## Open Water Creel Survey Report for Portage Lake, Manistee County, 2017

Waterbody Portage Lake

**Year** 2017

County Manistee County Sites PortageLake

**Survey period** April 1 to October 31

**Survey design** Roving (instantaneous)-access

**Count methods/modes** Roving (instantaneous)/boat and shore

Clerk time 1/2 time

**Survey purpose** Characterize general effort and catch aspects of the fishery

## **Notes**

Survey followed a roving (instantaneous)-access design. Funding was provided by the Federal Aid to Sport Fish Restoration Project F-81, Study 230499. One clerk worked 1/2 time to collect angler survey data. Two weekend days and 3 week days were randomly selected for sampling during each week of the survey season. No holidays were sampled. The clerk followed a randomized count and interview schedule. One of two shifts was selected each sample day. The entire water body was sampled each day. Roving (instantaneous) counts of boat and shore anglers were made twice per day. Survey period for both counts and interviews was April 1 to October 31. Months were estimated separately. "NAN" in a table means there was not enough data to make an estimate.

Table 1.—Daylight hours used to estimate catch and effort for the Portage Lake open water creel survey from April 1 to October 31, 2017.

Year	Month	Daylight Hours
2017	4	14
2017	5	15
2017	6	16
2017	7	17
2017	8	17
2017	9	16
2017	10	13

Table 2.—Estimated harvest, catch per hour, and fishing pressure for Portage Lake boat fishery. Two standard errors are given below the estimates.

