i>	5,712 <i>734</i>	24,697 <i>1,766</i>	28,355 <i>1,444</i>	9,995 <i>601</i>	3,165 <i>526</i>	7 <i>0</i>	72,018 <i>2,527</i>
Brown Trout	0.0071	6,036 <i>1,394</i>	353 <i>114</i>	1,729 <i>355</i>	3,201 <i>646</i>	1,354 <i>227</i>	1,579 <i>307</i>	93 <i>0</i>	14,345 <i>1,627</i>
Brook Trout	0.0000	0 <i>0</i>	8 <i>0</i>	10 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	18 <i>0</i>
Lake Trout	0.0143	528 <i>243</i>	4,731 <i>574</i>	7,759 <i>634</i>	7,135 <i>505</i>	5,956 <i>457</i>	2,922 <i>577</i>	0 <i>0</i>	29,031 <i>1,260</i>
Splake	0.0000	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>
Northern Pike	0.0012	1,196 <i>747</i>	439 <i>226</i>	24 <i>22</i>	443 <i>215</i>	96 <i>60</i>	216 <i>89</i>	0 <i>0</i>	2,414 <i>817</i>
White Perch	0.0010	0 <i>0</i>	0 <i>0</i>	22 <i>22</i>	144 <i>114</i>	1,445 <i>1,244</i>	359 <i>227</i>	0 <i>0</i>	1,970 <i>1,270</i>
Smallmouth Bass	0.0035	0 <i>0</i>	1,413 <i>477</i>	1,397 <i>385</i>	1,436 <i>415</i>	2,672 <i>1,290</i>	115 <i>54</i>	0 <i>0</i>	7,033 <i>1,488</i>
Yellow Perch	0.0707	50 <i>48</i>	2,962 <i>1,247</i>	13,884 <i>2,733</i>	36,970 <i>5,973</i>	52,494 <i>9,068</i>	37,264 <i>7,127</i>	0 <i>0</i>	143,624 <i>13,331</i>
Walleye	0.0369	3,109 <i>748</i>	33,746 <i>4,530</i>	15,768 <i>3,487</i>	15,088 <i>3,052</i>	6,817 <i>1,633</i>	464 <i>194</i>	0 <i>0</i>	74,992 <i>6,728</i>
Total Harvest	0.3884	12,013 <i>1,774</i>	110,529 <i>6,848</i>	196,479 <i>7,001</i>	246,564 <i>8,815</i>	156,552 <i>9,826</i>	66,524 <i>7,401</i>	100 <i>0</i>	788,661 <i>18,113</i>
Angler Hours		110,010 <i>8,802</i>	290,165 <i>25,411</i>	479,138 <i>18,363</i>	590,491 <i>22,446</i>	364,274 <i>15,603</i>	196,240 <i>8,518</i>	264 <i>0</i>	2,030,582 <i>43,362</i>

Table 6. Estimated harvest-rate (harvest per hour), harvest and effort for the **PIER FISHERY** with all survey areas combined for Wisconsin waters of Lake Michigan and Green Bay during 2012. Standard deviations are in *Italics*.

Species	Harvest per hour	Mar/Apr	May	June	July	August	Sept/Oct	Season
Coho Salmon	0.0034	20 <i>13</i>	248 <i>73</i>	188 <i>74</i>	43 <i>22</i>	2 <i>0</i>	43 <i>18</i>	544 <i>109</i>
Chinook Salmon	0.0223	12 <i>11</i>	1,143 <i>295</i>	583 <i>123</i>	349 <i>91</i>	314 <i>91</i>	1,224 <i>273</i>	3,625 <i>439</i>
Rainbow Trout	0.0066	41 <i>29</i>	127 <i>46</i>	399 <i>78</i>	432 <i>199</i>	40 <i>17</i>	25 <i>10</i>	1,064 <i>222</i>
Brown Trout	0.0232	2,144 <i>468</i>	426 <i>148</i>	668 <i>130</i>	116 <i>39</i>	183 <i>51</i>	234 <i>65</i>	3,771 <i>516</i>
Brook Trout	0.0000	0 <i>0</i>						
Lake Trout	0.0001	17 <i>16</i>	1 <i>0</i>	1 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	19 <i>16</i>
Splake	0.0000	0 <i>0</i>						
Northern Pike	0.0002	6 <i>6</i>	0 <i>0</i>	0 <i>0</i>	8 <i>6</i>	4 <i>4</i>	8 <i>5</i>	26 <i>11</i>
White Perch	0.0000	0 <i>0</i>						
Smallmouth Bass	0.0034	0 <i>0</i>	68 <i>50</i>	241 <i>0</i>	211 <i>137</i>	27 <i>15</i>	0 <i>0</i>	547 <i>146</i>
Yellow Perch	0.0201	0 <i>0</i>	78 <i>41</i>	907 <i>475</i>	503 <i>236</i>	1,743 <i>1,119</i>	24 <i>25</i>	3,255 <i>1,239</i>
Walleye	0.0000	0 <i>0</i>						
Total Harvest	0.0792	2,240 <i>470</i>	2,091 <i>347</i>	2,987 <i>519</i>	1,662 <i>353</i>	2,313 <i>1,124</i>	1,558 <i>283</i>	12,851 <i>1,441</i>
Angler Hours		15,733 <i>1,843</i>	20,178 <i>1,964</i>	33,689 <i>2,359</i>	34,740 <i>2,950</i>	24,335 <i>2,593</i>	33,534 <i>2,202</i>	162,209 <i>5,753</i>

