

APPENDIX 4

Miscellaneous angler survey data collected from 1927 to 1995 for the Manistique River, its tributaries, and watershed lakes.

Estimated catch rate, catch, and angling effort for two lakes (3 years) within the Mainstem-upper subwatershed are presented in appendices 4-1 through 4-3; and seven lakes and one river within the Indian-upper subwatershed are presented in appendices 4-4 through 4-11. Each of these surveys followed a complemented sample design with counts of angling effort and interviews of anglers or angling parties. Specific sampling design and estimation methods for appendices 4-4, 4-7, and 4-10 and 4-11 are given in Lockwood (2000b) with estimation formulae presented in Lockwood et al. (1999). Sampling designs for appendices 4-1 through 4-3, 4-5 and 4-6, and 4-9 and 4-10 are presented in Ryckman and Lockwood (1985) with estimation formulae presented in appendix 1 of Lockwood et al. (1999).

Estimated catch rate and mean length of harvested fish are presented in appendices 4-12 through 4-25. These data are from the General Creel Census and were collected by MDNR conservation offices as they performed their normal duties (Ryckman 1981, Lockwood 2000a). While these data provide historical evidence of species presence, they were not collected following traditional random sampling designs. Originally, interview records were recorded by angler or angling party. Daily summaries were then prepared for each lake or river site. These daily summaries then contain the catch and effort information for one or multiple anglers. The original interview records have been discarded. As a result, between angler or angler party variation cannot be estimated. Variation (1 Standard Error) reported here is between days. Summaries of these interviews are archived at The Institute for Fisheries Research, Ann Arbor, MI.

Estimated catch rates presented in appendices 4-12 through 4-25 were calculated using the ratio-of-means estimator. Specific formulae for estimating catch rate and catch rate Standard Error (SE) are given in Lockwood et al. (1999). Weighted mean length \bar{L} for species s was estimated as:

$$\bar{L}_s = \frac{\sum_{i=1}^N L_{si} C_{si}}{\sum_{i=1}^N C_{si}},$$

for C fish caught and N days sampled. Standard Error SE of \bar{L} for species s was estimated as:

$$SE_s = \sqrt{\frac{\sum_{i=1}^N (L_{si} - \bar{L}_s)^2 C_{si}}{\left(\sum_{i=1}^N C_{si}\right) \left(\left[\sum_{i=1}^N C_{si}\right] - 1\right)}}.$$

References

- Lockwood, R. N. 2000a. Conducting roving and access site angler surveys. Chapter 14 *in* Schneider, James C. (editor) 2000. Manual of fisheries survey methods II: with periodic updates. Michigan Department of Natural Resources, Fisheries Special Report 25, Ann Arbor.
- Lockwood, R. N. 2000b. Sportfishing angler surveys on Michigan inland waters, 1993-99. Michigan Department of Natural Resources, Fisheries Technical Report 2000-3, Ann Arbor.
- Lockwood, R. N., D. M. Benjamin, and J. R. Bence. 1999. Estimating angling effort and catch from Michigan roving and access site angler survey data. Michigan Department of Natural Resources, Fisheries Research Report 2044, Ann Arbor.
- Ryckman, J. R. 1981. Creel census methods in general. Appendix VI-A-9 *in* J. W. Merna, J. C. Schneider, G. R. Alexander, W. D. Alward and R. L. Eschenroder, editors. Manual of fisheries survey methods. Fisheries Management Report No. 9, Michigan Department of Natural Resources, Lansing.
- Ryckman, J. R. and R. N. Lockwood. 1985. On-site creel surveys in Michigan 1975-82. Michigan Department of Natural Resources, Fisheries Research Report 1922, Ann Arbor.

Appendix 4-1.—Estimated monthly harvest, fishing pressure and catch per hour by anglers, Big Manistique Lake (Mainstem – upper; Luce and Mackinac Co.; T. 44-45 N., R. 11-12 W., Sec. many). Survey period was May 1978 – February 1979. Two standard errors are given in parentheses.

| Species | Catch/hour | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Season |
|-----------------|---------------------|-------------------|-------------------|-------------------|------------------|------------------|----------------|----------|------------------|--------------|----------------|-------------------|
| northern pike | 0.0336 (0.0132) | 1,334 (743) | 257 (222) | 298 (294) | 157 (152) | 88 (124) | 0 (0) | 0 (0) | 0 (0) | 42 (92) | 0 (0) | 2,176 (857) |
| yellow perch | 0.2824 (0.1417) | 4,715 (6,881) | 1,217 (826) | 5,076 (4,147) | 4,650 (4,128) | 393 (345) | 82 (172) | 0 (0) | 1,024 (1,093) | 417 (394) | 697 (532) | 18,271 (9,168) |
| walleye | 0.0984 (0.0225) | 1,406 (622) | 1,353 (730) | 1,051 (806) | 1,151 (667) | 254 (203) | 34 (40) | 0 (0) | 68 (58) | 314 (223) | 736 (454) | 6,367 (1,453) |
| smallmouth bass | 0.0040 (0.0044) | 70 (143) | 27 (57) | 0 (0) | 107 (215) | 57 (117) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 261 (289) |
| largemouth bass | <0.0001 (0.0001) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 4 (9) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 4 (9) |
| bluegill | 0.0007 (0.0015) | 0 (0) | 47 (95) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 47 (95) |
| rock bass | 0.0020 (0.0019) | 95 (122) | 27 (54) | 0 (0) | 0 (0) | 6 (12) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 128 (124) |
| white sucker | 0.0002 (0.0004) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 13 (27) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 13 (27) |
| Total harvest | 0.4215 (0.1444) | 7,620 (6,951) | 2,928 (1,131) | 6,425 (4,235) | 6,065 (4,190) | 815 (436) | 116 (177) | 0 (0) | 1,092 (1,095) | 773 (462) | 1,433 (699) | 27,267 (9,339) |
| Angler hours | | 16,297 (3,783) | 15,465 (4,716) | 14,716 (2,300) | 9,737 (2,452) | 3,684 (1,081) | 1,154 (521) | 0 (0) | 1,435 (486) | 925 (426) | 1,278 (472) | 64,691 (7,066) |
| Angler trips | | 4,832 (1,151) | 5,522 (1,732) | 4,664 (1,031) | 3,409 (843) | 763 (272) | 222 (91) | 0 (0) | 326 (129) | 487 (282) | 260 (97) | 20,485 (2,507) |

Appendix 4-2.—Estimated monthly harvest, fishing pressure and catch per hour by anglers, Big Manistique Lake (Mainstem – upper; Luce and Mackinac Co.; T. 44-45 N., R. 11-12 W., Sec. many). Survey period was May 1979 – February 1980. Two standard errors are given in parentheses.

| Species | Catch/hour | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Season |
|-----------------|--------------------|------------------|------------------|------------------|------------------|------------------|--------------|----------|------------------|------------------|------------------|-------------------|
| brook trout | 0.0003 (0.0007) | 15 (32) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 15 (32) |
| cisco | 0.0029 (0.0052) | 115 (240) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 4 (8) | 15 (19) | 134 (241) |
| northern pike | 0.0428 (0.0146) | 0 (0) | 73 (105) | 162 (178) | 70 (72) | 335 (348) | 69 (120) | 0 (0) | 403 (420) | 458 (248) | 404 (189) | 1,974 (676) |
| yellow perch | 0.3685 (0.1720) | 2,691 (3,474) | 3,102 (2,321) | 110 (199) | 509 (352) | 1,741 (1,131) | 11 (24) | 0 (0) | 1,892 (2,510) | 2,246 (2,248) | 4,673 (5,703) | 16,975 (7,923) |
| walleye | 0.1158 (0.0389) | 2,129 (1,540) | 1,122 (469) | 472 (528) | 606 (397) | 719 (361) | 26 (41) | 0 (0) | 106 (162) | 114 (153) | 41 (37) | 5,335 (1,792) |
| smallmouth bass | 0.0263 (0.0129) | 88 (125) | 23 (32) | 117 (209) | 860 (527) | 123 (124) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 1,211 (595) |
| rock bass | 0.0036 (0.0051) | 0 (0) | 38 (76) | 0 (0) | 0 (0) | 128 (225) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 166 (237) |
| white sucker | 0.0034 (0.0037) | 58 (117) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 70 (109) | 27 (55) | 155 (169) |
| Total harvest | 0.5636 (0.1776) | 5,096 (3,812) | 4,358 (2,372) | 861 (627) | 2,045 (751) | 3,046 (1,264) | 106 (129) | 0 (0) | 2,401 (2,550) | 2,892 (2,269) | 5,160 (5,707) | 25,965 (8,182) |
| Angler hours | | 7,712 (1,436) | 9,285 (1,328) | 6,630 (1,346) | 5,984 (1,388) | 7,340 (1,676) | 751 (489) | 0 (0) | 3,051 (2,416) | 3,477 (1,035) | 1,838 (557) | 46,068 (4,223) |
| Angler trips | | 2,588 (632) | 2,959 (444) | 2,315 (535) | 1,927 (470) | 1,760 (476) | 296 (214) | 0 (0) | 1,486 (1,223) | 942 (285) | 558 (167) | 14,831 (1,726) |

Appendix 4-3.—Estimated monthly harvest, fishing pressure and catch per hour by boat anglers, South Manistique Lake (Mainstem – upper; Mackinac Co.; T. 43-44 N., R. 12 W., Sec. many). Survey period was May 15 – September 9, 1978. Two standard errors are given in parentheses.

| Species | Catch/hour | May | June | July | Aug. | Sept. | Season |
|-----------------|--------------------|----------------|-------------------|-------------------|-------------------|------------------|--------------------|
| northern pike | 0.0722 (0.0469) | 102 (97) | 3,035 (2,665) | 1,063 (628) | 193 (390) | 47 (101) | 4,440 (2,769) |
| yellow perch | 0.1512 (0.0610) | 180 (154) | 2,453 (2,568) | 3,437 (1,333) | 2,498 (1,400) | 725 (902) | 9,293 (3,342) |
| walleye | 0.2300 (0.1411) | 216 (102) | 9,477 (8,100) | 3,386 (1,424) | 778 (871) | 280 (415) | 14,137 (8,281) |
| smallmouth bass | 0.0051 (0.0058) | 0 (0) | 0 (0) | 258 (334) | 58 (117) | 0 (0) | 316 (354) |
| largemouth bass | 0.0124 (0.0141) | 31 (43) | 0 (0) | 729 (853) | 0 (0) | 0 (0) | 760 (854) |
| bluegill | 0.0186 (0.0148) | 55 (65) | 95 (201) | 475 (417) | 435 (743) | 86 (143) | 1,146 (890) |
| rock bass | 0.0239 (0.0241) | 44 (50) | 497 (1,027) | 559 (924) | 344 (453) | 24 (50) | 1,468 (1,456) |
| sunfish sp. | 0.0036 (0.0032) | 27 (40) | 0 (0) | 78 (108) | 32 (65) | 86 (143) | 223 (195) |
| crappie sp. | 0.0002 (0.0003) | 12 (17) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 12 (17) |
| bullhead sp. | 0.0006 (0.0011) | 6 (13) | 0 (0) | 30 (61) | 0 (0) | 0 (0) | 36 (63) |
| Total harvest | 0.5178 (0.1819) | 673 (233) | 15,557 (8,967) | 10,015 (2,466) | 4,338 (1,909) | 1,248 (1,019) | 31,831 (9,551) |
| Angler hours | | 2,154 (445) | 10,019 (8,624) | 22,019 (5,497) | 15,828 (4,444) | 2,362 (1,214) | 61,472 (11,225) |
| Angler trips | | 849 (184) | 19,234 (4,821) | 9,223 (2,409) | 5,108 (1,658) | 582 (333) | 25,996 (5,651) |

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Appendix 4-4.—Estimated monthly harvest, fishing pressure and catch per hour by boat anglers, Bass Lake (Indian – upper; Schoolcraft Co.; T. 44 N., R. 17 W., Sec. 31, 32). Survey period was May 28 – September 16, 1995. Two standard errors are given in parentheses.

| Species | Catch/hour | May | June | July | Aug | Sept | Season |
|-----------------|--------------------|-------------|----------------|------------------|------------------|--------------|------------------|
| yellow perch | 0.9326 (0.7395) | 0 (0) | 164 (344) | 1,722 (1,607) | 1,114 (1,426) | 85 (154) | 3,085 (2,181) |
| smallmouth bass | 0.0057 (0.0058) | 2 (5) | 7 (11) | 9 (14) | 2 (4) | 0 (0) | 19 (18) |
| largemouth bass | 0.0082 (0.0107) | 0 (0) | 16 (23) | 11 (25) | 0 (0) | 0 (0) | 27 (34) |
| bluegill | 0.1539 (0.2372) | 0 (0) | 492 (762) | 15 (33) | 2 (4) | 0 (0) | 509 (763) |
| rock bass | 0.0033 (0.0078) | 0 (0) | 0 (0) | 11 (25) | 0 (0) | 0 (0) | 11 (25) |
| Total harvest | 1.1037 (0.8032) | 2 (5) | 679 (836) | 1,767 (1,608) | 1,118 (1,426) | 85 (154) | 3,651 (2,311) |
| Angler hours | | 112 (81) | 1,609 (866) | 1,166 (752) | 272 (228) | 149 (194) | 3,308 (1,188) |
| Angler trips | | 32 (24) | 493 (268) | 444 (289) | 74 (70) | 39 (51) | 1,082 (404) |

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Appendix 4-5.—Estimated monthly harvest, fishing pressure and catch per hour by boat anglers, Corner Lake (Indian – upper; Alger, Delta, and Schoolcraft cos.; T. 43-44 N., R. 18-19 W., Sec. 1, 6, and 36). Survey period was May– August 1978. Two standard errors are given in parentheses.

| Species | Catch/hour | May | June | July | Aug. | Season |
|-----------------|--------------------|--------------|--------------|--------------|--------------|----------------|
| northern pike | 0.0337 (0.0508) | 0 (0) | 77 (113) | 0 (0) | 0 (0) | 77 (113) |
| yellow perch | 0.0083 (0.0177) | 19 (40) | 0 (0) | 0 (0) | 0 (0) | 19 (40) |
| smallmouth bass | 0.0070 (0.0155) | 0 (0) | 16 (35) | 0 (0) | 0 (0) | 16 (35) |
| bluegill | 0.0083 (0.0177) | 19 (40) | 0 (0) | 0 (0) | 0 (0) | 19 (40) |
| sunfish sp. | 0.0709 (0.1387) | 162 (312) | 0 (0) | 0 (0) | 0 (0) | 162 (312) |
| Total harvest | 0.1282 (0.1546) | 200 (317) | 93 (118) | 0 (0) | 0 (0) | 293 (338) |
| Angler hours | | 583 (291) | 820 (456) | 683 (547) | 200 (230) | 2,286 (803) |
| Angler trips | | 364 (199) | 513 (300) | 427 (351) | 125 (146) | 1,429 (524) |

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Appendix 4-6.—Estimated harvest, fishing pressure, and catch per hour, Deep Lake (Indian – upper; Schoolcraft and Delta Co.; T. 43-44 N., R 18 W., Sec. 6 and 31). Survey period was May - August, 1978. Two standard errors are given in parentheses.

| Species | Catch/hour | May | Jun | Jul | Aug | Season |
|---------------|--------------------|-------------|--------------|----------|----------|--------------|
| northern pike | 0.0660 (0.1482) | 0 (0) | 33 (71) | 0 (0) | 0 (0) | 33 (71) |
| yellow perch | 0.0020 (0.0013) | 0 (0) | 0 (0) | 1 (0) | 0 (0) | 1 (0) |
| bluegill | 0.2380 (0.5364) | 0 (0) | 119 (257) | 0 (0) | 0 (0) | 119 (257) |
| rock bass | 0.1840 (0.5236) | 90 (255) | 0 (0) | 2 (0) | 0 (0) | 92 (255) |
| Total harvest | 0.4900 (0.8026) | 90 (255) | 152 (267) | 3 (0) | 0 (0) | 245 (369) |
| Angler hours | | 80 (160) | 414 (279) | 4 (0) | 2 (0) | 500 (322) |
| Angler trips | | 50 (101) | 257 (178) | 5 (0) | 2 (0) | 314 (205) |