HARVEST Walleye	Species	C/H	April	May	June	July	August	September	October	Season
Northern Pike	HARVEST									
Northern Pike	Walleye	0.0019	_	_	-	_		_	_	
Largemouth Bass			_	_	_	_		_	_	71
Largemouth Bass         0.0171         -         53         92         181         49         50         -         425           Smallmouth Bass         0.0041         -         -         31         40         32         -         -         103           Yellow Perch         1.0068         2.642         3.614         2.647         2.403         6.682         3,984         3.094         25.065           Bluegill         0.1657         162         273         1.298         1.281         260         657         194         4.124           Bluegill         0.1657         162         273         1.298         1.281         260         657         194         4.124           0.0084         335         417         1.335         1.173         368         862         296         2.098           Pumpkinseed         0.0132         -         114         -         100         49         65         -         238           Rock Bass         0.2288         -         121         1,322         1,544         1,868         724         116         5,695           Green Sunfish         0.0037         -         53         -         40 </td <td>Northern Pike</td> <td></td> <td>_</td> <td></td> <td>_</td> <td>_</td> <td></td> <td></td> <td>_</td> <td></td>	Northern Pike		_		_	_			_	
Smallmouth Bass         0.0152         -         108         195         276         54         101         -         373           Smallmouth Bass         0.0041         -         -         31         40         32         -         -         103           Yellow Perch         1.0068         2.642         3.614         2.647         2.403         6.682         3,984         3.094         25,065           Bluegill         0.1657         162         273         1.288         1.281         260         657         194         4,124           Pumpkinseed         0.0132         -         114         -         100         49         65         -         228           Rock Bass         0.2288         -         121         1,335         1,173         388         862         296         2,098           Rock Bass         0.2288         -         121         1,322         1,544         1,688         724         116         5,695           Rock Bass         0.2288         -         121         1,322         1,544         1,688         724         116         5,695           Rock Bass         0.0033         3,535         3,539			_		_	_			_	
Smallmouth Bass         0.0041         -         -         31         40         32         -         -         103           Yellow Perch         1.0068         2.642         3.614         2.647         2.403         6.682         3.994         3.094         25.065           Bluegill         0.1657         1.62         273         1.298         1.281         260         657         194         4.124           Pumpkinseed         0.0132         -         114         -         100         49         65         -         328           Rock Bass         0.2288         -         121         1.322         1.544         1.868         724         116         5.695           Green Sunfish         0.0037         -         166         -         126         71         129         -         255           Rock Bass         0.2288         -         121         1.322         1.544         1.868         724         116         5.695           Green Sunfish         0.0037         -         53         -         40         -         -         -         93         2.378           Green Sunfish         0.0037         -         85	Largemouth Bass	0.0171	_	53	92	181	49	50	_	425
Vellow Perch   1,0068   2,642   3,614   2,647   2,403   6,682   3,984   3,094   25,065		0.0152	_	108	195	276	54	101	_	373
Yellow Perch         1,0068         2,642         3,614         2,647         2,403         6,682         3,984         3,004         25,065           Bluegill         0,1657         162         273         1,298         1,281         260         657         194         4,124           0,0884         335         417         1,335         1,173         358         862         296         2,098           Pumpkinseed         0,0132         -         114         -         100         49         65         -         328           Rock Bass         0,2288         -         121         1,322         1,544         1,868         724         116         5,995           Green Sunfish         0,0037         -         53         -         40         -         -         -         -         15         2,998           Green Sunfish         0,0037         -         53         -         40         -         -         -         -         15         6,93         -         148         69         2,398         3,00         5,588         9,004         5,524         3,403         36,005         114         2,927         3,15         1,11 <t< td=""><td>Smallmouth Bass</td><td>0.0041</td><td>_</td><td>-</td><td>31</td><td>40</td><td>32</td><td>_</td><td>_</td><td>103</td></t<>	Smallmouth Bass	0.0041	_	-	31	40	32	_	_	103
Bluegill		0.0045	-	-	63	80	46	_	_	112
Bluegill	Yellow Perch	1.0068	2,642	3,614	2,647	2,403	6,682	3,984	3,094	25,065
Pumpkinseed		0.3479	1,774	2,868	2,519	2,092	4,652	3,121	2,274	7,658
Pumpkinseed         0.0132         -         114         -         100         49         65         -         328           Rock Bass         0.2288         -         121         1,322         1,544         1,868         724         116         5,695           Green Sunfish         0.0037         -         53         -         40         -         -         -         93           Green Sunfish         0.0037         -         85         -         81         -         -         -         117           TOTAL HARVEST         1.4462         2,805         4,293         5,390         5,588         9,004         5,524         3,403         36,005           RELEASED         Northern Pike         0.0061         -         75         -         40         16         22         -         153           Largemouth Bass         0.5336         41         2,927         3,115         3,153         1,455         1,998         595         13,286           Conder Pike         0.0065         -         93         -         79         32         44         -         134           Largemouth Bass         0.5336         41         2,927 <td>Bluegill</td> <td>0.1657</td> <td>162</td> <td>273</td> <td>1,298</td> <td>1,281</td> <td>260</td> <td>657</td> <td>194</td> <td>4,124</td>	Bluegill	0.1657	162	273	1,298	1,281	260	657	194	4,124
Rock Bass         0.0105         -         166         -         126         71         129         -         255           Rock Bass         0.2288         -         121         1,322         1,544         1,868         724         116         5,695           Green Sunfish         0.0037         -         53         -         40         -         -         -         93           TOTAL HARVEST         1.4462         2.805         4.293         5,390         5,588         9,004         5,524         3,403         36,005           RELEASED         0.4073         1,806         2,911         3,088         2,734         4,898         3,317         2,305         8,310           RELEASED         Northern Pike         0.0065         -         93         -         -         40         16         22         -         153           Largemouth Bass         0.5336         41         2,927         3,115         3,153         1,455         1,998         595         13,286           Smallmouth Bass         0.0845         -         393         4         24         4         -         1328           Yellow Perch         2,1381         8,526	· ·	0.0884	335	417	1,335	1,173	358	862	296	2,098