Table 7. Estimated harvest-rate (harvest per hour), harvest and effort for the **SHORE FISHERY** with all survey areas combined for Wisconsin waters of Lake Michigan and Green Bay during 2012. Standard deviations are in *Italics*.

Species	Harvest per hour	Mar/Apr	May	June	July	August	Sept/Oct	Season
Coho Salmon	0.0023	2 <i>0</i>	25 <i>20</i>	1 <i>0</i>	0 <i>0</i>	0 <i>0</i>	306 <i>86</i>	334 <i>88</i>
Chinook Salmon	0.0222	0 <i>0</i>	0 <i>0</i>	15 <i>16</i>	2 <i>0</i>	48 <i>28</i>	3,144 <i>453</i>	3,209 <i>454</i>
Rainbow Trout	0.0038	88 <i>57</i>	1 <i>0</i>	22 <i>21</i>	2 <i>0</i>	10 <i>7</i>	421 <i>122</i>	544 <i>136</i>
Brown Trout	0.0191	1,585 <i>404</i>	307 <i>91</i>	149 <i>76</i>	26 <i>14</i>	45 <i>26</i>	657 <i>146</i>	2,769 <i>447</i>
Brook Trout	0.0000	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>
Lake Trout	0.0003	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	44 <i>46</i>	44 <i>46</i>
Splake	0.0000	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>
Northern Pike	0.0006	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	63 <i>34</i>	23 <i>13</i>	86 <i>36</i>
White Perch	0.0000	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>
Smallmouth Bass	0.0020	0 <i>0</i>	109 <i>110</i>	23 <i>23</i>	131 <i>78</i>	18 <i>12</i>	3 <i>0</i>	284 <i>137</i>
Yellow Perch	0.0395	197 <i>194</i>	0 <i>0</i>	1,637 <i>551</i>	214 <i>88</i>	1,023 <i>61</i>	2,650 <i>2,160</i>	5,721 <i>2,240</i>
Walleye	0.0001	0 <i>0</i>	18 <i>18</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	18 <i>18</i>
Total Harvest	0.0899	1,872 <i>452</i>	460 <i>145</i>	1,847 <i>557</i>	375 <i>118</i>	1,207 <i>81</i>	7,248 <i>2,217</i>	13,009 <i>2,339</i>
Angler Hours		13,867 <i>1,372</i>	7,987 <i>701</i>	19,836 <i>2,769</i>	16,834 <i>1,732</i>	10,255 <i>928</i>	75,906 <i>5,085</i>	144,685 <i>6,305</i>

Table 8. Estimated harvest-rate (harvest per hour), harvest and effort for the **STREAM FISHERY** with all survey areas combined for Wisconsin waters of Lake Michigan and Green Bay during 2012. Standard deviations are in italics.