Appendix 4-7.—Estimated harvest, fishing pressure, and catch per hour by boat and shore anglers fishing, Petes Lake (Indian – upper; Schoolcraft Co.; T. 44 N., R. 18 W., Sec. 7, 8). Survey period was May 15 – September 11, 1993. Two standard errors are given in parentheses.

| Species | Catch/hour | May | Jun | Jul | Aug | Sep | Season |
|-----------------|--------------------|--------------|--------------|----------------|----------------|--------------|----------------|
| yellow perch | 0.0050 (0.0104) | 0 (0) | 0 (0) | 0 (0) | 15 (31) | 0 (0) | 15 (31) |
| walleye | 0.0721 (0.0634) | 0 (0) | 15 (28) | 2 (4) | 143 (159) | 57 (81) | 217 (181) |
| smallmouth bass | 0.0229 (0.0200) | 0 (0) | 10 (15) | 30 (48) | 25 (25) | 4 (8) | 69 (57) |
| largemouth bass | 0.0010 (0.0020) | 3 (6) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 3 (6) |
| bluegill | 0.0518 (0.0446) | 0 (0) | 14 (33) | 20 (31) | 81 (82) | 41 (87) | 156 (127) |
| rock bass | 0.0013 (0.0030) | 0 (0) | 4 (9) | 0 (0) | 0 (0) | 0 (0) | 4 (9) |
| Total harvest | 0.1542 (0.0878) | 3 (6) | 43 (46) | 52 (57) | 264 (183) | 102 (119) | 464 (230) |
| Angler hours | | 135 (208) | 382 (350) | 1,186 (497) | 1,074 (509) | 232 (194) | 3,009 (842) |
| Angler trips | | 44 (68) | 140 (129) | 453 (192) | 401 (217) | 69 (61) | 1,107 (330) |

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Appendix 4-8.—Estimated monthly harvest, fishing pressure and catch per hour by boat anglers, Skeels Lake (Indian – upper; Alger, and Delta cos.; T. 43-44 N., R. 18-19 W., Sec. 1, and 36). Survey period was May– August 1978. Two standard errors are given in parentheses.

| Species | Catch/hour | May | June | July | Aug. | Season |
|-----------------|--------------------|--------------|--------------|--------------|--------------|----------------|
| northern pike | 0.1885 (0.2232) | 7 (16) | 353 (408) | 11 (14) | 0 (0) | 371 (409) |
| yellow perch | 0.0351 (0.0496) | 8 (19) | 38 (78) | 23 (46) | 0 (0) | 69 (93) |
| smallmouth bass | 0.0056 (0.0075) | 0 (0) | 0 (0) | 11 (14) | 0 (0) | 11 (14) |
| bluegill | 0.0696 (0.1424) | 0 (0) | 0 (0) | 137 (274) | 0 (0) | 137 (274) |
| rock bass | 0.0569 (0.0854) | 0 (0) | 66 (133) | 46 (91) | 0 (0) | 112 (161) |
| sunfish sp. | 0.0727 (0.0695) | 15 (37) | 94 (93) | 34 (69) | 0 (0) | 143 (122) |
| crappie sp. | 0.0193 (0.0405) | 0 (0) | 38 (78) | 0 (9) | 0 (0) | 38 (78) |
| Total harvest | 0.4477 (0.3380) | 30 (45) | 589 (453) | 262 (301) | 0 (0) | 881 (546) |
| Angler hours | | 133 (126) | 703 (233) | 724 (765) | 408 (255) | 1,968 (849) |
| Angler trips | | 49 (49) | 260 (114) | 269 (296) | 151 (105) | 729 (338) |

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Appendix 4-9.—Estimated harvest, fishing pressure, and catch per hour by boat anglers fishing, Straights Lake (Indian – upper; Schoolcraft Co.; T. 44 N., R. 18 W., Sec. 21, 30, and 31). Survey period was May– August 1978. Two standard errors are given in parentheses.

| Species | Catch/hour | May | Jun | Jul | Aug | Season |
|-----------------|--------------------|--------------|--------------|-------------|------------|--------------|
| northern pike | 0.3003 (0.3860) | 74 (150) | 162 (243) | 0 (0) | 0 (0) | 236 (286) |
| smallmouth bass | 0.0420 (0.0934) | 0 (0) | 33 (72) | 0 (0) | 0 (0) | 33 (72) |
| largemouth bass | 0.0165 (0.0489) | 0 (0) | 13 (38) | 0 (0) | 0 (0) | 13 (38) |
| bluegill | 0.0356 (0.0729) | 28 (56) | 0 (0) | 0 (0) | 0 (0) | 28 (56) |
| rock bass | 0.0356 (0.0729) | 28 (56) | 0 (0) | 0 (0) | 0 (0) | 28 (56) |
| Total harvest | 0.4300 (0.4331) | 130 (170) | 208 (256) | 0 (0) | 0 (0) | 338 (308) |
| Angler hours | | 350 (135) | 345 (276) | 46 (123) | 45 (64) | 786 (337) |
| Angler trips | | 247 (105) | 244 (198) | 32 (87) | 32 (45) | 555 (245) |

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Appendix 4-10.—Estimated harvest, fishing pressure, and catch per hour by boat anglers, Thunder Lake (Indian – upper; Schoolcraft Co.; T. 43N., R. 17 W., sec 19, 20, 29, 30). Survey period was May 15 – September 16, 1995. Two standard errors are given in parentheses.

| Species | Catch/hour | May | Jun | Jul | Aug | Sep | Season |
|-----------------|--------------------|----------------|----------------|------------------|--------------|--------------|------------------|
| northern pike | 0.0635 (0.0609) | 0 (0) | 0 (0) | 93 (195) | 128 (169) | 160 (242) | 381 (354) |
| yellow perch | 0.7148 (1.0344) | 0 (0) | 0 (0) | 3,622 (6,087) | 346 (446) | 322 (473) | 4,289 (6,122) |
| smallmouth bass | 0.0128 (0.0267) | 0 (0) | 0 (0) | 0 (0) | 77 (159) | 0 (0) | 77 (159) |
| bluegill | 0.3282 (0.3230) | 0 (0) | 0 (0) | 1,539 (1,826) | 359 (442) | 72 (91) | 1,969 (1,881) |
| rock bass | 0.0060 (0.0078) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 36 (46) | 36 (46) |
| sunfish | 0.0030 (0.0062) | 0 (0) | 0 (0) | 18 (37) | 0 (0) | 0 (0) | 18 (37) |
| Total harvest | 1.1283 (1.1024) | 0 (0) | 0 (0) | 5,272 (6,358) | 908 (669) | 590 (541) | 6,770 (6,416) |
| Angler hours | | 1,040 (564) | 1,060 (402) | 2,335 (1,153) | 852 (392) | 713 (259) | 6,000 (1,425) |
| Angler trips | | 380 (207) | 446 (225) | 1,001 (521) | 363 (174) | 416 (191) | 2,606 (657) |

Appendix 4-11.—Estimated harvest, fishing pressure, and catch per hour, Indian River (Indian – upper; Schoolcraft Co.; T. 44 N, R. 17 W., Sec. 20, 28, 34; T. 43 N., R. 17 W., Sec 2, 11, 14, 22, 23, 27). Survey period was May 28 – September 30, 1995. Two standard errors are given in parentheses.

| Species | Catch/hour | May | Jun | Jul | Aug | Sep | Season |
|---------------|--------------------|----------|----------------|----------------|--------------|--------------|------------------|
| brown trout | 0.0258 (0.0368) | 0 (0) | 0 (0) | 58 (120) | 61 (115) | 0 (0) | 119 (166) |
| brook trout | 0.0471 (0.0683) | 0 (0) | 62 (104) | 139 (288) | 16 (33) | 0 (0) | 217 (308) |
| Total harvest | 0.0729 (0.0789) | 0 (0) | 62 (104) | 197 (312) | 77 (120) | 0 (0) | 336 (350) |
| Angler hours | | 0 (0) | 1,605 (822) | 2,011 (914) | 672 (371) | 316 (336) | 4,604 (1,327) |
| Angler trips | | 0 (0) | 192 (104) | 1,269 (679) | 144 (110) | 90 (97) | 1,695 (702) |

Appendix 4-12.—Direct contact river angler creel data for the Manistique River mainstem-upper. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). CPE = catch per unit effort; AL = average length.

| River/Creek | Year | No.anglers (lines) | Total hours | Days (N) | brook trout | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | | sucker sp | | |
|-------------|------|-----------------------|----------------|-------------|----------------|-------------|----------------|----|----------------|-----------------|-------------|----------------|-----------------|----------------|--------------|----|-----------------|-----------------|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | |
| Black | 1946 | 2 | 18.0 | 1 | 1.22 (-) | 9.00 (-) | | | | | | | | | | | | | |
| | 1957 | 8 | 12.0 | 1 | | | | | 0.58 (-) | | | | | | | | | | |
| | 1958 | 11 | 34.5 | 3 | 0.03 (0.05) | | 0.14 (0.02) | | 0.20 (0.33) | | | | | 1.16 (0.13) | | | | | |
| Helmer | 1939 | 2 | 3.0 | 2 | | | | | | | | | | | | | 20.00 (6.67) | 16.00 (0.00) | |
| | 1940 | 2 | 4.0 | 2 | | | | | 1.00 (0.00) | 17.50 (0.00) | | | | | | | 1.00 (0.00) | 16.00 (0.00) | |
| | 1945 | 1 | 2.0 | 1 | 0.50 (-) | 8.00 (-) | | | | | | | | | | | | | |
| | 1949 | 2 | 1.0 | 1 | | | | | | | | | | | | | | 5.00 (-) | |
| | 1959 | 10 | 22.0 | 2 | | | | | | | | | | | | | | 5.91 (1.65) | |
| Manistique | 1944 | 4 | 16.0 | 2 | | | | | | | | 0.25 (0.06) | 23.00 (1.00) | | | | | | |
| | 1952 | 10 | 51.0 | 3 | | | | | 0.04 (0.04) | | | | 0.67 (0.13) | | | | | | |
| | 1964 | 4 | 12.0 | 1 | | | | | 0.17 (-) | | 0.08 (-) | | 0.08 (-) | | | | | | |
| | 1943 | 4 | 4.0 | 2 | | | | | | | | 0.25 (0.25) | 18.00 (-) | | | | | | |

Appendix 4-13.—Direct contact river angler creel data for the Manistique River mainstem-middle. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-).

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | |
|-------------|------|------------------------|----------------|-------------|-------------|----------------|
| | | | | | CPE | Average length |
| Little Bear | 1952 | 1 | 5.0 | 1 | 1.60 (-) | |
| Manistique | 1943 | 2 | 4.0 | 1 | | |

Appendix 4-14.—Direct contact river angler creel data for the Manistique River mainstem-mouth. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). CPE = catch per unit effort; AL = average length.

| River/Creek | Year | No.anglers (lines) | Total hours | Days (N) | brook trout | | smallmouth bass | | largemouth bass | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | | sucker sp. | | |
|-------------|------|-----------------------|----------------|-------------|-------------|--------------|--------------------|-----------------|--------------------|----|----------------|----|-----------------|----------------|----------------|----------------|-----------------|----------------|--------------|----|------------|----------------|-----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Manistique | 1931 | 1 | 3.0 | 1 | 0.33 (-) | 15.50 (-) | | | | | | | | 0.67 (-) | 16.00 (-) | | | | | | | | |
| | 1941 | 7 | 27.3 | 3 | | | 0.07 (0.05) | 17.33 (1.67) | | | | | | 0.11 (0.03) | 11.00 (-) | 0.55 (0.58) | | | | | | | |
| | 1944 | 3 | 4.8 | 2 | | | | | | | | | | | | 0.63 (0.22) | 24.00 (6.00) | | | | | | |
| | 1948 | 6 | 16.0 | 2 | | | | | | | | | | 0.06 (0.08) | | 0.81 (0.23) | | | | | | | |
| | 1950 | 2 | 1.0 | 1 | | | | | | | | | | | | 1.00 (-) | | | | | | | |
| | 1953 | 5 | 16.0 | 3 | | | | | 0.06 (0.07) | | | | | | 0.25 (0.29) | 0.56 (0.12) | | | | | | | |
| | 1954 | 34 | 106.0 | 9 | | | | | | | | | 0.38 (0.32) | 0.01 (0.01) | 0.53 (0.10) | | | | | | | | |
| | 1955 | 23 | 82.0 | 8 | | | | | | | | | 0.02 (0.03) | 0.10 (0.06) | 0.48 (0.04) | | | | | | | | |
| | 1957 | 9 | 40.0 | 1 | | | | | | | | | 0.08 (-) | 0.03 (-) | 0.08 (-) | | | 0.13 (-) | | | | | |
| | 1958 | 37 | 86.0 | 5 | | | | | | | | | 0.02 (0.02) | 0.06 (0.03) | 0.27 (0.07) | | | | | | | | |
| | 1959 | 8 | 19.0 | 3 | | | 0.16 (0.19) | | | | | | | | 0.68 (0.27) | | | | | | | | |
| | 1960 | 24 | 60.0 | 5 | | | | | | | | | 0.02 (0.02) | 0.07 (0.04) | 0.43 (0.14) | | | | | | | | |
| | 1961 | 28 | 109.0 | 7 | | | | | 0.03 (0.03) | | | | 0.18 (0.08) | 0.17 (0.13) | 0.24 (0.19) | | | | | | | | |
| | 1962 | 83 | 257.5 | 17 | | | | | | | 0.02 (0.01) | | 0.76 (0.20) | 0.08 (0.04) | 0.24 (0.07) | | | 0.02 (0.01) | | | | 0.01 (0.01) | |
| | 1963 | 54 | 165.0 | 12 | | | 0.01 (0.01) | 0.01 (0.01) | | | 0.01 (0.01) | | 0.27 (0.16) | 0.15 (0.08) | 0.12 (0.03) | | | 0.13 (0.14) | | | | 0.01 (0.01) | |
| | 1964 | 19 | 72.0 | 6 | | | 0.08 (0.06) | 0.03 (0.03) | | | | | | 0.07 (0.05) | 0.07 (0.03) | | | | | | | | |

Appendix 4-14.-Continued.

| River/Creek | Year | No.anglers (lines) | Total hours | Days (N) | brook trout | | smallmouth bass | | largemouth bass | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | | sucker sp. | | |
|---------------|------|-----------------------|----------------|-------------|-------------|--------|--------------------|----|--------------------|----|-----------|----|-----------------|----|---------|----|---------------|----|--------------|----|------------|----|-----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Sturgeon Hole | 1942 | 2 | 10.3 | 1 | 2.24 | 8.50 | | | | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | | | | |
| | 1944 | 1 | 2.0 | 1 | 2.50 | 9.00 | | | | | | | | | | | | | | | | | |
| | | | | | | (-) | (-) | | | | | | | | | | | | | | | | |
| | 1948 | 2 | 5.0 | 1 | 2.20 | | | | | | | | | | | | | | | | | | |
| | | | | | | (-) | | | | | | | | | | | | | | | | | |
| | 1953 | 3 | 5.0 | 1 | 0.80 | | | | | | | | | | | | | | | | | | |
| | | | | | | (-) | | | | | | | | | | | | | | | | | |
| | 1954 | 6 | 16.0 | 2 | 0.56 | | | | | | | | | | | | | | | | | | |
| | | | | | | (0.08) | | | | | | | | | | | | | | | | | |
| | 1955 | 1 | 1.0 | 1 | 4.00 | | | | | | | | | | | | | | | | | | |
| | | | | | | (-) | | | | | | | | | | | | | | | | | |
| 1958 | 1 | 0.5 | 1 | 2.00 | | | | | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | | | | |
| 1961 | 1 | 0.5 | 1 | 2.00 | | | | | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | | | | |
| 1963 | 2 | 4.0 | 2 | 2.50 | | | | | | | | | | | | | | | | | | | |
| | | | | | (0.75) | | | | | | | | | | | | | | | | | | |
| 1964 | 7 | 7.0 | 3 | 0.71 | | | | | | | | | | | | | | | | | | | |
| | | | | | (0.12) | | | | | | | | | | | | | | | | | | |