Rock Bass         0.0105         -         166         -         126         71         129         -         255           Rock Bass         0.2288         -         121         1,322         1,544         1,868         724         116         5,695           Green Sunfish         0.0032         -         133         1,169         1,271         1,485         699         236         2,398           Green Sunfish         0.0048         -         85         -         81         -         -         -         93           TOTAL HARVEST         1.4462         2.905         4.923         5,390         5,588         9,004         5,524         3,403         36,005           RELEASED         Northern Pike         0.0061         -         75         -         40         16         22         -         153           Largemouth Bass         0.5336         41         2.927         3,115         3,153         1,455         1,998         595         13,286           Smallmouth Bass         0.0845         -         393         453         402         437         421         -         2,105           Yellow Perch         2.1381         8,	Pumpkinseed	0.0132	_	114	_	100	49	65	_	328
Green Sunfish O.0037 - 53 - 40 93 O.0048 - 85 - 81 117  TOTAL HARVEST 1.4462 2.805 4.293 5.390 5.588 9.004 5.524 3.403 36,005 O.4073 1.806 2.911 3.088 2.734 4.898 3.317 2.305 8.310  RELEASED Northern Pike O.0061 - 75 - 40 16 22 - 153 O.0055 - 93 - 79 32 44 - 134 Largemouth Bass O.5336 41 2.927 3.115 3.153 1.455 1.998 595 13.286 O.1928 60 2.751 1.866 2.093 988 1.107 897 4.294  Smallmouth Bass O.0845 - 393 453 402 437 421 - 2.105 O.0419 - 516 420 367 489 393 - 985 Yellow Perch 2.1381 8.526 4.467 6.014 4.705 10.995 6.492 12.031 53.230 O.7649 6.641 3.213 7.088 4.725 7.879 4.412 8.962 16.995 Bluegill O.0403 23 129 185 340 87 240 - 1.003 O.0326 47 199 388 487 128 431 - 795 Pumpkinseed O.0024 - 43 16 - 59 Pumpkinseed O.0024 - 847 1.275 822 1.209 602 242 4.997 O.0037 - 847 1.275 822 1.209 602 242 4.997 O.0037 - 847 1.275 822 1.209 602 242 4.997 O.0032 333 93 Rock Bass O.0007 - 847 1.275 822 1.209 602 242 4.997 O.1057 - 1.315 1.392 976 971 679 497 2.504 Channel Catfish O.0015 37 80 40 O.0032 80 O.0035 88 18 O.0005 37 - 88 37 OTH3R O.0036 - 88 18 O.0007 18 80 O.0015 37 80 OTH3R O.0036 - 88 40 O.0032 80 O.0035 - 88 180 O.0015 37 80 OTH3R O.0036 - 88 80 OTH3R O.0036 - 88 18 O.0073 - 180 18 OTAL RELEASED 3.0117 8.609 8.968 11.041 9.502 14.216 9.775 12.868 74.979 O.0056 6.641 4.469 7.482 5.295 8.016 4.636 9.020 17.754 TOTAL CATCH 4.4579 11.414 13.261 16.431 15.089 23.219 15.298 16.271 110.984 ANGLER HOURS 422 680 947 1.084 1.220 1.097 353 5.803	•	0.0105	_	166	_	126	71	129	_	255
Green Sunfish         0.1032         -         132         1,169         1,271         1,485         699         236         2,398           Green Sunfish         0.0048         -         53         -         40         -         -         -         93           0.0048         -         85         -         81         -         -         -         117           TOTAL HARVEST         1.4462         2,805         4,293         5,390         5,588         9,004         5,524         3,403         36,005           RELEASED         Northern Pike         0.0061         -         75         -         40         16         22         -         153           Largemouth Bass         0.5336         41         2,927         3,115         3,153         1,455         1,998         595         13,286           Smallmouth Bass         0.0845         -         393         453         402         437         421         -         2,105           Smallmouth Bass         0.0845         -         393         453         402         437         421         -         2,105           Smallmouth Bass         0.0845         -         393	Rock Bass	0.2288	_	121	1,322	1,544	1,868	724	116	5,695
Green Sunfish         0.0037         -         53         -         40         -         -         -         93           TOTAL HARVEST         1.4462         2.805         4.293         5.390         5.588         9.004         5.524         3,403         36.005           RELEASED         0.4073         1.806         2.911         3.088         2.734         4.898         3,317         2.305         8,310           RELEASED         0.0061         -         75         -         40         16         22         -         153           Largemouth Bass         0.5336         41         2,927         3,115         3,153         1,455         1,998         595         13,286           0.1928         60         2,751         1,866         2,093         988         1,107         897         4,294           Smallmouth Bass         0,0845         -         393         453         402         437         421         -         2,105           Yellow Perch         2,1381         8,526         4,467         6,014         4,705         10,995         6,492         12,031         53,230           Bluegill         0,0403         23         129 <td></td> <td>0.1032</td> <td>_</td> <td></td> <td></td> <td></td> <td>1,485</td> <td></td> <td></td> <td></td>		0.1032	_				1,485			
Total Harvest	Green Sunfish		_					_		
TOTAL HARVEST			_		_		_	_	_	
RELEASED         Northern Pike         0.0061         -         75         -         40         16         22         -         153           Northern Pike         0.0055         -         93         -         79         32         44         -         134           Largemouth Bass         0.5336         41         2,927         3,115         3,153         1,455         1,998         595         13,286           Smallmouth Bass         0.0845         -         393         453         402         437         421         -         2,105           Smallmouth Bass         0.0845         -         393         453         402         437         421         -         2,105           Yellow Perch         2.1381         8,526         4,467         6,014         4,705         10,995         6,492         12,031         53,230           Yellow Perch         2.1381         8,526         4,467         6,014         4,705         10,995         6,492         12,031         53,230           Bluegill         0.0403         23         129         185         340         87         240         -         1,003           Bluegill         0.0326	TOTAL HARVEST		2 805		5 390		9 004	5 524	3 403	
RELEASED   Northern Pike	10171211711111201									
Northern Pike	RELEASED	0.1070	1,000	2////	0,000	2,701	1,070	0,017	2,000	0,010