Species	Harvest	Mar/Apr	May	June	July	August	Sept/Oct	Season
	per hour							
Coho Salmon	0.0013	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	240 <i>101</i>	240 <i>101</i>
Chinook Salmon	0.0665	8 <i>8</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	12,504 <i>1,150</i>	12,512 <i>1,150</i>
Rainbow Trout	0.0125	1,852 <i>318</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	503 <i>409</i>	2,355 <i>518</i>
Brown Trout	0.0024	180 <i>82</i>	55 <i>38</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	217 <i>76</i>	452 <i>118</i>
Brook Trout	0.0000	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>
Lake Trout	0.0000	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>
Splake	0.0000	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>
Northern Pike	0.0011	200 <i>201</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	200 <i>201</i>
White Perch	0.0000	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>
Smallmouth Bass	0.0046	65 <i>69</i>	297 <i>277</i>	46 <i>51</i>	427 <i>525</i>	0 <i>0</i>	36 <i>29</i>	871 <i>600</i>
Yellow Perch	0.0292	0 <i>0</i>	3 <i>3</i>	0 <i>0</i>	0 <i>0</i>	634 <i>0</i>	4,858 <i>2,035</i>	5,495 <i>2,035</i>
Walleye	0.0230	2,084 <i>754</i>	1,882 <i>920</i>	356 <i>267</i>	0 <i>0</i>	0 <i>0</i>	0 <i>0</i>	4,322 <i>1,220</i>
Total Harvest	0.1406	4,389 <i>849</i>	2,237 <i>962</i>	402 <i>272</i>	427 <i>525</i>	634 <i>0</i>	18,358 <i>2,377</i>	26,447 <i>2,765</i>
Angler Hours		64,603 <i>4,102</i>	10,250 <i>2,594</i>	9,980 <i>1,673</i>	5,749 <i>1,375</i>	8,749 <i>1,776</i>	88,779 <i>6,434</i>	188,110 <i>8,532</i>

Table 9. Average weight, average length and standard weight of salmonids from Wisconsin's Lake Michigan creel survey during 2003 through 2012, all areas and fishery types combined. std = standard deviation.

Year	Average weight (lbs.)	± 1 std	Average length (in.)	± 1 std	Standard weight (lbs.)
Coho salmon					
2003	4.6807	1.8751	23.0807	2.9682	3.7452
2004	4.8908	2.1299	23.7228	3.1697	3.7542
2005	3.5859	1.7365	21.5351	2.5803	3.7625
2006	3.7539	1.3560	21.6351	2.1038	3.8924
2007	4.5479	1.4540	22.9910	2.2278	3.7990
2008	4.4560	2.0490	22.4677	3.1329	3.9681
2009	4.9807	1.9220	23.2278	2.9728	4.2262
2010	4.5751	2.2101	22.8805	3.7821	3.9833
2011	4.2329	1.8161	22.1766	2.6627	3.9868
2012	3.4466	1.4930	20.6385	2.8135	3.8802
Chinook salmon					
2003	9.7510	5.7925	28.5172	5.6862	9.6825
2004	10.8366	4.8605	30.3981	5.2144	9.2655
2005	8.6770	4.3969	27.9173	5.2664	9.1806
2006	10.2487	4.7178	29.4031	4.9557	9.6769
2007	10.2004	4.4631	29.6011	4.8774	9.0942
2008	9.6660	4.7395	28.6085	4.9816	9.4565
2009	11.0706	5.3288	29.6812	5.5420	9.7943
2010	8.7700	4.3646	28.0374	5.5873	8.5914
2011	10.1487	5.8206	28.0507	6.0373	10.2631
2012	10.2651	4.0305	30.0844	4.6550	8.8881
Rainbow trout					
2003	6.1235	2.9715	25.2357	4.8806	3.8857
2004	6.6084	2.5308	25.8536	4.3064	4.3724
2005	6.2049	2.4847	25.9888	3.7545	3.8343
2006	6.7922	2.5199	25.7703	3.8482	4.3479
2007	6.5670	2.7310	25.9133	4.0252	3.8683
2008	5.8041	2.5126	24.6186	3.6684	3.8944
2009	6.4368	2.6692	25.1826	3.9525	4.5698
2010	6.2216	2.5984	25.6125	3.9888	4.3301
2011	6.1851	2.6215	24.8381	3.8826	4.2453
2012	6.3634	2.4765	26.1214	3.7593	4.2812
Brown trout					
2003	5.9883	3.7869	22.0368	4.8654	3.9051
2004	5.5489	3.6353	21.5438	5.1509	3.7367
2005	5.4529	3.8649	21.2167	5.6031	3.7473
2006	6.3170	3.5998	22.6715	4.7363	3.9029
2007	4.8583	2.9599	20.9185	3.7287	3.7323
2008	5.7157	3.1288	22.2123	3.7398	3.7529
2009	6.7666	3.9047	22.8051	4.3925	4.4162
2010	7.7499	4.3883	24.2774	5.0338	3.8949
2011	4.9160	4.0068	19.7757	5.5077	4.1725
2012	4.7658	2.7347	20.7304	3.7789	4.0676
Lake trout					
2003	5.8656	3.1534	24.7221	3.8386	5.8727
2004	5.6370	2.7429	24.5108	3.5812	5.6439
2005	4.7568	2.0300	23.4632	2.8051	5.4412
2006	5.3567	2.0533	24.2254	3.1010	5.5616
2007	5.8834	2.8582	24.7787	3.4032	5.4606
2008	6.0624	3.2897	24.5111	3.3282	5.9121
2009	6.0985	2.5753	25.1504	3.2636	5.5297
2010	5.9275	3.2344	24.2994	3.9970	5.9239
2011	6.1933	3.1017	25.0834	3.6291	5.6477
2012	6.7815	3.6110	26.1740	4.1798	5.3274