Appendix 4-15.—Direct contact angler creel data for the Tributaries - Fox. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). CPE = catch per unit effort; AL = average length.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | yellow perch | | walleye | | northern pike | | sucker sp. | | | |
|-------------|------|------------------------|----------------|-------------|-------------|--------|-------------|----|---------------|----|--------------|----|---------|----|---------------|----|------------|--|--|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | | | |
| Camp 7 | 1951 | 2 | 2.0 | 1 | 2.00 | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | |
| | 1954 | 1 | 2.0 | 1 | 1.00 | | | | | | | | | | | | | | | |
| | | | | | | (-) | | | | | | | | | | | | | | |
| | 1955 | 3 | 7.0 | 1 | 0.00 | | | | | | | | | | | | | | | |
| | | | | | | (-) | | | | | | | | | | | | | | |
| | 1959 | 16 | 37.0 | 7 | 1.35 | | | | | | | | | | | | | | | |
| | | | | | (0.42) | | | | | | | | | | | | | | | |
| | 1960 | 9 | 16.0 | 5 | 1.69 | | | | | | | | | | | | | | | |
| | | | | | (0.51) | | | | | | | | | | | | | | | |
| Clear | 1936 | 2 | 8.0 | 2 | 6.75 | 7.88 | | | | | | | | | | | | | | |
| | | | | | (0.00) | (0.02) | | | | | | | | | | | | | | |
| | 1941 | 1 | 2.0 | 1 | 6.50 | 8.00 | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | |
| | 1943 | 2 | 8.0 | 2 | 1.13 | 8.00 | | | | | | | | | | | | | | |
| | | | | | | (0.63) | (0.00) | | | | | | | | | | | | | |
| | 1944 | 2 | 3.0 | 2 | 0.33 | 7.50 | | | | | | | | | | | | | | |
| | | | | | | (0.22) | (-) | | | | | | | | | | | | | |
| | 1945 | 5 | 25.0 | 3 | 1.08 | 8.00 | | | | | | | | | | | | | | |
| | | | | | | (0.75) | (0.00) | | | | | | | | | | | | | |
| | 1946 | 7 | 30.0 | 3 | 1.77 | 8.21 | | | | | | | | | | | | | | |
| | | | | | | (0.32) | (0.06) | | | | | | | | | | | | | |
| | 1947 | 5 | 18.0 | 5 | 0.72 | | | | | | | | | | | | | | | |
| | | | | | | (0.16) | | | | | | | | | | | | | | |
| | 1948 | 2 | 1.0 | 1 | 1.00 | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | |
| 1949 | 7 | 14.0 | 3 | 1.50 | | | | | | | | | | | | | | | | |
| | | | | | (0.69) | | | | | | | | | | | | | | | |
| 1950 | 16 | 18.0 | 2 | 0.06 | | | | | | | | | | | | | | | | |
| | | | | | (0.09) | | | | | | | | | | | | | | | |
| 1951 | 17 | 22.5 | 10 | 2.36 | | | | | | | | | | | | | | | | |
| | | | | | (0.77) | | | | | | | | | | | | | | | |
| 1952 | 18 | 43.0 | 8 | 1.53 | | | | | | | | | | | | | | | | |
| | | | | | (0.42) | | | | | | | | | | | | | | | |

Appendix 4-15.--Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | yellow perch | | walleye | | northern pike | | sucker sp. | | | |
|----------------------|------|------------------------|----------------|-------------|-------------|--------|-------------|----|---------------|----|--------------|----|---------|----|---------------|----|------------|--|--|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | | | |
| Clear-- continued | 1954 | 1 | 0.5 | 1 | 2.00 | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | |
| | 1956 | 3 | 2.0 | 2 | 1.00 | | | | | | | | | | | | | | | |
| | | | | | | (1.00) | | | | | | | | | | | | | | |
| | 1957 | 2 | 1.5 | 2 | | | | | | | | | | | | | | | | |
| | 1958 | 10 | 11.5 | 4 | 0.87 | | | | | | | | | | | | | | | |
| | | | | | | (0.41) | | | | | | | | | | | | | | |
| | 1960 | 6 | 11.0 | 3 | 1.73 | | | | | | | | | | | | | | | |
| | | | | | (0.43) | | | | | | | | | | | | | | | |
| 1961 | 3 | 4.5 | 3 | 3.33 | | | | | | | | | | | | | | | | |
| | | | | | (0.56) | | | | | | | | | | | | | | | |
| 1962 | 17 | 24.0 | 4 | 0.67 | | | | | | | | | | | | | | | | |
| | | | | | (0.20) | | | | | | | | | | | | | | | |
| 1964 | 8 | 11.0 | 3 | 1.64 | | | | | | | | | | | | | | | | |
| | | | | | (0.84) | | | | | | | | | | | | | | | |
| Cold | 1934 | 4 | 7.0 | 4 | 1.43 | 8.30 | | | | | | | | | | | | | | |
| | | | | | (0.39) | (0.26) | | | | | | | | | | | | | | |
| | 1937 | 3 | 4.0 | 3 | 12.75 | 8.50 | | | | | | | | | | | | | | |
| | | | | | (3.19) | (0.00) | | | | | | | | | | | | | | |
| | 1939 | 4 | 4.0 | 2 | 5.50 | 11.07 | | | | | | | | | | | | | | |
| | | | | | (2.00) | (0.46) | | | | | | | | | | | | | | |
| | 1940 | 1 | 6.0 | 1 | 0.00 | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | |
| | 1941 | 1 | 8.0 | 1 | 1.88 | 11.00 | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | |
| | 1944 | 9 | 72.0 | 1 | 0.60 | 8.30 | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | |
| | 1945 | 8 | 36.0 | 2 | 1.25 | 8.00 | | | | | | | | | | | | | | |
| | | | | (0.56) | (0.00) | | | | | | | | | | | | | | | |
| 1946 | 4 | 33.0 | 2 | 1.18 | 8.88 | | | | | | | | | | | | | | | |
| | | | | (0.46) | (0.03) | | | | | | | | | | | | | | | |
| 1947 | 4 | 8.0 | 1 | 0.00 | | | | | | | | | | | | | | | | |
| | | | | (-) | | | | | | | | | | | | | | | | |
| 1948 | 8 | 33.0 | 3 | 1.97 | | | | | | | | | | | | | | | | |
| | | | | | (0.46) | | | | | | | | | | | | | | | |

Appendix 4-15.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | yellow perch | | walleye | | northern pike | | sucker sp. | | | |
|--------------------|------|------------------------|----------------|-------------|-------------|--------|-------------|----|---------------|----|--------------|----|---------|----|---------------|----|------------|--|--|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | | | |
| Cold- continued | 1949 | 4 | 26.0 | 2 | 1.19 | | | | | | | | | | | | | | | |
| | | | | | (0.84) | | | | | | | | | | | | | | | |
| | 1952 | 11 | 29.0 | 4 | 1.41 | | | | | | | | | | | | | | | |
| | | | | | | (0.42) | | | | | | | | | | | | | | |
| | 1954 | 14 | 54.0 | 8 | 1.56 | | | | | | | | | | | | | | | |
| | | | | | | (0.19) | | | | | | | | | | | | | | |
| | 1955 | 37 | 106.5 | 14 | 1.72 | | | | | | | | | | | | | | | |
| | | | | | | (0.44) | | | | | | | | | | | | | | |
| | 1956 | 26 | 66.0 | 13 | 1.76 | | | | | | | | | | | | | | | |
| | | | | | | (0.47) | | | | | | | | | | | | | | |
| | 1957 | 30 | 77.5 | 10 | 0.71 | | | | | | | | | | | | | | | |
| | | | | | (0.15) | | | | | | | | | | | | | | | |
| 1958 | 13 | 37.0 | 5 | 0.97 | | | | | | | | | | | | | | | | |
| | | | | | (0.67) | | | | | | | | | | | | | | | |
| 1959 | 8 | 33.5 | 5 | 1.73 | | | | | | | | | | | | | | | | |
| | | | | | (0.41) | | | | | | | | | | | | | | | |
| 1960 | 1 | 4.0 | 1 | 2.25 | | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | |
| 1961 | 2 | 12.0 | 1 | 1.67 | | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | |
| 1964 | 8 | 38.0 | 3 | 1.68 | | | | | | | | | | | | | | | | |
| | | | | | (0.09) | | | | | | | | | | | | | | | |
| Deer | 1950 | 2 | 10.0 | 1 | 0.20 | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | |
| | 1952 | 2 | 10.0 | 1 | 0.10 | | | | | | | | | | | | | | | |
| | | | | | | (-) | | | | | | | | | | | | | | |
| | 1955 | 2 | 4.0 | 1 | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| 1956 | 3 | 20.0 | 1 | 0.80 | | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | |
| 1957 | 4 | 11.0 | 2 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| 1958 | 11 | 19.0 | 4 | 2.32 | | | | | | | | | | | | | | | | |
| | | | | | (0.52) | | | | | | | | | | | | | | | |

Appendix 4-15.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | yellow perch | | walleye | | northern pike | | sucker sp. | |
|-------------|------|------------------------|----------------|-------------|----------------|-----------------|-------------|----------------|----------------|-------------|--------------|----|---------|----|----------------|--------------|------------|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | |
| Fox | 1928 | 21 | 168.5 | 21 | 1.73 (0.32) | 8.52 (0.56) | | | 0.11 (0.06) | 9.00 (-) | | | | | | | | |
| | 1929 | 1 | 1.0 | 1 | 1.00 (-) | 9.00 (-) | | | | | | | | | | | | |
| | 1930 | 20 | 63.0 | 20 | 1.95 (0.45) | 9.70 (0.11) | | | | | | | | | | | | |
| | 1931 | 18 | 66.5 | 18 | 1.73 (0.25) | 10.70 (0.07) | | | 0.21 (0.22) | 8.50 (-) | | | | | | | | |
| | 1932 | 9 | 24.0 | 9 | 1.33 (0.44) | 10.13 (0.30) | | | | | | | | | | | | |
| | 1933 | 5 | 34.0 | 5 | 1.24 (0.55) | 10.07 (0.23) | | | | | | | | | | | | |
| | 1934 | 5 | 24.5 | 5 | 1.06 (0.15) | 12.19 (0.18) | | | | | | | | | | | | |
| | 1938 | 2 | 2.0 | 2 | 1.50 (0.50) | 7.50 (0.00) | | | | | | | | | | | | |
| | 1939 | 27 | 116.0 | 23 | 1.66 (0.31) | 9.50 (0.12) | | | | | | | | | 0.01 (0.01) | 16.00 (-) | | |
| | 1940 | 9 | 48.0 | 9 | 1.21 (0.40) | 8.95 (0.19) | | | | | | | | | | | | |
| | 1941 | 18 | 77.5 | 8 | 0.84 (0.14) | 10.73 (0.09) | | | | | | | | | | | | |
| | 1942 | 41 | 139.5 | 14 | 0.37 (0.09) | 10.13 (0.21) | | | | | | | | | | | | |
| | 1944 | 13 | 66.5 | 5 | 0.89 (0.33) | 9.49 (0.16) | | | | | | | | | | | | |
| | 1945 | 71 | 399.5 | 15 | 0.47 (0.07) | 9.19 (0.08) | | | | | | | | | | | | |
| | 1946 | 117 | 513.5 | 38 | 0.98 (0.09) | 8.86 (0.04) | | | | | | | | | | | | |
| | 1947 | 25 | 74.0 | 9 | 0.41 (0.22) | | | | | | | | | | | | | |
| | 1948 | 18 | 45.0 | 7 | 0.84 (0.38) | | | 0.09 (0.09) | | | | | | | | | | |
| | 1949 | 16 | 49.0 | 8 | 0.73 (0.35) | | | | | | | | | | | | | |

Appendix 4-15.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | yellow perch | | walleye | | northern pike | | sucker sp. | | |
|--------------------|------|------------------------|----------------|-------------|----------------|----------------|-------------|----|---------------|----|--------------|----|---------|----------------|-----------------|----|------------|--|----------------|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | | |
| Fox-- continued | 1950 | 30 | 81.5 | 13 | 1.46 (0.28) | | | | | | | | | | | | | | |
| | 1951 | 26 | 94.5 | 14 | 1.29 (0.25) | | | | | | | | | | | | | | |
| | 1952 | 60 | 205.0 | 25 | 1.04 (0.19) | | | | | | | | | | | | | | |
| | 1953 | 10 | 29.0 | 5 | 1.59 (0.34) | | | | | | | | | | | | | | |
| | 1954 | 45 | 112.0 | 20 | 1.07 (0.18) | | | | | | | | | | | | | | |
| | 1955 | 38 | 169.0 | 19 | 1.20 (0.25) | | | | | | | | | | | | | | |
| | 1956 | 58 | 178.0 | 25 | 1.26 (0.17) | | | | | | | | | | | | | | 0.01 (0.01) |
| | 1956 | 86 | 190.8 | 29 | 1.35 (0.23) | | | | | | | | | | | | | | |
| | 1958 | 32 | 75.0 | 14 | 0.83 (0.25) | | | | | | | | | | | | | | |
| | 1959 | 24 | 67.0 | 11 | 1.24 (0.30) | | | | | | | | | | | | | | |
| | 1960 | 7 | 22.5 | 4 | 1.73 (0.42) | | | | | | | | | | | | | | |
| | 1961 | 8 | 17.0 | 5 | 2.18 (0.36) | | | | | | | | | | | | | | |
| | 1962 | 14 | 34.3 | 9 | 1.11 (0.23) | | | | | | | | | | | | | | |
| | 1963 | 24 | 50.0 | 8 | 0.82 (0.28) | | | | | | | | | | | | | | |
| | 1964 | 41 | 125.0 | 19 | 1.09 (0.25) | | | | | | | | | | | | | | |
| Fox (E.branch) | 1928 | 1 | 8.0 | 1 | 4.38 (-) | 8.00 (-) | | | | | | | | | | | | | |
| | 1929 | 6 | 32.0 | 6 | 3.13 (0.60) | 9.39 (0.07) | | | | | | | | | | | | | |
| | 1930 | 26 | 89.0 | 18 | 1.67 (0.35) | 8.87 (0.06) | | | | | | | | 0.17 (0.11) | 21.00 (0.00) | | | | |

Appendix 4-15.–Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | yellow perch | | walleye | | northern pike | | sucker sp. | |
|----------------------------------|------|------------------------|----------------|----------------|----------------|------------------|-----------------|--------------|---------------|----|--------------|----|----------------|----------------|---------------|----|------------|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | |
| Fox (E. branch)– continued | 1931 | 5 | 17.0 | 5 | 2.24 (0.84) | 9.53 (0.13) | | | | | | | | | | | | |
| | 1933 | 9 | 35.0 | 8 | 1.89 (0.64) | 8.29 (0.10) | | | | | | | | | | | | |
| | 1934 | 13 | 45.5 | 13 | 1.65 (0.50) | 8.78 (0.11) | | | | | | | | | | | | |
| | 1937 | 3 | 12.0 | 3 | 0.00 (0.00) | | | | | | | | | 0.17 (0.17) | 20.00 (-) | | | |
| | 1939 | 24 | 76.0 | 21 | 2.61 (0.37) | 9.26 (0.08) | | | | | | | | | | | | |
| | 1941 | 11.00 | 49.00 | 3 | 1.08 (0.28) | 9.51 (0.04) | | | | | | | | | | | | |
| | 1943 | 66 | 280.0 | 25 | 1.31 (0.21) | 8.59 (0.03) | | | | | | | | | | | | |
| | 1944 | 86 | 241.8 | 21 | 1.42 (0.32) | 8.38 (0.03) | | | | | | | | | | | | |
| | 1945 | 92 | 482.00 | 26 | 0.88 (0.10) | 8.46 (0.03) | | | | | | | | | | | | |
| | 1946 | 97 | 443.5 | 25 | 1.05 (0.18) | 8.32 (0.05) | <0.01 (0.01) | 16.00 (-) | | | | | | | | | | |
| | 1948 | 30 | 116.5 | 9 | 1.06 (0.36) | | | | | | | | | | | | | |
| | 1949 | 44 | 189.0 | 14 | 0.97 (0.20) | | | | | | | | | | | | | |
| | 1950 | 52 | 107.0 | 15 | 0.61 (0.24) | | | | | | | | | | | | | |
| | 1951 | 90 | 232.3 | 27 | 1.67 (0.19) | | | | | | | | | | | | | |
| | 1952 | 111 | 286.5 | 32 | 1.79 (0.20) | | | | | | | | 0.01 (0.01) | | | | | |
| | 1953 | 35 | 96.0 | 13 | 1.61 (0.27) | | 0.06 (0.04) | | | | | | | | | | | |
| | 1954 | 182 | 534.5 | 85 | 1.58 (0.13) | | | | | | | | | | | | | |
| | 1955 | 33 | 70.5 | 19 | 0.96 (0.30) | | 0.01 (0.01) | | | | | | | | | | | |
| 1956 | 77 | 229.3 | 34 | 1.46 (0.19) | | <0.01 (<0.01) | | | | | | | | | | | | |