Largemouth Bass         0.0055         -         93         -         79         32         44         -         134           Largemouth Bass         0.5336         41         2,927         3,115         3,153         1,455         1,998         595         13,286           Smallmouth Bass         0.0845         -         393         453         402         437         421         -         2,105           0.0419         -         516         420         367         489         393         -         985           Yellow Perch         2.1381         8,526         4,467         6,014         4,705         10,995         6,492         12,031         53,230           O.7649         6,641         3,213         7,088         4,725         7,879         4,412         8,962         16,995           Bluegill         0.0403         23         129         185         340         87         240         -         1,003           Pumpkinseed         0.0024         -         43         -         -         16         -         -         59           Rock Bass         0.2007         -         847         1,275         822 <td< td=""><td></td><td>0.0061</td><td>_</td><td>75</td><td>_</td><td>40</td><td>16</td><td>22</td><td>_</td><td>153</td></td<>		0.0061	_	75	_	40	16	22	_	153
Largemouth Bass         0.5336         41         2,927         3,115         3,153         1,455         1,998         595         13,286           Smallmouth Bass         0.1928         60         2,751         1,866         2,093         988         1,107         897         4,294           Smallmouth Bass         0.0845         -         393         453         402         437         421         -         2,105           Yellow Perch         2.1381         8,526         4,467         6,014         4,705         10,995         6,492         12,031         53,230           0.7649         6,641         3,213         7,088         4,725         7,879         4,412         8,962         16,995           Bluegill         0.0403         23         129         185         340         87         240         -         1,003           Pumpkinseed         0.0024         -         43         -         -         16         -         -         59           Rock Bass         0.2007         -         847         1,275         822         1,209         602         242         4,997           Channel Catfish         0.0016         -         - <td>TWO THIS THE</td> <td></td> <td>_</td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td>_</td> <td></td>	TWO THIS THE		_		_				_	
Smallmouth Bass         0.1928         60         2,751         1,866         2,093         988         1,107         897         4,294           Smallmouth Bass         0.0845         -         393         453         402         437         421         -         2,105           Yellow Perch         2.1381         8,526         4,467         6,014         4,705         10,995         6,492         12,031         53,230           0.7649         6,641         3,213         7,088         4,725         7,879         4,412         8,962         16,995           Bluegill         0.0403         23         129         185         340         87         240         -         1,003           0.0326         47         199         388         487         128         431         -         795           Pumpkinseed         0.0024         -         43         -         -         16         -         -         59           0.0037         -         847         1,275         822         1,209         602         242         4,997           Rock Bass         0,2007         -         847         1,275         822         1,209         <	Largemouth Bass									
Smallmouth Bass         0.0845 0.0419         -         393 453         402 437 489         393 3         -         2,105 985           Yellow Perch         2.1381 8,526 4,467 6,014 4,705 10,995 6,492 12,031 53,230         0.7649 6,641 3,213 7,088 4,725 7,879 4,412 8,962 16,995         16,995           Bluegill         0.0403 23 129 185 340 87 240 - 1,003         10,003         47 199 388 487 128 431 - 795         795           Pumpkinseed         0.0024 - 43 - 87 - 16 - 16 - 795         33 - 93         - 93           Rock Bass         0.2007 - 847 1,275 822 1,209 602 242 4,997         2,4997           0.1057 - 1,315 1,392 976 971 679 497 2,504           Channel Catfish         0.0016 40 - 40 80           0.0032 88 80 80         80           Chinook Salmon         0.0015 37 - 180 80           0.0015 37 - 180 88 80         88           0.0073 - 180 88 88           0.0073 - 180 180           TOTAL RELEASED         3.0117 8,609 8,968 11,041 9,502 14,216 9,775 12,868 74,979           0.8630 6,641 4,469 7,482 5,295 8,016 4,636 9,020 17,754           TOTAL CATCH         4,4579 11,414 13,261 16,431 15,089 23,219 15,298 16,271 110,984           107AL CATCH         4,4579 11,414 13,261 16,431 15,089 23,219 5,295 8,016 4,636 9,020 17,754           TOTAL CATCH	Largemodin bass									
Yellow Perch         0.0419         -         516         420         367         489         393         -         985           Yellow Perch         2.1381         8,526         4,467         6,014         4,705         10,995         6,492         12,031         53,230           Douglil         0.0403         23         129         185         340         87         240         -         1,003           Pumpkinseed         0.0024         -         43         -         -         16         -         -         59           Pumpkinseed         0.0037         -         87         -         -         16         -         -         59           Pumpkinseed         0.0037         -         87         -         -         33         -         -         -         59           Rock Bass         0.2007         -         847         1,275         822         1,209         602         242         4,997           Channel Catfish         0.0016         -         -         -         40         -         -         40           Chinook Salmon         0.0007         18         -         -         -         -	Smallmouth Rass									
Yellow Perch         2.1381         8,526         4,467         6,014         4,705         10,995         6,492         12,031         53,230           Bluegill         0.0403         23         129         185         340         87         240         —         1,003           Pumpkinseed         0.0024         —         43         —         —         16         —         —         59           Nock Bass         0.2007         —         847         1,275         822         1,209         602         242         4,997           Channel Catfish         0.0016         —         —         —         —         80         —         —         —         80           Chinook Salmon         0.0032         —         —         —         —         —         —         —         —         93           OTH3R         —         —         —         —         —         —         —         —         —         —         —         93           Chinook Salmon         0.0007         18         —         —         —         —         —         —         —         —         —         —         —         18	Jillallilloutil Dass									