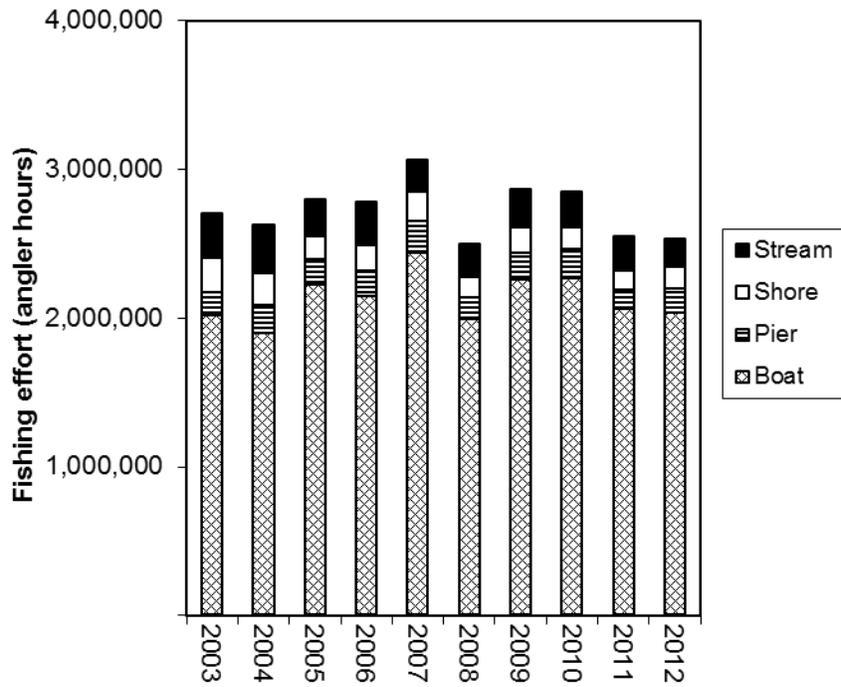


Figure 1. Fishing effort (angler hours) in Wisconsin waters of Lake Michigan and Green Bay from 2003 through 2012.