Appendix 4-15.--Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | yellow perch | | walleye | | northern pike | | sucker sp. | | |
|-----------------------------------|------|------------------------|----------------|-------------|----------------|-------------|----------------|----|---------------|----|--------------|----|---------|----------------|---------------|----|------------|--|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | | |
| Fox (E. branch)-- continued | 1957 | 41 | 90.5 | 21 | 1.01 (0.25) | | 0.01 (0.01) | | | | | | | | | | | | |
| | 1958 | 56 | 162.5 | 21 | 0.67 (0.15) | | | | | | | | | | | | | | |
| | 1959 | 35 | 105.0 | 12 | 1.72 (0.25) | | | | | | | | | | | | | | |
| | 1960 | 35 | 94.5 | 14 | 1.61 (0.20) | | | | | | | | | 0.02 (0.02) | | | | | |
| | 1961 | 50 | 150.5 | 22 | 1.61 (0.22) | | | | | | | | | | | | | | |
| | 1962 | 27 | 73.5 | 14 | 1.35 (0.26) | | 0.01 (0.01) | | | | | | | | | | | | |
| | 1963 | 40 | 91.5 | 18 | 1.27 (0.18) | | | | | | | | | | | | | | |
| | 1964 | 43 | 140.0 | 17 | 1.21 (0.28) | | | | | | | | | | | | | | |
| Hay Meadow | 1942 | 5 | 5.0 | 1 | | | | | | | | | | | | | | | |
| | 1945 | 2 | 2.0 | 1 | 1.50 (-) | 7.50 (-) | | | | | | | | | | | | | |
| | 1947 | 2 | 4.0 | 1 | 1.25 (-) | | | | | | | | | | | | | | |
| | 1948 | 3 | 6.0 | 2 | 1.17 (0.22) | | | | | | | | | | | | | | |
| | 1951 | 4 | 10.0 | 2 | 0.50 (0.40) | | | | | | | | | | | | | | |
| | 1952 | 5 | 5.0 | 1 | 1.00 (-) | | | | | | | | | | | | | | |
| | 1953 | 5 | 9.0 | 2 | 2.00 (0.67) | | | | | | | | | | | | | | |
| | 1954 | 7 | 9.3 | 4 | 0.76 (0.21) | | | | | | | | | | | | | | |
| | 1959 | 2 | 2.0 | 1 | | | | | | | | | | | | | | | |
| | 1962 | 1 | 2.0 | 1 | | | | | | | | | | | | | | | |

Appendix 4-15.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | yellow perch | | walleye | | northern pike | | sucker sp. | |
|--------------------------|------|------------------------|----------------|-------------|----------------|-----------------|----------------|--------------|----------------|--------------|----------------|----------------|---------|----|---------------|----|------------|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | |
| Hay meadow- continued | 1964 | 1 | 0.3 | 1 | 12.00 (-) | | | | | | | | | | | | | |
| | 1928 | 2 | 14.0 | 2 | 0.50 (0.14) | 10.00 (0.00) | 0.21 (0.37) | | | | | | | | | | | |
| | 1929 | 7 | 37.0 | 7 | 1.86 (0.23) | 10.81 (0.22) | | | | | | | | | | | | |
| | 1930 | 14 | 48.0 | 12 | 2.42 (0.58) | 9.03 (0.07) | | | | | | | | | | | | |
| | 1932 | 10 | 36.0 | 5 | 5.03 (0.83) | 8.17 (0.03) | | | | | | | | | | | | |
| | 1933 | 14 | 42.0 | 11 | 2.90 (0.45) | 8.45 (0.05) | | | | | | | | | | | | |
| | 1934 | 12 | 40.0 | 12 | 0.78 (0.29) | 10.97 (0.39) | | | | | | | | | | | | |
| | 1939 | 13 | 28.5 | 9 | 0.60 (0.28) | 8.21 (0.16) | | | | | | | | | | | | |
| | 1940 | 20 | 44.5 | 19 | 1.35 (0.29) | 8.40 (0.09) | | | | | | | | | | | | |
| | 1941 | 45 | 137.5 | 29 | 0.77 (0.15) | 8.78 (0.09) | 0.01 (0.01) | 16.00 (-) | | | 0.04 (0.03) | 6.00 (0.00) | | | | | | |
| | 1942 | 22 | 77.0 | 8 | 0.95 (0.28) | 8.04 (0.07) | | | | | | | | | | | | |
| | 1943 | 16 | 12.0 | 4 | 4.25 (3.50) | 8.20 (0.00) | | | | | | | | | | | | |
| | 1944 | 17 | 56.0 | 8 | 1.36 (0.61) | 10.09 (0.17) | | | 0.02 (0.02) | 20.00 (-) | | | | | | | | |
| | 1945 | 24 | 46.5 | 11 | 1.20 (0.55) | 8.24 (0.14) | | | | | | | | | | | | |
| | 1946 | 17 | 41.0 | 10 | 1.17 (0.40) | 9.17 (0.20) | | | | | | | | | | | | |
| | 1947 | 1 | 6.0 | 1 | | | | | | | | | | | | | | |
| | 1948 | 14 | 56.0 | 2 | 1.34 (0.44) | | | | | | | | | | | | | |
| | 1950 | 4 | 9.0 | 1 | 0.67 (-) | | | | | | | | | | | | | |
| | 1951 | 7 | 16.0 | 3 | 3.13 (2.46) | | | | | | | | | | | | | |

Appendix 4-15.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | yellow perch | | walleye | | northern pike | | sucker sp. | | |
|--------------------------|------|------------------------|----------------|-------------|----------------|----------------|-------------|----|----------------|----|--------------|----|---------|----|---------------|----|------------|--|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | | |
| Hay meadow- continued | 1952 | 12 | 30.5 | 4 | 1.44 (0.37) | | | | | | | | | | | | | | |
| | 1954 | 3 | 5.0 | 1 | 0.80 (-) | | | | | | | | | | | | | | |
| | 1958 | 2 | 6.0 | 1 | | | | | | | | | | | | | | | |
| | 1959 | 9 | 13.0 | 2 | 0.77 (0.08) | | | | | | | | | | | | | | |
| | 1960 | 8 | 17.0 | 5 | 0.82 (0.19) | | | | | | | | | | | | | | |
| | 1961 | 4 | 8.0 | 1 | | | | | | | | | | | | | | | |
| | 1963 | 7 | 21.0 | 4 | 0.52 (0.45) | | | | | | | | | | | | | | |
| | 1964 | 11 | 25.0 | 2 | 0.36 (0.31) | | | | 0.04 (0.01) | | | | | | | | | | |
| Little Fox | 1931 | 15 | 27.0 | 11 | 1.48 (0.59) | 8.26 (0.12) | | | | | | | | | | | | | |
| | 1932 | 12 | 63.5 | 10 | 0.61 (0.12) | 8.46 (0.13) | | | | | | | | | | | | | |
| | 1934 | 18 | 55.0 | 15 | 1.44 (0.40) | 9.25 (0.12) | | | | | | | | | | | | | |
| | 1936 | 18 | 88.0 | 18 | 2.03 (0.25) | 8.89 (0.09) | | | | | | | | | | | | | |
| | 1937 | 21 | 99.5 | 21 | 1.53 (0.18) | 8.63 (0.07) | | | | | | | | | | | | | |
| | 1938 | 33 | 104.0 | 32 | 2.61 (0.28) | 9.08 (0.06) | | | | | | | | | | | | | |
| | 1939 | 21 | 71.5 | 17 | 1.65 (0.37) | 8.47 (0.08) | | | | | | | | | | | | | |
| | 1940 | 11 | 41.5 | 11 | 2.31 (0.22) | 8.48 (0.04) | | | | | | | | | | | | | |
| | 1941 | 3 | 10.0 | 3 | 1.50 (0.15) | 7.63 (0.06) | | | | | | | | | | | | | |
| | 1942 | 4 | 12.0 | 2 | 0.67 (0.06) | 8.88 (0.13) | | | | | | | | | | | | | |
| | 1943 | 4 | 14.0 | 3 | 1.57 (0.31) | 8.68 (0.15) | | | | | | | | | | | | | |

Appendix 4-15.–Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | yellow perch | | walleye | | northern pike | | sucker sp. | | | |
|--------------------------|------|------------------------|----------------|-------------|----------------|----------------|-------------|----|---------------|----|--------------|----|---------|----|---------------|----|------------|--|--|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | | | |
| Little Fox– continued | 1944 | 24 | 86.5 | 6 | 0.81 (0.49) | 8.26 (0.03) | | | | | | | | | | | | | | |
| | 1945 | 22 | 87.0 | 4 | 0.30 (0.06) | 8.47 (0.06) | | | | | | | | | | | | | | |
| | 1946 | 42 | 127.0 | 14 | 0.91 (0.22) | 8.14 (0.20) | | | | | | | | | | | | | | |
| | 1947 | 68 | 196.0 | 15 | 0.88 (0.28) | | | | | | | | | | | | | | | |
| | 1948 | 14 | 21.5 | 6 | 0.79 (0.68) | | | | | | | | | | | | | | | |
| | 1949 | 14 | 29.0 | 6 | 1.14 (0.48) | | | | | | | | | | | | | | | |
| | 1950 | 36 | 74.0 | 13 | 1.20 (0.39) | | | | | | | | | | | | | | | |
| | 1951 | 41 | 131.5 | 6 | 1.33 (0.34) | | | | | | | | | | | | | | | |
| | 1952 | 19 | 43.0 | 10 | 1.19 (0.48) | | | | | | | | | | | | | | | |
| | 1953 | 8 | 17.5 | 3 | 1.03 (0.78) | | | | | | | | | | | | | | | |
| | 1954 | 15 | 34.0 | 7 | 1.76 (0.53) | | | | | | | | | | | | | | | |
| | 1955 | 9 | 19.0 | 5 | 2.05 (1.31) | | | | | | | | | | | | | | | |
| | 1956 | 46 | 86.0 | 18 | 0.86 (0.14) | | | | | | | | | | | | | | | |
| | 1957 | 50 | 93.5 | 21 | 0.81 (0.17) | | | | | | | | | | | | | | | |
| | 1958 | 16 | 33.0 | 7 | 2.18 (0.45) | | | | | | | | | | | | | | | |
| | 1959 | 11 | 16.5 | 6 | 1.76 (0.41) | | | | | | | | | | | | | | | |
| | 1960 | 8 | 19.0 | 6 | 2.32 (0.34) | | | | | | | | | | | | | | | |
| | 1961 | 13 | 24.0 | 4 | 2.21 (0.86) | | | | | | | | | | | | | | | |
| | 1962 | 8 | 15.0 | 3 | 2.40 (0.57) | | | | | | | | | | | | | | | |

Appendix 4-15.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | yellow perch | | walleye | | northern pike | | sucker sp. | | | | | |
|---------------------------|------|------------------------|----------------|-------------|-------------|--------|-------------|----|---------------|----|--------------|----|---------|----|---------------|----|------------|--|--|--|--|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | | | | | |
| Little Fox-- continued | 1963 | 14 | 23.0 | 8 | 1.35 | | | | | | | | | | | | | | | | | |
| | | | | | (0.73) | | | | | | | | | | | | | | | | | |
| | 1964 | 20 | 26.0 | 9 | 2.15 | | | | | | | | | | | | | | | | | |
| | | | | | (0.49) | | | | | | | | | | | | | | | | | |
| Snyder | 1943 | 3 | 12.0 | 1 | 0.17 | 8.00 | | | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | | | |
| | 1947 | 5 | 10.0 | 1 | 0.50 | | | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | | | |
| Spring | 1935 | 1 | 4.0 | 1 | 1.50 | 7.50 | | | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | | | |
| | 1940 | 4 | 6.5 | 4 | 4.31 | 9.75 | | | | | | | | | | | | | | | | |
| | | | | | (1.41) | (0.09) | | | | | | | | | | | | | | | | |
| | 1945 | 4 | 20.3 | 1 | 1.48 | 9.50 | | | | | | | | | | | | | | | | |
| | | | | | | (-) | (-) | | | | | | | | | | | | | | | |
| | 1946 | 2 | 7.0 | 1 | 0.57 | 8.50 | | | | | | | | | | | | | | | | |
| | | | | | | (-) | (-) | | | | | | | | | | | | | | | |
| | 1949 | 1 | 1.0 | 1 | 1.00 | | | | | | | | | | | | | | | | | |
| | | | | | | (-) | | | | | | | | | | | | | | | | |
| | 1950 | 2 | 4.0 | 1 | | | | | | | | | | | | | | | | | | |
| | 1951 | 12 | 39.0 | 4 | 0.85 | | | | | | | | | | | | | | | | | |
| | | | | | | (0.12) | | | | | | | | | | | | | | | | |
| | 1952 | 11 | 41.0 | 5 | 0.66 | | | | | | | | | | | | | | | | | |
| | | | | | | (0.10) | | | | | | | | | | | | | | | | |
| | 1954 | 8 | 10.8 | 2 | 0.74 | | | | | | | | | | | | | | | | | |
| | | | | | | (0.33) | | | | | | | | | | | | | | | | |
| 1955 | 8 | 11.0 | 4 | 1.00 | | | | | | | | | | | | | | | | | | |
| | | | | | (0.54) | | | | | | | | | | | | | | | | | |
| 1956 | 15 | 34.0 | 5 | 1.12 | | | | | | | | | | | | | | | | | | |
| | | | | | (0.33) | | | | | | | | | | | | | | | | | |
| 1957 | 7 | 14.0 | 2 | | | | | | | | | | | | | | | | | | | |
| 1958 | 17 | 27.0 | 3 | 0.15 | | | | | | | | | | | | | | | | | | |
| | | | | | (0.11) | | | | | | | | | | | | | | | | | |
| 1962 | 2 | 7.0 | 1 | 1.00 | | | | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | | | |

Appendix 4-16.–Direct contact river angler creel data for the Tributaries – central. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). CPE = catch per unit effort; AL = average length.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | rock bass | | walleye | | northern pike | |
|-------------|------|------------------------|----------------|-------------|-------------|--------|-------------|----|---------------|----|-----------|----|---------|----|---------------|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | |
| Beaver | 1933 | 1 | 4.0 | 1 | 1.75 | 8.00 | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | |
| | 1947 | 3 | 3.0 | 1 | 1.00 | | | | | | | | | | | |
| | 1952 | 1 | 2.0 | 1 | 0.50 | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |
| Black | 1952 | 17 | 32.5 | 5 | 0.65 | | | | | | 0.12 | | | | | |
| | | | | | (0.40) | | | | | | (0.09) | | | | | |
| | 1953 | 2 | 10.0 | 1 | 0.90 | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |
| | 1954 | 5 | 12.0 | 2 | 1.33 | | | | | | | | | | | |
| | | | | | | (0.06) | | | | | | | | | | |
| | 1956 | 4 | 4.0 | 1 | 0.50 | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |
| | 1959 | 5 | 11.0 | 1 | 2.36 | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |
| | 1960 | 5 | 10.0 | 1 | 1.00 | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |
| Brace | 1931 | 3 | 7.0 | 3 | 1.29 | 9.86 | | | | | | | | | | |
| | | | | | (0.44) | (0.40) | | | | | | | | | | |
| | 1959 | 3 | 8.0 | 2 | 1.50 | | | | | | | | | | | |
| | | | | | (0.25) | | | | | | | | | | | |
| | 1960 | 1 | 1.0 | 1 | | | | | | | | | | | | |
| | 1961 | 1 | 1.0 | 1 | 1.00 | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |
| | 1964 | 3 | 6.0 | 3 | 1.50 | | | | | | | | | | | |
| | | | | | (0.58) | | | | | | | | | | | |