Bluegill 0.7649 6,641 3,213 7,088 4,725 7,879 4,412 8,962 16,995   Bluegill 0.0403 23 129 185 340 87 240 - 1,003   0.0326 47 199 388 487 128 431 - 795   Pumpkinseed 0.0024 - 43 - 16 - 59   0.0037 - 87 - 133 - 16 - 93   Rock Bass 0.2007 - 847 1,275 822 1,209 602 242 4,997   0.1057 - 1,315 1,392 976 971 679 497 2,504   Channel Catfish 0.0016 40 - 60 - 80    Chinook Salmon 0.0007 18 - 6 - 80 - 6 - 80    Chinook Salmon 0.0007 18 - 6 - 7 - 80 - 7 - 80    Chinook Salmon 0.0015 37 - 88    0.0015 37 - 6 - 88    0.00073 - 180 - 7 - 7 - 88    0.00073 - 180 - 7 - 7 - 88    0.0073 - 180 - 7 - 7 - 88    0.0073 - 180 - 7 - 7 - 180    TOTAL RELEASED 3.0117 8,609 8,968 11,041 9,502 14,216 9,775 12,868 74,979   0.8630 6,641 4,469 7,482 5,295 8,016 4,636 9,020 17,754   TOTAL CATCH 4.4579 11,414 13,261 16,431 15,089 23,219 15,298 16,271 110,984   1.0666 6,882 5,334 8,095 5,959 9,394 5,700 9,310 19,603   ANGLER HOURS 1,462 680 947 1,084 1,220 1,097 353 5,803	Vallow Parch								12 031	
Bluegill         0.0403         23         129         185         340         87         240         -         1,003           Pumpkinseed         0.0326         47         199         388         487         128         431         -         795           Pumpkinseed         0.0024         -         43         -         -         16         -         -         59           0.0037         -         87         -         -         33         -         -         93           Rock Bass         0.2007         -         847         1,275         822         1,209         602         242         4,997           0.1057         -         1,315         1,392         976         971         679         497         2,504           Channel Catfish         0.0016         -         -         -         40         -         -         -         40           O.0032         -         -         -         80         -         -         -         80           Chinook Salmon         0.0007         18         -         -         -         -         -         -         88           OTH3R	Tellow Letell									
Pumpkinseed         0.0326         47         199         388         487         128         431         —         795           Pumpkinseed         0.0024         —         43         —         —         16         —         —         59           0.0037         —         87         —         —         33         —         —         93           Rock Bass         0.2007         —         847         1,275         822         1,209         602         242         4,997           0.1057         —         1,315         1,392         976         971         679         497         2,504           Channel Catfish         0.0016         —         —         —         40         —         —         —         40           0.0032         —         —         —         80         —         —         —         80           Chinook Salmon         0.0007         18         —         —         —         —         —         —         18           0.0015         37         —         —         —         —         —         —         —         37           OTH3R         0.0036 <td>Rluogill</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0,702</td> <td></td>	Rluogill								0,702	
Pumpkinseed         0.0024         -         43         -         -         16         -         -         59           Rock Bass         0.2007         -         847         1,275         822         1,209         602         242         4,997           Channel Catfish         0.01057         -         1,315         1,392         976         971         679         497         2,504           Channel Catfish         0.0016         -         -         -         40         -         -         -         40           0.0032         -         -         -         80         -         -         -         80           Chinook Salmon         0.0007         18         -         -         -         -         -         80           OTH3R         0.0015         37         -         -         -         -         -         -         18           0.0073         -         180         -         -         -         -         -         88           0.0073         -         180         -         -         -         -         -         180           TOTAL RELEASED         3.0117	Diucyiii								_	
Rock Bass         0.0037         -         87         -         -         33         -         -         93           Rock Bass         0.2007         -         847         1,275         822         1,209         602         242         4,997           Channel Catfish         0.1057         -         1,315         1,392         976         971         679         497         2,504           Channel Catfish         0.0016         -         -         -         40         -         -         -         40           0.0032         -         -         -         -         80         -         -         -         80           Chinook Salmon         0.0007         18         -         -         -         -         -         -         80           0.0015         37         -	Dumpkingood								_	
Rock Bass         0.2007         -         847         1,275         822         1,209         602         242         4,997           Channel Catfish         0.0016         -         -         -         40         -         -         -         40           Chinook Salmon         0.00032         -         -         -         80         -         -         -         80           Chinook Salmon         0.0007         18         -         -         -         -         -         -         80           Chinook Salmon         0.00015         37         -         -         -         -         -         -         -         80           OTH3R         0.0015         37         -         -         -         -         -         -         -         37           OTH3R         0.0036         -         88         -         -         -         -         -         -         88           0.0073         -         180         -         -         -         -         -         -         180           TOTAL RELEASED         3.0117         8,609         8,968         11,041         9,502 <t< td=""><td>Pullipkiliseeu</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td></t<>	Pullipkiliseeu								_	
Channel Catfish  O.0016  O.0032  Chinook Salmon  O.0007  OTH3R  O.0036  O.0036  O.0073  OTH3R  O.0074  OTH3R  O.0075  OTH3R  O.0075  OTH3R  O.0075  OTH3R  O.0076  OTH3R  O.0077  OTH3R  O.0078  OTH3R  O.0078  OTH3R  O.0079  OTH3R  OTH3R  O.0079  OTH3R  OT	Dook Doog								242	
Channel Catfish         0.0016         -         -         -         40         -         -         -         40           0.0032         -         -         -         80         -         -         80           Chinook Salmon         0.0007         18         -         -         -         -         -         -         18           0.0015         37         -         -         -         -         -         -         -         37           OTH3R         0.0036         -         88         -         -         -         -         -         88           0.0073         -         180         -         -         -         -         -         88           TOTAL RELEASED         3.0117         8,609         8,968         11,041         9,502         14,216         9,775         12,868         74,979           TOTAL CATCH         4.4579         11,414         13,261         16,431         15,089         23,219         15,298         16,271         110,984           ANGLER HOURS         1,436         2,571         4,786         4,677         5,288         4,683         1,456         24,896	KUUK Dass									