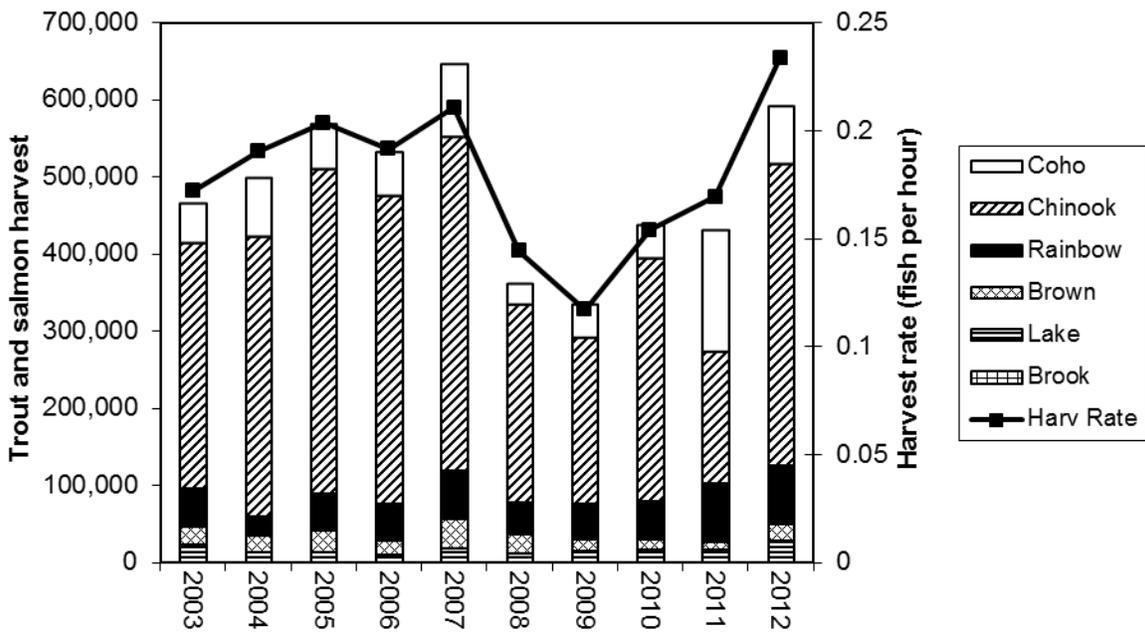


Figure 2. Trout and salmon harvest and harvest-rate from Wisconsin waters of Lake Michigan and Green Bay from 2003 through 2012.

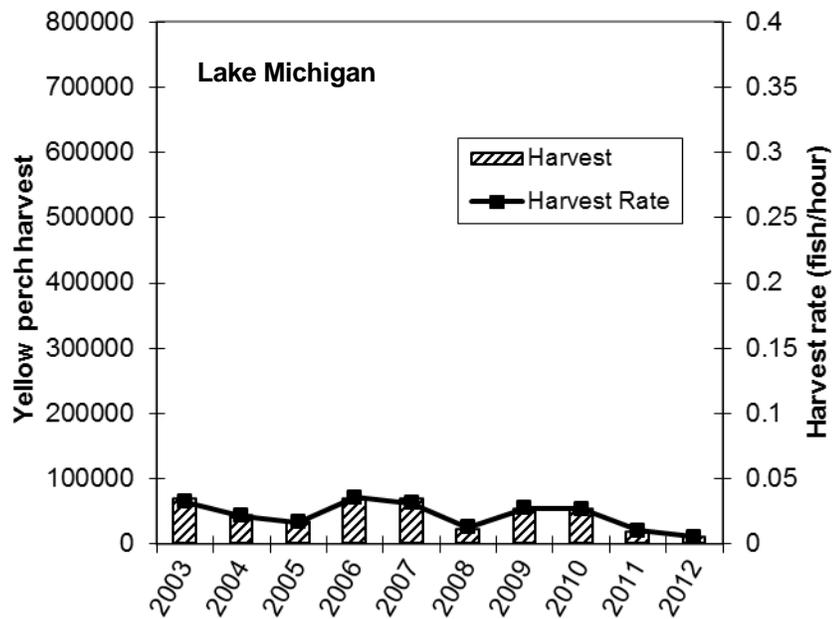
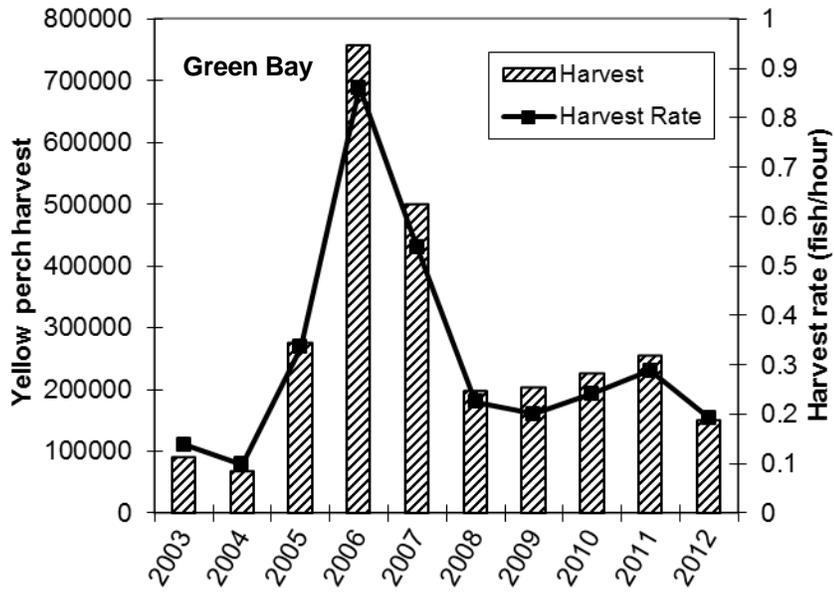


Figure 3. Yellow perch angler-harvest and harvest-rate from Wisconsin waters of Green Bay and Lake Michigan from 2003 through 2012. Note: Figure 3 reflects that Door County ramp and shore sites represent Green Bay for yellow perch harvest statistics.