Appendix 4-16.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | rock bass | | walleye | | northern pike | |
|-------------|------|------------------------|----------------|-------------|-------------|--------|-------------|-------|---------------|----|-----------|----|---------|----|---------------|--------|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Clark Ditch | 1944 | 4 | 6.0 | 2 | | | | | | | | | | | 0.67 | 17.50 |
| | | | | | | | | | | | | | | | (0.11) | (1.50) |
| Driggs | 1931 | 2 | 4.0 | 2 | | | | | | | | | | | | |
| | 1934 | 2 | 10.0 | 2 | 0.80 | 10.25 | | | | | | | | | | |
| | | | | | (0.44) | (0.25) | | | | | | | | | | |
| | 1942 | 7 | 15.0 | 2 | | | | | | | | | | | | |
| | 1943 | 1 | 2.5 | 1 | | | | | | | | | | | | |
| | 1945 | 6 | 28.0 | 3 | 0.43 | 9.33 | 0.04 | 10.00 | | | | | | | | |
| | | | | | (0.29) | (0.33) | (0.05) | (-) | | | | | | | | |
| | 1946 | 2 | 4.0 | 1 | | | | | | | | | | | | |
| | 1947 | 1 | 2.0 | 1 | | | | | | | | | | | | |
| | 1948 | 10 | 16.0 | 4 | 0.19 | | 0.75 | | | | | | | | | |
| | | | | | (0.16) | | (0.64) | | | | | | | | | |
| | 1949 | 3 | 6.0 | 1 | 0.00 | | 0.17 | | | | | | | | | |
| | | | | | (-) | | (-) | | | | | | | | | |
| | 1950 | 18 | 58.0 | 13 | | | 0.60 | | | | | | | | | |
| | | | | | | | (0.24) | | | | | | | | | |
| | 1951 | 19 | 38.5 | 9 | | | 0.34 | | | | | | | | | |
| | | | | | | | (0.17) | | | | | | | | | |
| | 1952 | 30 | 81.0 | 15 | | | 0.64 | | 0.05 | | | | | | | |
| | | | | | | | (0.22) | | (0.03) | | | | | | | |
| | 1954 | 10 | 20.5 | 5 | | | 0.78 | | | | | | | | | |
| | | | | | | | (0.32) | | | | | | | | | |
| | 1955 | 11 | 25.0 | 8 | | | 1.08 | | 0.04 | | | | | | | |
| | | | | | | | (0.37) | | (0.03) | | | | | | | |

Appendix 4-16.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | rock bass | | walleye | | northern pike | |
|-----------------------|------|------------------------|----------------|-------------|-------------|--------|-------------|------|---------------|----|-----------|----|---------|----|---------------|------|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | |
| Driggs-- continued | 1956 | 5 | 10.0 | 4 | | | 1.30 | | | | | | | | | |
| | 1957 | 8 | 13.0 | 4 | 0.08 | | 0.77 | | | | | | | | | |
| | 1958 | 2 | 12.0 | 1 | (0.08) | | (0.36) | | | | | | | | | 0.25 |
| | 1959 | 1 | 1.5 | 1 | | | 1.33 | | | | | | | | | (-) |
| | 1960 | 2 | 1.0 | 1 | | | (-) | | | | | | | | | |
| | 1962 | | 3.0 | 1 | | | 1.00 | | | | | | | | | |
| | 1963 | 2 | 2.0 | 1 | | | (-) | | | | | | | | | |
| | 1964 | 2 | 2.5 | 2 | | 0.40 | | 0.40 | | | | | | | | |
| | | | | | (0.16) | | (0.16) | | | | | | | | | |
| Grays | 1952 | 2 | 1.0 | 1 | | | | | | | | | | | | |
| Hiawatha | 1942 | 2 | 6.0 | 1 | 1.50 | 9.20 | | | | | | | | | | |
| | 1961 | 1 | 4.0 | 1 | (-) | (-) | | | | | | | | | | |
| Hickey | 1928 | 5 | 5.0 | 5 | 1.80 | 9.56 | | | | | | | | | | |
| | | | | | (0.92) | (0.18) | | | | | | | | | | |
| | 1930 | 1 | 2.0 | 1 | 10.50 | 8.00 | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | |
| | 1940 | 1 | 2.0 | 1 | 5.50 | 9.00 | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | |
| | 1948 | 13 | 33.0 | 3 | 1.36 | | | | | | | | | | | |
| | | | | | (0.33) | | | | | | | | | | | |

Appendix 4-16.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | rock bass | | walleye | | northern pike | |
|----------------------|------|------------------------|----------------|-------------|-------------|--------|-------------|----|---------------|----|-----------|----|---------|----|---------------|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | |
| Hickey- continued | 1950 | 1 | 2.0 | 1 | 2.50 | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |
| | 1951 | 1 | 2.0 | 1 | 1.50 | | | | | | | | | | | |
| | | | | | | (-) | | | | | | | | | | |
| | 1955 | 112 | 229.5 | 52 | 1.36 | | | | | | | | | | | |
| | | | | | | (0.07) | | | | | | | | | | |
| | 1956 | 45 | 94.0 | 29 | 1.38 | | | | | | | | | | | |
| | | | | | | (0.23) | | | | | | | | | | |
| | 1957 | 47 | 112.0 | 34 | 1.45 | | | | | | | | | | | |
| | | | | | | (0.22) | | | | | | | | | | |
| | 1958 | 47 | 90.0 | 22 | 1.79 | | | | | | | | | | | |
| | | | | | | (0.28) | | | | | | | | | | |
| | 1959 | 90 | 189.5 | 32 | 1.15 | | | | | | | | | | | |
| | | | | | | (0.16) | | | | | | | | | | |
| 1960 | 3 | 3.0 | 1 | 0.67 | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |
| 1961 | 93 | 230.5 | 26 | 1.54 | | | | | | | | | | | | |
| | | | | | (0.27) | | | | | | | | | | | |
| 1962 | 68 | 146.5 | 23 | 1.22 | | | | | | | | | | | | |
| | | | | | (0.22) | | | | | | | | | | | |
| 1963 | 15 | 43.5 | 11 | 1.24 | | | | | | | | | | | | |
| | | | | | (0.59) | | | | | | | | | | | |
| 1964 | 3 | 1.0 | 1 | 1.00 | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |
| Mahoney | 1938 | 1 | 2.0 | 1 | 1.50 | 9.00 | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | |
| | 1947 | 2 | 7.0 | 1 | | | | | | | | | | | | |
| | 1949 | 2 | 3.0 | 1 | 1.00 | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |

Appendix 4-16.–Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | rock bass | | walleye | | northern pike | |
|-----------------------|------|------------------------|----------------|-------------|----------------|----------------|-------------|----|---------------|----|-----------|----|---------|----|---------------|-------------|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | |
| Mahoney– continued | 1950 | 4 | 4.0 | 2 | 0.50 (0.50) | | | | | | | | | | | |
| | 1951 | 2 | 4.0 | 1 | | | | | | | | | | | | 0.25 (-) |
| | 1952 | 4 | 8.0 | 1 | 0.75 (-) | | | | | | | | | | | |
| | 1956 | 8 | 16.0 | 2 | 0.81 (0.06) | | | | | | | | | | | |
| | 1957 | 1 | 2.0 | 1 | 0.00 (-) | | | | | | | | | | | |
| | 1959 | 2 | 4.0 | 2 | 2.75 (0.94) | | | | | | | | | | | |
| | 1960 | 1 | 0.5 | 1 | | | | | | | | | | | | |
| | 1964 | 3 | 15.5 | 2 | 1.42 (0.02) | | | | | | | | | | | |
| Prairie | 1933 | 1 | 3.0 | 1 | 1.33 (-) | 8.00 (-) | | | | | | | | | | |
| | 1939 | 2 | 6.0 | 2 | 5.00 (0.00) | 8.25 (0.05) | | | | | | | | | | |
| | 1945 | 2 | 4.0 | 1 | 0.25 (-) | 8.00 (-) | | | | | | | | | | |
| | 1946 | 9 | 12.0 | 3 | 2.42 (0.54) | 8.00 (0.00) | | | | | | | | | | |
| | 1950 | 1 | 1.0 | 1 | 4.00 (-) | | | | | | | | | | | |
| | 1955 | 5 | 8.5 | 3 | 3.29 (0.56) | | | | | | | | | | | |
| | 1956 | 4 | 8.0 | 3 | 2.75 (0.60) | | | | | | | | | | | |

Appendix 4-16.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | rock bass | | walleye | | northern pike | |
|------------------------|------|------------------------|----------------|-------------|-------------|-------|-------------|----|---------------|----|-----------|----|---------|----|---------------|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | |
| Prairie-- continued | 1958 | 2 | 6.0 | 1 | | | | | | | | | | | | |
| | 1959 | 3 | 3.0 | 1 | 6.67 | | | | | | | | | | | |
| | 1961 | 5 | 9.0 | 2 | (-) | | | | | | | | | | | |
| | 1964 | 3 | 5.0 | 2 | 0.89 | | | | | | | | | | | |
| Star | | | | | (0.59) | | | | | | | | | | | |
| | | | | | 0.40 | | | | | | | | | | | |
| | | | | | (0.64) | | | | | | | | | | | |
| | 1930 | 1 | 2.0 | 1 | 3.50 | 10.00 | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | |
| | 1946 | 1 | 2.5 | 1 | 8.00 | 8.00 | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | |
| | 1948 | 1 | 12.0 | 1 | 1.25 | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |
| | 1951 | 3 | 6.0 | 1 | 0.17 | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | |
| | 1955 | 1 | 1.0 | 1 | 1.00 | | | | | | | | | | | |
| | | | | (-) | | | | | | | | | | | | |
| 1956 | 1 | 1.5 | 1 | 4.67 | | | | | | | | | | | | |
| | | | | (-) | | | | | | | | | | | | |
| 1959 | 3 | 3.0 | 1 | 2.33 | | | | | | | | | | | | |
| | | | | (-) | | | | | | | | | | | | |
| 1960 | 4 | 7.0 | 2 | 0.57 | | | | | | | | | | | | |
| | | | | (0.16) | | | | | | | | | | | | |
| 1961 | 1 | 0.5 | 1 | 14.00 | | | | | | | | | | | | |
| | | | | (-) | | | | | | | | | | | | |
| 1964 | 1 | 1.0 | 1 | | | | | | | | | | | | | |

Appendix 4-16.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | rock bass | | walleye | | northern pike | | |
|-------------|------|------------------------|----------------|-------------|-------------|--------|-------------|----|---------------|----|-----------|----|---------|----|---------------|--|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | | |
| Stoner | 1938 | 11 | 54.0 | 6 | 1.09 | 8.00 | | | | | | | | | | | |
| | | | | | (0.25) | (0.00) | | | | | | | | | | | |
| | 1939 | 8 | 6.5 | 3 | 3.85 | 7.44 | | | | | | | | | | | |
| | | | | | (1.78) | (0.10) | | | | | | | | | | | |
| | 1945 | 1 | 2.0 | 1 | 4.00 | 8.00 | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | |
| | 1946 | 3 | 5.0 | 1 | 1.20 | 8.00 | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | |
| | 1952 | 7 | 23.0 | 4 | 1.39 | | | | | | | | | | | | |
| | | | | | (0.31) | | | | | | | | | | | | |
| | 1953 | 15 | 70.0 | 5 | 0.90 | | | | | | | | | | | | |
| | | | | | (0.18) | | | | | | | | | | | | |
| | 1954 | 9 | 35.0 | 4 | 0.83 | | | | | | | | | | | | |
| | | | | | (0.25) | | | | | | | | | | | | |
| 1955 | 13 | 46.0 | 4 | 0.89 | | | | | | | | | | | | | |
| | | | | (0.13) | | | | | | | | | | | | | |
| 1956 | 18 | 62.0 | 8 | 1.53 | | | | | | | | | | | | | |
| | | | | (0.64) | | | | | | | | | | | | | |
| 1957 | 14 | 37.0 | 8 | 1.46 | | | | | | | | | | | | | |
| | | | | (0.26) | | | | | | | | | | | | | |
| 1960 | 4 | 7.0 | 2 | 2.57 | | | | | | | | | | | | | |
| | | | | (0.45) | | | | | | | | | | | | | |
| 1961 | 2 | 12.0 | 1 | 1.00 | | | | | | | | | | | | | |
| | | | | (-) | | | | | | | | | | | | | |
| 1964 | 2 | 6.0 | 1 | 0.17 | | | | | | | | | | | | | |
| | | | | (-) | | | | | | | | | | | | | |
| Stony | 1944 | 1 | 4.0 | 1 | 2.00 | 10.00 | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | |
| | 1948 | 6 | 22.0 | 2 | 0.73 | | | | | | | | | | | | |
| | | | | | (0.69) | | | | | | | | | | | | |

Appendix 4-16.–Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | rock bass | | walleye | | northern pike | |
|---------------------|------|------------------------|----------------|-------------|----------------|----------------|-------------|----|---------------|----|-----------|----------------|---------|----|----------------|----------------|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | |
| Stony– continued | 1956 | 3 | 15.0 | 1 | 2.13 (-) | | | | | | | | | | | |
| | 1957 | 3 | 0.8 | 2 | 1.33 (1.78) | | | | | | | | | | | |
| | 1964 | 3 | 4.0 | 1 | 0.25 (-) | | | | | | | | | | | |
| Stutts | 1933 | 1 | 3.0 | 1 | 1.00 (-) | 9.00 (-) | | | | | | | | | | |
| | 1934 | 4 | 6.0 | 2 | 0.00 (0.00) | | | | | | | | | | | |
| | 1938 | 1 | 4.0 | 1 | 0.25 (-) | 10.00 (-) | | | | | | | | | | |
| | 1940 | 1 | 2.0 | 1 | 4.00 (-) | 8.00 (-) | | | | | | | | | | |
| | 1945 | 6 | 12.0 | 2 | 0.58 (0.58) | 8.00 (0.00) | | | | | | | | | | |
| | 1948 | 2 | 12.0 | 1 | 1.33 (-) | | | | | | | | | | | |
| | 1950 | 12 | 43.0 | 4 | 0.98 (0.31) | | | | | | | 0.02 (0.03) | | | 0.05 (0.06) | |
| | 1951 | 4 | 14.0 | 2 | 1.57 (0.18) | | | | | | | | | | | |
| | 1952 | 4 | 14.0 | 4 | 0.57 (0.13) | | | | | | | | | | | |
| | 1953 | 9 | 19.0 | 4 | 0.58 (0.32) | | | | | | | | | | | 0.16 (0.14) |
| | 1955 | 1 | 1.0 | 1 | 3.00 (-) | | | | | | | | | | | |
| | 1957 | 3 | 4.0 | 1 | 2.00 (-) | | | | | | | | | | | |

Appendix 4-16.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | rock bass | | walleye | | northern pike | | |
|----------------------|------|------------------------|----------------|-------------|----------------|-----------------|----------------|--------------|---------------|----|-----------|----|---------|----|---------------|----------------|-----------------|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | |
| Stutts- continued | 1939 | 2 | 6.0 | 2 | 3.17 (0.78) | 8.39 (0.05) | | | | | | | | | | | |
| | 1942 | 13 | 49.0 | 4 | 1.73 (0.38) | 9.47 (0.08) | | | | | | | | | | | |
| | 1944 | 5 | 17.0 | 3 | 1.47 (0.08) | 8.98 (0.20) | | | | | | | | | | | |
| N Stutz | 1939 | 15 | 40.0 | 8 | 1.78 (0.18) | 10.06 (0.12) | | | | | | | | | | | |
| N B Stutz | 1945 | 2 | 16.0 | 1 | 0.19 (-) | 8.00 (-) | | | | | | | | | | | |
| | 1947 | 2 | 14.0 | 1 | 1.50 (-) | | | | | | | | | | | | |
| | 1948 | 49 | 72.0 | 7 | 2.68 (0.25) | | | | | | | | | | | | |
| | 1954 | 1 | 2.0 | 1 | 2.00 (-) | | | | | | | | | | | | |
| | 1957 | 2 | 2.0 | 1 | | | | | | | | | | | | | |
| W B Stutz | 1957 | 2 | 2.0 | 1 | | | | | | | | | | | | | |
| Walsh | 1944 | 2 | 10.0 | 2 | | | | | | | | | | | | 0.70 (0.04) | |
| | 1945 | 12 | 45.0 | 3 | | | 0.02 (0.03) | 19.50 (-) | | | | | | | | 0.29 (0.02) | 22.65 (0.57) |
| | 1946 | 3 | 2.0 | 1 | | | 1.00 (-) | 16.50 (-) | | | | | | | | | |
| | 1950 | 18 | 54.0 | 8 | | | 0.15 (0.04) | | | | | | | | | | |
| | 1955 | 3 | 5.5 | 3 | | | | | | | | | | | | | |
| | 1956 | 1 | 2.0 | 1 | | | 1.00 (-) | | | | | | | | | | |