Chinook Salmon  O.0007  18	Channal Cattich			1,313				0/9		
Chinook Salmon         0.0007         18         -         -         -         -         -         -         -         18           0.0015         37         -         -         -         -         -         -         37           OTH3R         0.0036         -         88         -         -         -         -         -         88           0.0073         -         180         -         -         -         -         -         180           TOTAL RELEASED         3.0117         8,609         8,968         11,041         9,502         14,216         9,775         12,868         74,979           0.8630         6,641         4,469         7,482         5,295         8,016         4,636         9,020         17,754           TOTAL CATCH         4.4579         11,414         13,261         16,431         15,089         23,219         15,298         16,271         110,984           ANGLER HOURS         1,436         2,571         4,786         4,677         5,288         4,683         1,456         24,896           ANGLER TRIPS         422         680         947         1,084         1,220         1,097         353 <td>Charliner Caulsh</td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td></td>	Charliner Caulsh		_	_	_		_	_	_	
OTH3R  0.0015 37 37  OTH3R  0.0036 - 88 88  0.0073 - 180 180  TOTAL RELEASED 3.0117 8,609 8,968 11,041 9,502 14,216 9,775 12,868 74,979 0.8630 6,641 4,469 7,482 5,295 8,016 4,636 9,020 17,754  TOTAL CATCH 4.4579 11,414 13,261 16,431 15,089 23,219 15,298 16,271 110,984 1.0666 6,882 5,334 8,095 5,959 9,394 5,700 9,310 19,603  ANGLER HOURS 1,436 2,571 4,786 4,677 5,288 4,683 1,456 24,896 706 1,130 2,135 1,693 1,865 1,668 828 4,018  ANGLER TRIPS	Chinaali Calmaan		10	_	_	80	_	_	_	
OTH3R         0.0036         -         88         -         -         -         -         -         88           0.0073         -         180         -         -         -         -         -         -         180           TOTAL RELEASED         3.0117         8,609         8,968         11,041         9,502         14,216         9,775         12,868         74,979           0.8630         6,641         4,469         7,482         5,295         8,016         4,636         9,020         17,754           TOTAL CATCH         4.4579         11,414         13,261         16,431         15,089         23,219         15,298         16,271         110,984           1.0666         6,882         5,334         8,095         5,959         9,394         5,700         9,310         19,603           ANGLER HOURS         1,436         2,571         4,786         4,677         5,288         4,683         1,456         24,896           ANGLER TRIPS         422         680         947         1,084         1,220         1,097         353         5,803	Chinook Salmon			-	-	-	-	_	_	
0.0073         -         180         -         -         -         -         -         180           TOTAL RELEASED         3.0117         8,609         8,968         11,041         9,502         14,216         9,775         12,868         74,979           0.8630         6,641         4,469         7,482         5,295         8,016         4,636         9,020         17,754           TOTAL CATCH         4.4579         11,414         13,261         16,431         15,089         23,219         15,298         16,271         110,984           1.0666         6,882         5,334         8,095         5,959         9,394         5,700         9,310         19,603           ANGLER HOURS         1,436         2,571         4,786         4,677         5,288         4,683         1,456         24,896           ANGLER TRIPS         422         680         947         1,084         1,220         1,097         353         5,803	OTUD		37	-	-	-	-	_	_	
TOTAL RELEASED         3.0117         8,609         8,968         11,041         9,502         14,216         9,775         12,868         74,979           0.8630         6,641         4,469         7,482         5,295         8,016         4,636         9,020         17,754           TOTAL CATCH         4.4579         11,414         13,261         16,431         15,089         23,219         15,298         16,271         110,984           1.0666         6,882         5,334         8,095         5,959         9,394         5,700         9,310         19,603           ANGLER HOURS         1,436         2,571         4,786         4,677         5,288         4,683         1,456         24,896           706         1,130         2,135         1,693         1,865         1,668         828         4,018           ANGLER TRIPS         422         680         947         1,084         1,220         1,097         353         5,803	UTH3R		_		_	_	_	_	_	
TOTAL CATCH         0.8630         6,641         4,469         7,482         5,295         8,016         4,636         9,020         17,754           TOTAL CATCH         4.4579         11,414         13,261         16,431         15,089         23,219         15,298         16,271         110,984           1.0666         6,882         5,334         8,095         5,959         9,394         5,700         9,310         19,603           ANGLER HOURS         1,436         2,571         4,786         4,677         5,288         4,683         1,456         24,896           706         1,130         2,135         1,693         1,865         1,668         828         4,018           ANGLER TRIPS         422         680         947         1,084         1,220         1,097         353         5,803							-			
TOTAL CATCH         4.4579         11,414         13,261         16,431         15,089         23,219         15,298         16,271         110,984           1.0666         6,882         5,334         8,095         5,959         9,394         5,700         9,310         19,603           ANGLER HOURS         1,436         2,571         4,786         4,677         5,288         4,683         1,456         24,896           706         1,130         2,135         1,693         1,865         1,668         828         4,018           ANGLER TRIPS         422         680         947         1,084         1,220         1,097         353         5,803	TOTAL RELEASED									
ANGLER HOURS     1.0666     6,882     5,334     8,095     5,959     9,394     5,700     9,310     19,603       ANGLER HOURS     1,436     2,571     4,786     4,677     5,288     4,683     1,456     24,896       706     1,130     2,135     1,693     1,865     1,668     828     4,018       ANGLER TRIPS     422     680     947     1,084     1,220     1,097     353     5,803										
ANGLER HOURS 1,436 2,571 4,786 4,677 5,288 4,683 1,456 24,896 706 1,130 2,135 1,693 1,865 1,668 828 4,018 ANGLER TRIPS 422 680 947 1,084 1,220 1,097 353 5,803	TOTAL CATCH									
706         1,130         2,135         1,693         1,865         1,668         828         4,018           ANGLER TRIPS         422         680         947         1,084         1,220         1,097         353         5,803		1.0666								
ANGLER TRIPS 422 680 947 1,084 1,220 1,097 353 5,803	ANGLER HOURS		1,436		4,786			4,683		24,896
ANGLER TRIPS 422 680 947 1,084 1,220 1,097 353 5,803			706	1,130	2,135	1,693	1,865	1,668	828	<u>4</u> ,018
	ANGLER TRIPS		422	680	947	1,084	1,220	1,097	353	5,803
			224		467					