Appendix 4-17.—Direct contact angler creel data for the Tributaries – upper Indian. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). CPE = catch per unit effort; AL = average length.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | largemouth bass | | rock bass | | yellow perch | | walleye | | northern pike | | sucker sp. | | |
|-------------|------|---------------------|-------------|----------|-------------|--------|-------------|--------|---------------|----|-----------------|----|-----------|------|--------------|----|---------|----|---------------|----|------------|----|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | |
| Bear | 1930 | 1 | 6.0 | 1 | 1.33 | 8.00 | | | | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | | | | |
| | 1931 | 2 | 4.0 | 2 | 0.25 | | | | | | | | | | | | | | | | | | |
| | | | | | | (0.25) | | | | | | | | | | | | | | | | | |
| | 1933 | 3 | 1.5 | 1 | 0.67 | 8.00 | | | | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | | | | |
| 1951 | 4 | 2.0 | 1 | 0.50 | | | | | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | | | | |
| 1957 | 1 | 3.0 | 1 | 1.00 | | | | | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | | | | |
| Big Murphy | 1954 | 5 | 17.0 | 1 | 0.76 | | 0.18 | | | | | | | | | | | | | | | | |
| | | | | | (-) | | (-) | | | | | | | | | | | | | | | | |
| | 1957 | 9 | 22.0 | 4 | 1.55 | | | | | | | | | | | | | | | | | | |
| | | | | | (0.69) | | | | | | | | | | | | | | | | | | |
| | 1958 | 4 | 3.0 | 2 | 1.00 | | | | | | | | | | | | | | | | | | |
| | | | | | (0.67) | | | | | | | | | | | | | | | | | | |
| | 1959 | 2 | 9.0 | 2 | 0.44 | | 0.22 | | | | | | | | | | | | | | | | |
| | | | | | (0.15) | | (0.15) | | | | | | | | | | | | | | | | |
| | 1960 | 10 | 22.0 | 3 | 0.73 | | | | 0.09 | | | | | | | | | | | | | | |
| | | | | | (0.19) | | | | (0.13) | | | | | | | | | | | | | | |
| 1961 | 8 | 21.5 | 3 | 0.42 | | | | 0.37 | | | | | | | | | | | | | | | |
| | | | | (0.18) | | | | (0.11) | | | | | | | | | | | | | | | |
| 1962 | 3 | 5.0 | 2 | 2.80 | | | | | | | | | | | | | | | | | | | |
| | | | | (1.76) | | | | | | | | | | | | | | | | | | | |
| 1963 | 2 | 2.0 | 1 | 0.50 | | | | | | | | | | | | | | | | | | | |
| | | | | (-) | | | | | | | | | | | | | | | | | | | |
| 1964 | 8 | 15.0 | 4 | 0.13 | | | | | | | | | | | | | | | | | | | |
| | | | | (0.11) | | | | | | | | | | | | | | | | | | | |
| Carr | 1929 | 1 | 1.0 | 1 | | | | | | | | | | 6.00 | | | | | | | | | |
| | | | | | | | | | | | | | | (-) | | | | | | | | | |
| | 1933 | 2 | 7.0 | 1 | 0.71 | 7.50 | | | | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | | | | |
| | 1934 | 16 | 6.0 | 4 | 0.67 | 8.38 | | | | | | | | | | | | | | | | | |
| | | | | (0.27) | (0.38) | | | | | | | | | | | | | | | | | | |
| 1940 | 1 | 4.0 | 1 | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| 1942 | 6 | 10.8 | 2 | 0.09 | 10.00 | | | | | | | | | | | | | | | | | | |
| | | | | (0.02) | (-) | | | | | | | | | | | | | | | | | | |

Appendix 4-17.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | largemouth bass | | rock bass | | yellow perch | | walleye | | northern pike | | sucker sp. | |
|----------------|------|---------------------|-------------|----------|-------------|--------|-------------|-------|---------------|--------|-----------------|-------|-----------|--------|--------------|--------|---------|--------|---------------|--------|------------|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Carr-continued | 1943 | 2 | 1.0 | 1 | 1.00 | 8.00 | | | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | | | |
| | 1947 | 4 | 12.0 | 1 | 0.67 | | | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | | | |
| | 1950 | 2 | 4.0 | 1 | | | | | 1.00 | | | | | | | | | | | | | |
| | | | | | | | | | (-) | | | | | | | | | | | | | |
| Fenton | 1931 | 2 | 2.0 | 2 | 1.50 | 8.00 | | | | | | | | | | | | | | | | |
| | | | | | (0.50) | (0.00) | | | | | | | | | | | | | | | | |
| Indian | 1928 | 11 | 55.0 | 11 | 3.44 | 8.57 | | | | | | | | | | | | | | | | |
| | | | | | (0.64) | (0.06) | | | | | | | | | | | | | | | | |
| | 1929 | 3 | 22.0 | 3 | | | | | | | | | | 0.36 | 8.44 | | | 0.05 | 12.00 | | | |
| | | | | | | | | | | | | | | (0.46) | (0.94) | | | (0.04) | (-) | | | |
| | 1930 | 37 | 83.0 | 31 | 2.45 | 9.18 | | | | | | | | | | | | 0.24 | 19.90 | 0.10 | 19.63 | |
| | | | | | (0.79) | (0.10) | | | | | | | | | | | | (0.12) | (0.37) | (0.07) | (0.18) | |
| | 1931 | 47 | 97.0 | 34 | 2.04 | 8.39 | | | | | | | | | | | | 0.14 | 17.50 | | | |
| | | | | | (0.43) | (0.19) | | | | | | | | | | | | (0.10) | (0.23) | | | |
| | 1933 | 37 | 79.0 | 22 | 1.16 | 8.36 | | | | | | | | | | | | | | | | |
| | | | | | (0.25) | (0.35) | | | | | | | | | | | | | | | | |
| | 1937 | 11 | 21.8 | 11 | 0.09 | 9.00 | | | | | | | | | | | | 0.46 | 15.80 | | | |
| | | | | | (0.09) | (0.00) | | | | | | | | | | | | (0.21) | (0.13) | | | |
| | 1938 | 6 | 12.0 | 5 | 3.83 | 9.61 | | | | 0.08 | 16.00 | | | | | | | | | | | |
| | | | | | (0.41) | (0.09) | | | | (0.10) | (-) | | | | | | | | | | | |
| | 1939 | 13 | 14.8 | 12 | 2.64 | 7.77 | | | | | | | 0.20 | 9.00 | | | 0.07 | 17.00 | | | | |
| | | | | | (2.00) | (0.09) | | | | | | | (0.20) | (-) | | | (0.07) | (-) | | | | |
| | 1940 | 8 | 17.5 | 8 | 0.69 | 9.00 | 0.06 | 10.00 | | | | | | | | | | | | | | |
| | | | | | (0.20) | (0.56) | (0.06) | (-) | | | | | | | | | | | | | | |
| | 1941 | 9 | 23.3 | 3 | 0.77 | 8.63 | | | 0.04 | 14.00 | | | | | | | | | | | | |
| | | | | | (0.28) | (0.06) | | | (0.03) | (-) | | | | 0.34 | | | | | | | | |
| | | | | | | | | | | | | | | (0.48) | | | | | | | | |
| | 1942 | 42 | 174.3 | 13 | 0.52 | 9.56 | 0.01 | 8.00 | | | | | | | | | 0.03 | 15.33 | 0.01 | 16.00 | | |
| | | | | | (0.13) | (0.11) | (0.01) | (-) | | | | | | | | | (0.03) | (0.21) | (0.01) | (-) | | |
| | 1943 | 11 | 19.8 | 3 | 1.01 | 9.00 | 0.10 | 10.00 | 0.61 | 8.70 | 0.05 | 14.00 | 0.10 | 7.00 | 0.20 | 7.50 | 0.05 | 16.00 | 0.10 | 16.50 | | |
| | | | | | (0.52) | (-) | (0.05) | (-) | (0.31) | (-) | (0.06) | (-) | (0.13) | (-) | (0.20) | (0.29) | (0.06) | (-) | (0.13) | (-) | | |
| | 1944 | 33 | 92.0 | 18 | 0.87 | 9.21 | 0.03 | 10.00 | 0.02 | 14.00 | | | 0.02 | 6.00 | 0.20 | 7.99 | 0.18 | 17.46 | 0.12 | 19.36 | | |
| | | | | | (0.19) | (0.11) | (0.03) | (-) | (0.02) | (-) | | | (0.02) | (-) | (0.16) | (0.13) | (0.10) | (2.25) | (0.08) | (0.13) | | |
| | 1946 | 23 | 41.8 | 13 | 1.10 | 8.43 | 0.02 | 14.00 | | | | | | | 0.50 | 8.20 | | | 0.05 | 15.00 | | |
| | | | | | (0.37) | (0.53) | (0.03) | (-) | | | | | | | (0.48) | (-) | | | (0.05) | (-) | | |
| | 1947 | 26 | 49.0 | 11 | 0.45 | | 0.59 | | 0.10 | | | | | | | | | | | | 0.06 | |
| | | | | | (0.17) | | (0.25) | | (0.07) | | | | | | | | | | | | (0.07) | |
| | 1948 | 70 | 155.0 | 9 | 1.60 | | 0.13 | | 0.14 | | | | 0.03 | | | | | | 0.15 | | | |
| | | | | | (0.39) | | (0.12) | | (0.10) | | | | (0.03) | | | | | | (0.11) | | | |

Appendix 4-17.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | largemouth bass | | rock bass | | yellow perch | | walleye | | northern pike | | sucker sp. | | |
|------------------|------|---------------------|-------------|----------|----------------|----------------|----------------|----|----------------|----|-----------------|----|----------------|----|----------------|----|---------|----------------|---------------|----|------------|----|-----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Indian-continued | 1949 | 40 | 64.0 | 7 | 1.86 (0.36) | | 0.06 (0.06) | | | | | | | | | | | | | | | | |
| | 1950 | 25 | 78.0 | 10 | 0.49 (0.17) | | 0.21 (0.10) | | 0.26 (0.12) | | | | | | | | | | | | | | |
| | 1951 | 38 | 132.0 | 8 | 1.22 (0.31) | | 0.11 (0.07) | | 0.25 (0.09) | | | | | | | | | | | | | | |
| | 1952 | 67 | 183.5 | 14 | 0.39 (0.15) | | 0.09 (0.03) | | 0.64 (0.08) | | | | | | | | | | | | | | |
| | 1953 | 65 | 229.5 | 22 | 0.41 (0.10) | | 0.28 (0.08) | | 0.30 (0.09) | | 0.01 (0.01) | | | | | | | | | | | | |
| | 1954 | 18 | 43.0 | 5 | 1.28 (0.45) | | 0.12 (0.09) | | 0.02 (0.02) | | | | 0.01 (0.12) | | 0.09 (0.07) | | | | | | | | |
| | 1955 | 16 | 48.0 | 5 | 1.21 (0.51) | | 0.02 (0.02) | | 0.06 (0.06) | | | | | | | | | | | | | | |
| | 1956 | 22 | 44.0 | 10 | 0.43 (0.25) | | 0.20 (0.07) | | 0.07 (0.03) | | | | 0.02 (0.02) | | | | | 0.02 (0.02) | | | | | |
| | 1957 | 45 | 89.5 | 18 | 0.53 (0.15) | | 0.15 (0.05) | | 0.36 (0.22) | | | | | | | | | | | | | | |
| | 1958 | 44 | 128.5 | 18 | 0.27 (0.09) | | 0.11 (0.05) | | 0.60 (0.18) | | | | | | | | | | | | | | |
| | 1959 | 96 | 244.0 | 21 | 1.23 (0.31) | | 0.04 (0.02) | | 0.35 (0.09) | | | | 0.01 (0.01) | | 0.02 (0.02) | | | | | | | | |
| | 1960 | 23 | 54.0 | 10 | 0.61 (0.28) | | 0.07 (0.04) | | 0.76 (0.25) | | | | 0.15 (0.15) | | | | | | | | | | |
| | 1961 | 27 | 72.0 | 9 | 0.46 (0.15) | | 0.10 (0.05) | | 0.14 (0.06) | | | | | | | | | | | | | | |
| | 1962 | 13 | 29.0 | 3 | 0.28 (0.21) | | | | | | | | | | | | | | | | | | |
| | 1963 | 23 | 55.0 | 10 | 0.33 (0.10) | | | | 0.07 (0.04) | | | | | | 0.09 (0.10) | | | | | | | | |
| | 1964 | 14 | 48.0 | 7 | 0.83 (0.72) | | | | 0.31 (0.21) | | | | | | | | | | | | | | |
| Killpecker | 1931 | 16 | 17.5 | 6 | 1.60 (0.57) | 7.50 (0.00) | | | | | | | | | | | | | | | | | |
| | 1934 | 3 | 1.0 | 1 | 2.00 (-) | 7.00 (-) | | | | | | | | | | | | | | | | | |
| | 1937 | 2 | 2.0 | 2 | | | | | | | | | | | | | | | | | | | |
| | 1939 | 11 | 25.5 | 11 | 1.14 (0.38) | 8.16 (0.69) | | | | | | | | | | | | | | | | | |

Appendix 4-17.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | largemouth bass | | rock bass | | yellow perch | | walleye | | northern pike | | sucker sp. | |
|----------------------|------|---------------------|-------------|----------|----------------|-----------------|-------------|----|---------------|----|-----------------|----|-----------|----|--------------|----|---------|----|---------------|----|------------|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Killpecker-continued | 1940 | 5 | 8.8 | 5 | 2.06 (1.08) | 8.11 (0.08) | | | | | | | | | | | | | | | | |
| | 1941 | 2 | 9.0 | 1 | 2.67 (-) | 8.80 (-) | | | | | | | | | | | | | | | | |
| | 1942 | 11 | 26.5 | 3 | 1.06 (0.28) | 7.66 (0.06) | | | | | | | | | | | | | | | | |
| | 1946 | 3 | 13.0 | 2 | 1.00 (0.62) | 7.85 (0.07) | | | | | | | | | | | | | | | | |
| | 1949 | 2 | 2.0 | 1 | | | | | | | | | | | | | | | | | | |
| | 1953 | 11 | 29.0 | 4 | 2.03 (0.55) | | | | | | | | | | | | | | | | | |
| | 1954 | 6 | 12.0 | 2 | 1.25 (0.42) | | | | | | | | | | | | | | | | | |
| | 1955 | 4 | 8.0 | 1 | 0.50 (-) | | | | | | | | | | | | | | | | | |
| | 1956 | 1 | 1.0 | 1 | 3.00 (-) | | | | | | | | | | | | | | | | | |
| | 1957 | 3 | 8.0 | 2 | 0.63 (0.69) | | | | | | | | | | | | | | | | | |
| | 1958 | 4 | 8.0 | 1 | 0.50 (-) | | | | | | | | | | | | | | | | | |
| | 1962 | 1 | 1.0 | 1 | 1.00 (-) | | | | | | | | | | | | | | | | | |
| | 1963 | 2 | 1.0 | 1 | 1.00 (-) | | | | | | | | | | | | | | | | | |
| Little Indian | 1930 | 16 | 34.0 | 9 | 2.03 (0.61) | 9.93 (0.18) | | | | | | | | | | | | | | | | |
| | 1931 | 14 | 27.0 | 11 | 2.04 (0.39) | 8.32 (0.24) | | | | | | | | | | | | | | | | |
| | 1932 | 3 | 6.0 | 1 | 2.83 (-) | 9.00 (-) | | | | | | | | | | | | | | | | |
| | 1933 | 1 | 5.0 | 1 | | | | | | | | | | | | | | | | | | |
| | 1936 | 3 | 14.0 | 3 | 2.71 (0.39) | 8.74 (0.07) | | | | | | | | | | | | | | | | |
| | 1939 | 4 | 9.0 | 2 | 0.78 (0.33) | 11.64 (0.55) | | | | | | | | | | | | | | | | |
| | 1940 | 7 | 32.0 | 7 | 1.78 (0.29) | 8.44 (0.06) | | | | | | | | | | | | | | | | |

Appendix 4-17.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | largemouth bass | | rock bass | | yellow perch | | walleye | | northern pike | | sucker sp. | | |
|-------------------------|------|---------------------|-------------|----------|-------------|--------|-------------|----|---------------|----|-----------------|----|-----------|----|--------------|----|---------|----|---------------|----|------------|--------|------|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | |
| Little Indian-continued | 1941 | 2 | 7.5 | 1 | 1.33 | 9.00 | | | | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | | | | |
| | 1942 | 13 | 54.5 | 5 | 1.17 | 8.00 | | | | | | | | | | | | | | | | | |
| | | | | | (0.42) | (0.00) | | | | | | | | | | | | | | | | | |
| | 1944 | 9 | 42.5 | 6 | 1.34 | 9.16 | | | | | | | | | | | | | | | | | |
| | | | | | (0.42) | (0.10) | | | | | | | | | | | | | | | | | |
| | 1945 | 6 | 24.0 | 2 | 0.33 | 8.00 | | | | | | | | | | | | | | | | | |
| | | | | | (0.44) | (0.00) | | | | | | | | | | | | | | | | | |
| | 1946 | 4 | 17.0 | 2 | 1.41 | 8.00 | | | | | | | | | | | | | | | | | |
| | | | | (0.44) | (0.00) | | | | | | | | | | | | | | | | | | |
| 1947 | 5 | 12.0 | 3 | 1.75 | | | | | | | | | | | | | | | | | | 0.08 | |
| | | | | (0.23) | | | | | | | | | | | | | | | | | | (0.07) | |
| 1948 | 20 | 44.0 | 4 | 1.93 | | | | | | | | | | | | | | | | | | 0.05 | |
| | | | | (0.17) | | | | | | | | | | | | | | | | | | (0.04) | |
| 1949 | 19 | 25.0 | 3 | 3.52 | | | | | | | | | | | | | | | | | | | |
| | | | | (1.03) | | | | | | | | | | | | | | | | | | | |
| 1951 | 10 | 17.0 | 3 | 2.82 | | | | | | | | | | | | | | | | | | 0.12 | |
| | | | | (1.01) | | | | | | | | | | | | | | | | | | (0.12) | |
| Little Murphy | 1935 | 4 | 12.0 | 4 | 0.50 | 7.17 | | | | | | | | | | | | | | | | | |
| | | | | | (0.22) | (0.17) | | | | | | | | | | | | | | | | | |
| | 1938 | 1 | 2.0 | 1 | 2.00 | 8.50 | | | | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | | | | |
| | 1941 | 5 | 20.0 | 2 | 0.95 | 8.15 | | | | | | | | | | | | | | | | | |
| | | | | | (0.12) | (0.02) | | | | | | | | | | | | | | | | | |
| | 1944 | 1 | 1.5 | 1 | 0.00 | | | | | | | | | | | | | | | | | | |
| | | | | | (-) | | | | | | | | | | | | | | | | | | |
| | 1949 | 7 | 12.0 | 3 | 0.75 | | | | | | | | | | | | | | | | | | |
| | | | | | (0.27) | | | | | | | | | | | | | | | | | | |
| | 1950 | 6 | 8.0 | 2 | 0.38 | | | | | | | | | | | | | | | | | | |
| | | | | | (0.13) | | | | | | | | | | | | | | | | | | |
| | 1952 | 2 | 6.0 | 1 | 0.50 | | | | | | | | | | | | | | | | | | 0.83 |
| | | | | (-) | | | | | | | | | | | | | | | | | | (-) | |
| 1953 | 2 | 2.0 | 1 | 3.00 | | | | | | | | | | | | | | | | | | 0.50 | |
| | | | | (-) | | | | | | | | | | | | | | | | | | (-) | |
| 1954 | 10 | 29.0 | 4 | 0.83 | | | | | | | | | | | | | | | | | | 0.07 | |
| | | | | (0.11) | | | | | | | | | | | | | | | | | | (0.04) | |
| 1955 | 14 | 28.0 | 5 | 2.75 | | | | | | | | | | | | | | | | | | 0.03 | |
| | | | | (0.41) | | | | | | | | | | | | | | | | | | (0.02) | |
| 1957 | 16 | 25.5 | 6 | 1.37 | | | | | | | | | | | | | | | | | | 0.04 | |
| | | | | (0.38) | | | | | | | | | | | | | | | | | | (0.04) | |

Appendix 4-17.-Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | largemouth bass | | rock bass | | yellow perch | | walleye | | northern pike | | sucker sp. | |
|------------------------------|------|---------------------|-------------|----------|----------------|----|----------------|----|----------------|----|-----------------|----|-----------|----|--------------|----|---------|----|---------------|----|------------|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Little Murphy-- continued | 1958 | 1 | 2.0 | 1 | 5.00 | | | | | | | | | | | | | | | | | |
| | 1959 | 7 | 8.5 | 3 | 0.59 (0.17) | | 0.12 (0.16) | | | | | | | | | | | | | | | |
| | 1960 | 8 | 9.5 | 4 | 2.00 (0.82) | | | | | | | | | | | | | | | | | |
| | 1961 | 9 | 22.0 | 4 | 0.45 (0.15) | | | | | | | | | | | | | | | | | |
| | 1962 | 7 | 15.0 | 2 | 0.40 (0.05) | | | | | | | | | | | | | | | | | |
| | 1963 | 7 | 17.0 | 4 | 1.88 (0.27) | | | | 0.06 (0.08) | | | | | | | | | | | | | |
| | 1964 | 2 | 3.0 | 2 | | | | | | | | | | | | | | | | | | |

Appendix 4-18.—Direct contact river angler creel data for the Tributaries – lower Indian. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). CPE = catch per unit effort; AL = average length.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | smallmouth bass | | pumpkinseed sunfish | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | | sucker sp. | | |
|-------------|------|---------------------|-------------|----------|-------------|-------|-------------|----|---------------|----|-----------------|----|---------------------|----|-----------|----|--------------|----|---------|----|---------------|----|--------------|----|------------|----|-----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Dead | 1950 | 2 | 4.0 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Dufore | 1930 | 1 | 1.0 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1938 | 1 | 2.0 | 1 | 2.00 | 10.00 | | | | | | | | | | | | | | | | | | | | | |
| | 1941 | 2 | 2.0 | 1 | (-) | (-) | | | | | | | | | | | | | | | | | | | | | |
| | 1944 | 1 | 3.0 | 1 | 2.00 | 10.00 | | | | | | | | | | | | | | | | | | | | | |
| | 1944 | 1 | 3.0 | 1 | 1.00 | 8.00 | | | | | | | | | | | | | | | | | | | | | |
| | 1948 | 2 | 4.0 | 1 | (-) | (-) | | | | | | | | | | | | | | | | | | | | | |
| | 1948 | 2 | 4.0 | 1 | 0.75 | | | | | | | | | | | | | | | | | | | | | | |
| | 1949 | 5 | 8.0 | 3 | (-) | | | | | | | | | | | | | | | | | | | | | | |
| | 1949 | 5 | 8.0 | 3 | 1.13 | | | | | | | | | | | | | | | | | | | | | | |
| | 1951 | 2 | 4.0 | 1 | (0.12) | | | | | | | | | | | | | | | | | | | | | | |
| | 1951 | 2 | 4.0 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1952 | 2 | 4.0 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1953 | 1 | 1.0 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1953 | 1 | 1.0 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1954 | 2 | 1.0 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1954 | 2 | 1.0 | 1 | 1.00 | | | | | | | | | | | | | | | | | | | | | | |
| | 1955 | 3 | 5.0 | 1 | (-) | | | | | | | | | | | | | | | | | | | | | | |
| | 1955 | 3 | 5.0 | 1 | 1.00 | | | | | | | | | | | | | | | | | | | | | | |
| | 1956 | 2 | 6.0 | 1 | (-) | | | | | | | | | | | | | | | | | | | | | | |
| | 1956 | 2 | 6.0 | 1 | 0.33 | | | | | | | | | | | | | | | | | | | | | | |
| | 1957 | 3 | 5.0 | 3 | (-) | | | | | | | | | | | | | | | | | | | | | | |
| | 1957 | 3 | 5.0 | 3 | 1.80 | | | | | | | | | | | | | | | | | | | | | | |
| | 1958 | 1 | 2.0 | 1 | (0.78) | | | | | | | | | | | | | | | | | | | | | | |
| | 1958 | 1 | 2.0 | 1 | 2.00 | | | | | | | | | | | | | | | | | | | | | | |
| | 1959 | 3 | 3.5 | 1 | (-) | | | | | | | | | | | | | | | | | | | | | | |
| | 1959 | 3 | 3.5 | 1 | 1.43 | | | | | | | | | | | | | | | | | | | | | | |
| | 1961 | 7 | 18.0 | 3 | (-) | | | | | | | | | | | | | | | | | | | | | | |
| | 1961 | 7 | 18.0 | 3 | 0.89 | | | | | | | | | | | | | | | | | | | | | | |
| | 1962 | 13 | 34.0 | 4 | (0.31) | | | | | | | | | | | | | | | | | | | | | | |
| | 1962 | 13 | 34.0 | 4 | 0.76 | | | | | | | | | | | | | | | | | | | | | | |
| | 1963 | 11 | 31.0 | 5 | (0.10) | | | | | | | | | | | | | | | | | | | | | | |
| | 1963 | 11 | 31.0 | 5 | 0.55 | | | | | | | | | | | | | | | | | | | | | | |
| | 1963 | 11 | 31.0 | 5 | (0.28) | | | | | | | | | | | | | | | | | | | | | | |

Appendix 4-18.—Continued.

| River/Creek | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | smallmouth bass | | pumpkinseed sunfish | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | | sucker sp. | | | |
|-------------|------|---------------------|-------------|----------|----------------|----|----------------|----|----------------|----------------|-----------------|----|---------------------|----------------|----------------|------|----------------|----|----------------|----|----------------|----|--------------|----|------------|-------------|-----|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Indian | 1956 | 6 | 7.0 | 1 | | | | | | | | | | | 0.14 | 1.86 | | | | | | | | | | | | |
| | 1960 | 7 | 24.0 | 2 | 0.92 (0.20) | | 0.04 (0.02) | | 0.29 (0.33) | | | | | | | | | | | | | | | | | | | |
| | 1961 | 2 | 2.0 | 1 | | | | | | 0.50 (-) | | | | | 0.50 (-) | | | | | | | | | | | | | |
| | 1962 | 18 | 34.0 | 5 | | | | | | 0.06 (0.07) | 0.03 (0.03) | | | 0.03 (0.04) | 0.41 (0.18) | | 0.06 (0.03) | | 0.03 (0.04) | | 1.29 (0.32) | | | | | | | |
| | 1964 | 9 | 15.0 | 2 | | | | | 0.33 (0.36) | | | | | | | | 0.20 (0.19) | | 0.13 (0.12) | | | | | | | | | |
| Iron | 1956 | 3 | 6.0 | 1 | | | | | | | | | | | | | | | | | | | | | | 1.33 (-) | | |

Appendix 4-19.—Direct contact lake angler creel data for the Mainstem – upper. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). CPE = catch per unit effort; AL = average length.

| Lake | Year | No. Anglers (lines) | Total hours | Days (N) | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | | sucker sp. | | lake herring | | | | | | | | | | |
|------------|------|---------------------|-------------|----------|-----------------|--------|-----------------|--------|----------|--------|---------------------|--------|-----------|--------|--------------|--------|---------|--------|---------------|--------|--------------|--------|------------|--------|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | | | | | | |
| Manistique | 1928 | 4 | 37.5 | 4 | | | | | | | | | | | 2.67 | 7.65 | 0.19 | 15.00 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | (0.46) | (0.03) | (0.11) | (-) | | | | | | | | | | | | | | | | | |
| | 1929 | 1 | 14.0 | 1 | | | | | | | | | | | | | 1.21 | 9.00 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | (-) | (-) | | | | | | | | | | | | | | | | |
| | 1930 | 19 | 40.5 | 10 | | | | | 0.69 | 7.91 | | | | | | 0.91 | 9.69 | 0.30 | 15.67 | 0.02 | 20.00 | | | | | | | | | | | | | | |
| | | | | | | | | | (0.61) | (0.04) | | | | | | (0.34) | (0.17) | (0.09) | (0.33) | (0.02) | (-) | | | | | | | | | | | | | | |
| | 1932 | 1 | 2.5 | 1 | | | | | | | | | | | | 2.80 | 0.80 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | (-) | (-) | | | | | | | | | | | | | | | | | | |
| | 1934 | 13 | 41.5 | 9 | | | 0.02 | | | | | | | 0.14 | | 5.42 | 8.60 | 0.07 | | 0.14 | 15.97 | | | | | | | | | | | | | | |
| | | | | | | | (0.01) | | | | | | | (0.17) | | (3.55) | (0.03) | (0.03) | | (0.05) | (0.13) | | | | | | | | | | | | | | |
| | 1935 | 25 | 92.3 | 22 | | | | | | | | | | | | 1.46 | 8.28 | 0.42 | 14.54 | 0.07 | 22.25 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | (0.45) | (0.06) | (0.10) | (0.85) | (0.06) | (0.75) | | | | | | | | | | | | | | |
| | 1936 | 9 | 47.0 | 9 | | | | | | | | | | 0.09 | 8.25 | 1.06 | 9.10 | 0.26 | 16.13 | 0.21 | 23.20 | | | | 0.04 | 17.00 | | | | | | | | | |
| | | | | | | | | | | | | | | (0.07) | (0.25) | (0.37) | (0.15) | (0.13) | (0.13) | (0.11) | (0.85) | | | | (0.04) | (-) | | | | | | | | | |
| | 1937 | 47 | 190.5 | 46 | | | | | | | | | | | | 2.28 | 8.04 | 0.08 | 15.59 | 0.05 | 21.72 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | (0.19) | (0.04) | (0.03) | (0.24) | (0.02) | (1.69) | | | | | | | | | | | | | | |
| | 1938 | 49 | 165.0 | 48 | 0.01 | | | | | | | | | 0.04 | | 1.92 | 7.90 | 0.31 | 16.09 | 0.11 | 24.29 | | | | 0.01 | 15.00 | | | | | | | | | |
| | | | | | (0.01) | 11.00 | | | | | | | | (0.04) | | (0.19) | (0.03) | (0.04) | (0.14) | (0.03) | (1.13) | | | | (0.01) | (-) | | | | | | | | | |
| | 1939 | 194 | 610.8 | 157 | 0.02 | (-) | | | | | | | | 0.01 | 9.00 | 0.65 | 8.25 | 0.27 | 16.10 | 0.15 | 23.19 | | | | | | | | 0.01 | 14.67 | | | | | |
| | | | | | (0.01) | 14.25 | | | | | | | | (0.01) | (-) | (0.13) | (0.03) | (0.05) | (0.10) | (0.02) | (0.39) | | | | | | | | (0.02) | (0.42) | | | | | |
| 1940 | 275 | 792.5 | 239 | 0.01 | (0.43) | | | <0.01 | 9.50 | 0.01 | 7.25 | | 0.30 | 8.20 | 0.62 | 8.79 | 0.35 | 17.40 | 0.12 | 22.41 | | | | <0.01 | 20.00 | <0.01 | 16.00 | | | | | | | | |
| | | | | (0.01) | 13.05 | | | (0.01) | (1.50) | (0.01) | (0.14) | | (0.06) | (0.13) | (0.08) | (0.07) | (0.03) | (0.08) | (0.01) | (0.54) | | | | (0.01) | (0.54) | (0.01) | (0.54) | (0.01) | (0.54) | (0.01) | (0.54) | (0.01) | (0.54) | | |
| 1941 | 101 | 385.3 | 19 | 0.01 | (0.55) | | | | | <0.01 | 7.50 | | 0.04 | 7.85 | 0.87 | 8.22 | 0.07 | 16.66 | 0.12 | 21.90 | | | | 0.02 | 18.00 | 0.02 | 12.63 | | | | | | | | |
| | | | | (0.01) | 14.00 | | | | | (0.01) | (-) | | (0.03) | (0.02) | (0.25) | (0.02) | (0.04) | (0.05) | (0.05) | (0.39) | | | | (0.01) | (0.00) | (0.01) | (0.25) | (0.01) | (0.00) | (0.01) | (0.25) | (0.01) | (0.00) | | |
| 1942 | 133 | 339.8 | 20 | | (-) | | | | | | | | 0.11 | 8.54 | 0.35 | 8.46 | 0.09 | 16.63 | 0.20 | 19.92 | 0.01 | 9.00 | 0.01 | 15.50 | <0.01 | 14.00 | | | | | | | | | |
| | | | | | | | | | | | | | (0.06) | (0.08) | (0.10) | (0.03) | (0.03) | (0.16) | (0.05) | (0.19) | (0.01) | (-) | (0.01) | (-) | (0.01) | (-) | (0.01) | (-) | (0.01) | (-) | (0.01) | (-) | (0.01) | (-) | |
| 1943 | 140 | 433.5 | 40 | | | <0.01 | 17.00 | | | | | | 0.11 | 8.56 | 0.60 | 8.72 | 0.09 | 17.13 | 0.30 | 23.01 | | | | <0.01 | 15.00 | | | | | | | | | | |
| | | | | | | (0.01) | (-) | | | | | | (0.04) | (0.06) | (0.28) | (0.04) | (0.02) | (0.11) | (0.04) | (0.25) | | | | (0.01) | (-) | (0.01) | (-) | (0.01) | (-) | (0.01) | (-) | (0.01) | (-) | (0.01) | (-) |
| 1944 | 101 | 372.0 | 23 | | | 0.01 | 11.00 | | | | | | 0.13 | 8.04 | 0.23 | 8.69 | 0.13 | 16.18 | 0.32 | 21.50 | | | | | | | | | | | | | | | |
| | | | | | | (0.01) | (-) | | | | | | (0.08) | (0.04) | (0.09) | (0.06) | (0.03) | (0.08) | (0.05) | (0.22) | | | | | | | | | | | | | | | |
| 1945 | 72 | 224.0 | 11 | | | | | | | | | | <0.01 | 8.00 | 0.15 | 8.37 | 0.02 | 16.00 | 0.29 | 19.62 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | (0.01) | (-) | (0.06) | (0.08) | (0.02) | (0.00) | (0.04) | (0.08) | | | | | | | | | | | | | | | |
| 1946 | 62 | 262.5 | 10 | | | 0.06 | 8.06 | 0.34 | 8.63 | 0.18 | 17.54 | 0.06 | 24.46 | 0.02 | 9.75 | 0.01 | 16.00 | | | | 0.02 | 9.75 | 0.01 | 16.00 | | | | | | | | | | | |
| | | | | | | (0.05) | (0.14) | (0.14) | (0.08) | (0.05) | (0.13) | (0.03) | (1.54) | (0.01) | (0.25) | (0.01) | (0.25) | (0.01) | (0.25) | (0.01) | (0.25) | (0.01) | (0.25) | (0.01) | (0.25) | (0.01) | (0.25) | (0.01) | (0.25) | (0.01) | (0.25) | (0.01) | (0.25) | | |
| 1947 | 3 | 20.0 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1948 | 36 | 125.0 | 4 | | | | | | | | | | 0.17 | | 1.51 | | 0.40 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | (0.08) | | (0.33) | | (0.08) | | (0.01) | | | | | | | | | | | | | | | | |