Table 3.—Estimated harvest, catch per hour, and fishing pressure for Portage Lake pier/dock fishery. Two standard errors are given below the estimates.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
Yellow Perch	1.4360	_	_	_	2,168	164	100	_	2,431
	5.1668	-	-	-	NAN	337	161	-	8,678
Bluegill	0.2614	-	-	-	383	_	60	-	442
	0.9132	-	-	_	NAN	_	96	-	1,533
Pumpkinseed	0.0118	-	-	-	_	_	20	-	20
	0.0197	-	-	-	_	_	32	-	32
Rock Bass	0.0483	-	-	-	_	82	_	-	82
	0.1019	-	-	-	_	168	_	-	168
Chinook Salmon	0.2008	-	-	-	_	_	340	-	340
	0.3350	-	-	-	_	_	546	-	546
TOTAL HARVEST	1.9584	_	_	-	2,550	246	520	_	3,316
	6.1032	-	-	-	NAN	377	578	-	10,223
RELEASED									
Northern Pike	0.0284	-	_	23	25	_	_	_	48
	0.0399	_	_	32	55	_	_	_	64
Largemouth Bass	0.1613	_	_	46	227	_	_	_	273
_	0.3051	-	_	65	497	_	_	_	502
Yellow Perch	1.3506	_	_	274	253	927	700	132	2,286
	1.0314	-	_	735	485	847	647	264	1,407
Bluegill	0.1615	_	_	_	_	55	200	19	273
ū	0.3046	_	_	_	_	127	483	38	501
Rock Bass	0.2169	_	23	_	25	273	46	_	367
	0.3646	_	47	_	48	562	NAN	_	594
TOTAL RELEASED	1.9187	_	23	343	531	1,255	946	151	3,248
	2.5489	_	47	739	699	1,024	NAN	267	4,058
TOTAL CATCH	3.8771	-	23	343	3,081	1,500	1,466	151	6,564
	6.7292	_	47	739	NAN	1,091	NAN	267	10,999
ANGLER HOURS		_	422	190	425	412	183	61	1,693
		_	570	158	338	292	146	123	765
ANGLER TRIPS		_	84	62	136	111	47	19	459
		_	125	68	111	88	43	39	209

Table 4.—Estimated harvest, catch per hour, and fishing pressure for Portage Lake shore fishery. Two standard errors are given below the estimates.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
TOTAL HARVEST	_	_	_	_	_	_	_	_	_
	_	_	_	_	_	_	_	_	_
RELEASED									
TOTAL RELEASED	_	_	_	_	_	_	_	_	_
	_	_	_	_	_	_	_	_	_
TOTAL CATCH	_	_	_	_	_	_	_	_	_
	_	_	_	_	_	_	_	_	-
ANGLER HOURS		_	115	_	_	119	_	_	234
		_	138	_	_	183	_	_	229
ANGLER TRIPS		_	29	_	_	30	_	_	60
		_	36	_	-	47	_	_	59

Table 5.—Total estimated harvest, catch per hour, and fishing pressure for Portage Lake all fishing modes combined. Two standard errors are given below the estimates.

Species	C/H	April	May	June	July	August	September	October	Season
HARVEST									
Walleye	0.0018	-	-	-	-	49	_	_	49
	0.0027	_	_	-	-	71	_	_	71
Northern Pike	0.0046	-	64	-	_	16	44	-	124
	0.0044	-	93	-	_	32	64	-	118
Largemouth Bass	0.0158	-	53	92	181	49	50	-	425
	0.0141	_	108	195	276	54	101	_	373
Smallmouth Bass	0.0038	-	-	31	40	32	_	-	103
	0.0042	_	-	63	80	46	_	_	112
Yellow Perch	1.0251	2,642	3,614	2,647	4,570	6,845	4,084	3,094	27,496
	0.7515	1,774	2,868	2,519	NAN	4,664	3,125	2,274	19,714
Bluegill	0.1703	162	273	1,298	1,663	260	717	194	4,567
	0.2577	335	417	1,335	NAN	358	867	296	6,877
Pumpkinseed	0.0130	_	114	_	100	49	85	_	348
•	0.0098	_	166	_	126	71	133	_	257
Rock Bass	0.2154	_	121	1,322	1,544	1,950	724	116	5,777
	0.0955	_	132	1,169	1,271	1,494	699	236	2,404
Chinook Salmon	0.0127	_	_	_	_	_	340	_	340
	0.0204	_	_	_	_	_	546	_	546
Green Sunfish	0.0035	_	53	_	40	_	_	_	93
	0.0044	_	85	_	81	_	_	_	117
TOTAL HARVEST	1.4659	2,805	4,293	5,390	8,138	9,249	6,044	3,403	39,321
	1.2685	1,806	2,911	3,088	NAN	4,913	3,367	2,305	33,490
RELEASED	112000	1,000	2//11	0,000	10.114	1/710	0,007	2,000	00/170
Northern Pike	0.0075	_	75	23	66	16	22	_	201
NOTHICHTTING	0.0075	_	93	32	96	32	44	_	148
Largemouth Bass	0.5055	41	2,927	3,161	3,381	1,455	1,998	595	13,559
Largemodin bass	0.3033	60	2,751	1,867	2,151	988	1,107	897	4,323
Smallmouth Bass	0.0785	-	393	453	402	437	421	-	2,105
Jiliaiiilioutii Dass	0.0786	_	516	420	367	489	393	_	985
Yellow Perch	2.0698	8,526	4,467	6,288	4,957	11,923	7,192	12,163	55,517
Tellow Letell	0.7100	6,641	3,213	7,126	4,750	7,924	4,459	8,966	17,054
Dluogill	0.7100	23	129	185	340	1,924	4,459	19	17,054
Bluegill	0.0478	23 47	129	388	340 487	180	647	38	940
Dumpkingood	0.0336		43						59
Pumpkinseed	0.0022	-		_	-	16 33	-	-	
Rock Bass		-	87 970	- 1 27E	047		- 440	242	93 5 244
KUCK Bass	0.2000	-	870 1 214	1,275	847	1,482	648	242	5,364
Obama al Calfiala	0.1370	_	1,316	1,392	977	1,122	NAN	497	3,583
Channel Catfish	0.0015	_	-	-	40	-	_	_	40
China ale Calma an	0.0030	10	_	_	80	_	_	_	80
Chinook Salmon	0.0007	18	_	_	_	-	_	_	18
OTUAD	0.0014	37	-	_	_	_	-	-	37
OTH3R	0.0033	-	88	-	_	-	_	-	88
	0.0067	_	180		_			-	180
TOTAL RELEASED	2.9164	8,609	8,992	11,384	10,032	15,470	10,721	13,019	78,227
	1.7792	6,641	4,469	7,519	5,341	8,081	NAN	9,024	46,204
TOTAL CATCH	4.3824	11,414	13,284	16,774	18,170	24,720	16,764	16,422	117,548
	2.2303	6,882	5,334	8,128	NAN	9,457	NAN	9,314	57,065
ANGLER HOURS		1,436	3,107	4,976	5,102	5,819	4,866	1,517	26,823
		706	1,273	2,141	1,727	1,896	1,674	837	4,097
ANGLER TRIPS		422	794	1,009	1,219	1,361	1,144	372	6,322
		224	320	471	434	498	431	210	1,020
									· · · · · · · · · · · · · · · · · · ·