Appendix 4-19.-Continued.

| Lake | Year | No. Anglers (lines) | Total hours | Days (N) | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | | sucker sp. | | lake herring | | | | | |
|---------|------|---------------------|-------------|----------|----------------------|------|------------------|------------------|------------------|-------------|---------------------|----|------------------|----------------|----------------|----------------|---------|----------------|----------------|----------------|----------------|----------------|------------------|----|------------------|-----------------|-----|----|-----|----------------|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| | | | | | Manistique-continued | 1949 | 181 | 667.0 | 25 | | | | | | | | | 0.09 (0.04) | 1.03 (0.39) | 0.17 (0.07) | 0.09 (0.01) | 0.11 (0.08) | <0.01 (<0.01) | | | | | | | 0.02 (0.01) |
| | 1950 | 7 | 20.0 | 2 | | | | | | | | | 0.35 (0.28) | 1.65 (0.72) | | 0.10 (0.12) | | | | | | | | | | | | | | |
| | 1951 | 28 | 142.0 | 20 | | | | | | | | | | 0.01 (0.01) | 0.04 (0.03) | 0.14 (0.03) | | | | | | | | | | 0.02 (0.01) | | | | |
| | 1952 | 369 | 911.5 | 57 | | | <0.01 (<0.01) | | | | | | 0.04 (0.01) | 1.26 (0.17) | 0.19 (0.03) | 0.11 (0.02) | | 0.01 (0.01) | | | | | | | | 0.01 (<0.01) | | | | |
| | 1953 | 58 | 134.5 | 6 | | | | | | | | | | 0.54 (0.24) | 0.01 (0.01) | 0.07 (0.02) | | | | | | | | | | | | | | |
| | 1954 | 49 | 139.0 | 10 | | | | | | | | | | 0.42 (0.13) | 0.02 (0.02) | 0.04 (0.01) | | | | | | | | | | | | | | |
| | 1955 | 141 | 486.0 | 32 | | | | | | | | | 0.15 (0.04) | 1.59 (0.28) | 0.18 (0.05) | 0.15 (0.04) | | 0.02 (0.02) | | | | | | | | | | | | |
| | 1956 | 227 | 674.5 | 27 | 0.01 (0.01) | | | | | | 0.02 (0.01) | | 0.11 (0.04) | 0.85 (0.18) | 0.08 (0.02) | 0.11 (0.03) | | | | | | | 0.01 (0.00) | | | | | | | |
| | 1957 | 561 | 1282.7 | 62 | <0.01 (<0.01) | | | | | | <0.01 (<0.01) | | 0.02 (0.00) | 1.08 (0.19) | 0.07 (0.02) | 0.04 (0.01) | | | | | | | <0.01 (<0.01) | | 0.02 (0.01) | | | | | |
| | 1958 | 632 | 1547.0 | 57 | <0.01 (<0.01) | | | | | | | | 0.03 (0.01) | 0.82 (0.11) | 0.13 (0.03) | 0.03 (0.01) | | | | | | | <0.01 (<0.01) | | 0.01 (<0.01) | | | | | |
| | 1959 | 737 | 1415.3 | 49 | <0.01 (<0.01) | | | <0.01 (<0.01) | <0.01 (<0.01) | | | | 0.06 (0.03) | 0.79 (0.11) | 0.11 (0.02) | 0.05 (0.01) | | | | | | | <0.01 (<0.01) | | <0.01 (<0.01) | | | | | |
| | 1960 | 1033 | 1734.0 | 56 | <0.01 (<0.01) | | | <0.01 (<0.01) | <0.01 (<0.01) | | | | 0.04 (0.02) | 0.89 (0.10) | 0.07 (0.02) | 0.03 (0.01) | | | | | | | | | | | | | | |
| | 1961 | 1108 | 1985.3 | 52 | <0.01 (<0.01) | | | | | | | | 0.02 (<0.01) | 0.65 (0.11) | 0.10 (0.02) | 0.02 (0.00) | | | | | | | <0.01 (<0.01) | | <0.01 (<0.01) | | | | | |
| | 1962 | 268 | 504.0 | 23 | 0.00 (0.00) | | <0.01 (<0.01) | | | | | | <0.01 (<0.01) | 0.49 (0.10) | 0.35 (0.15) | 0.03 (0.02) | | | | | | | | | | | | | | |
| | 1963 | 204 | 416.0 | 31 | | | | | | | | | | 0.51 (0.13) | 0.10 (0.02) | 0.02 (0.01) | | | | | | | | | | 0.09 (0.04) | | | | |
| | 1964 | 391 | 680.0 | 32 | | | | | | | | | <0.01 (<0.01) | 0.71 (0.13) | 0.14 (0.05) | 0.05 (0.01) | | | | | | | | | | 0.20 (0.09) | | | | |
| | 1965 | 26 | 94.0 | 7 | | | | | | | | | | 0.44 (0.30) | 0.01 (0.01) | 0.14 (0.03) | | | | | | | | | | 0.04 (0.03) | | | | |
| Shoepac | 1946 | 10 | 16.5 | 3 | | | | | 0.30 (0.32) | 7.00 (-) | | | | 0.12 (0.14) | 8.00 (-) | | | | | 0.67 (0.55) | 10.00 (-) | | | | | | | | | |
| | 1960 | 11 | 13.0 | 1 | | | | | 1.69 (-) | | 0.08 (-) | | | 0.46 (-) | | | | | | | | | | | | | | | | |
| | 1962 | 5 | 5.0 | 1 | | | | | 1.40 (-) | | | | 0.60 (-) | | | | | | | | | | | | | | | | | |

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Manistique River Assessment Appendix

Appendix 4-20.—Direct contact lake angler creel data for the Mainstem – central. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). CPE = catch per unit effort; AL = average length.

| Lake | Year | No. Anglers (lines) | Total hours | Days (N) | northern pike | | bullhead sp. | |
|---------|------|------------------------|----------------|-------------|---------------|-------|--------------|----|
| | | | | | CPE | AL | CPE | AL |
| Kennedy | 1941 | 1 | 5.0 | 1 | 1.00 | 17.00 | 0.00 | |
| | | | | | (-) | (-) | (-) | |
| Kennedy | 1964 | 3 | 3.0 | 1 | 0.00 | | 1.00 | |
| | | | | | (-) | | (-) | |

Appendix 4-21.—Direct contact lake angler creel data for the Mainstem – mouth. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). CPE = catch per unit effort; AL = average length.

| Lake | Year | No. Anglers (lines) | Total hours | Days (N) | pumpkinseed | | | | | | | | | | | |
|------------------|------|------------------------|----------------|-------------|-------------|----|---------|----|--------------|----|---------|----|---------------|----|------------|-------|
| | | | | | brook trout | | sunfish | | yellow perch | | walleye | | northern pike | | sucker sp. | |
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Island Slough | 1949 | 3 | 7.0 | 2 | | | | | | | | | | | 0.29 | |
| | 1950 | 4 | 9.0 | 1 | | | | | | | | | | | (0.16) | |
| | 1952 | 7 | 8.5 | 2 | | | | | 0.12 | | | | | | 0.22 | |
| | 1959 | 11 | 45.0 | 1 | | | | | (0.19) | | | | | | (-) | |
| | 1961 | 13 | 42.0 | 3 | | | | | 0.02 | | 0.09 | | | | 0.71 | |
| | 1962 | 8 | 22.0 | 1 | | | | | (-) | | (-) | | | | (0.46) | |
| | 1965 | 1 | 3.0 | 1 | | | | | 0.12 | | 0.05 | | | | 0.38 | |
| Jamestown Slough | 1938 | 5 | 31.5 | 5 | 1.05 | | | | | | | | | | 0.29 | |
| | 1939 | 5 | 15.0 | 5 | (0.41) | | | | | | | | | | (0.10) | 19.20 |
| | 1941 | 2 | 4.0 | 1 | | | | | | | | | | | (1.71) | |
| | 1944 | 8 | 22.0 | 2 | | | | | | | | | | | 1.47 | 18.00 |
| | 1945 | 3 | 11.0 | 1 | | | | | | | | | | | (0.90) | (-) |
| | 1948 | 13 | 17.0 | 2 | | | | | | | | | | | (-) | |
| | 1949 | 4 | 7.0 | 2 | | | | | | | | | | | 1.00 | |
| | | | | | | | | | | | | | | | (0.24) | |

Appendix 4-21.-Continued.

| Lake | Year | No. Anglers (lines) | Total hours | Days (N) | brook trout | | pumpkinseed sunfish | | yellow perch | | walleye | | northern pike | | sucker sp. | |
|--------------------------------|------|------------------------|----------------|-------------|-------------|----|------------------------|----|--------------|----|---------|------|---------------|----|------------|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| | | | | | | | | | | | | | | | | |
| Jamestown Slough- continued | 1950 | 12 | 36.0 | 4 | | | | | | | | | 0.28 | | 0.06 | |
| | | | | | | | | | | | | | (0.02) | | (0.04) | |
| | 1953 | 10 | 38.0 | 2 | | | | | 0.05 | | 0.03 | | 0.50 | | | |
| | | | | | | | | | (0.05) | | (0.03) | | (0.18) | | | |
| | 1957 | 11 | 27.0 | 4 | | | | | | | | | 0.93 | | 0.04 | |
| | | | | | | | | | | | | | (0.13) | | (0.04) | |
| | 1958 | 8 | 19.0 | 1 | | | | | | | | | 0.21 | | | |
| | | | | | | | | | | | | | (-) | | | |
| 1959 | 3 | 13.0 | 1 | | | | | | | | | 0.62 | | | | |
| | | | | | | | | | | | | (-) | | | | |
| 1961 | 4 | 15.0 | 2 | | | | | | 1.67 | | | | 0.13 | | | |
| | | | | | | | | | (1.11) | | | | (0.04) | | | |
| 1962 | 11 | 28.0 | 2 | | | | | | 0.04 | | | | 0.32 | | | |
| | | | | | | | | | (0.03) | | | | (0.22) | | | |
| 1965 | 3 | 3.0 | 2 | | | | | | | | | | | | | |

Appendix 4-22.—Direct contact lake angler creel data for the Tributaries – Fox River. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). CPE = catch per unit effort; AL = average length.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseeds unfish | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | |
|-------------|------|---------------------|-------------|----------|-------------|--------|---------------|----|-----------------|----|-----------------|----|----------|----|---------------------|----|-----------|----|--------------|----|---------|-------|---------------|--------|--------------|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Carpenter | 1928 | 1 | 3 | 1 | | | | | | | | | | | | | | | | | | | | 0.67 | | |
| | 1942 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | (-) | | |
| | 1946 | 2 | 3 | 2 | | | | | | | | | | | | | | | | | | | | 0.33 | | |
| | 1950 | 8 | 13 | 2 | | | | | | | | | | | | | | | | | 0.15 | | | 0.15 | | |
| | 1955 | 3 | 3.5 | 2 | | | | | | | | | | | | | | | | | (0.21) | | | (0.06) | | |
| Casey | 1939 | 3 | 1.5 | 1 | | | | | | | | | | | | | | | | | 2.67 | 10.00 | | 3.33 | 20.00 | |
| | 1951 | 2 | 2.5 | 1 | | | | | | | | | | | | | | | | | (-) | (-) | | (-) | (-) | |
| | 1963 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | 2.80 | | | 2.40 | | |
| Center | 1947 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | 0.75 | | |
| | 1949 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | (-) | | |
| | 1950 | 15 | 34 | 1 | | | | | | | | | | | | | | | | | | | | 1.62 | | |
| Cloverleaf | 1949 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | 0.75 | | |
| | 1950 | 15 | 34 | 1 | | | | | | | | | | | | | | | | | | | | (-) | | |
| | 1954 | 2 | 2 | 1 | | | | | | | | | | | | | | | | | | | | 4.00 | | |
| Clyde | 1960 | 2 | 6 | 1 | | | | | | | | | | | | | | | | | | | | (-) | | |
| | 1947 | 4 | 16 | 1 | | | | | | | | | | | | | | | | | | | | 0.06 | | |
| | 1949 | 4 | 20 | 1 | | | | | | | | | | | | | | | | | | | | (-) | | |
| Deerfoot | 1947 | 4 | 16 | 1 | | | | | | | | | | | | | | | | | | | | 1.25 | | |
| | 1949 | 4 | 20 | 1 | | | | | | | | | | | | | | | | | | | | (-) | | |
| | 1949 | 4 | 20 | 1 | | | | | | | | | | | | | | | | | | | | 0.35 | | |
| Dutch Freds | 1942 | 37 | 136.5 | 9 | 0.41 | 12.38 | | | | | | | | | | | | | | | | | | | | |
| | 1943 | 25 | 176.5 | 2 | (0.09) | (0.29) | | | | | | | | | | | | | | | | | | | | |
| | 1944 | 25 | 129 | 4 | 0.43 | 13.48 | | | | | | | | | | | | | | | | | | | | |
| | | | | | (0.25) | (0.02) | | | | | | | | | | | | | | | | | | | | |
| | | | | | 0.41 | 12.12 | | | | | | | | | | | | | | | | | | | | |
| | | | | | (0.04) | (0.06) | | | | | | | | | | | | | | | | | | | | |

Appendix 4-22.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseeds unfish | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | | | | | |
|---------------------------|------|---------------------|-------------|----------|----------------|-----------------|---------------|----------------|-----------------|----|-----------------|----|----------|----|---------------------|----|-----------|----|--------------|----------------|-----------------|----|---------------|----|--------------|----|-----|----|----------------|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | |
| Dutch Freds- continued | 1945 | 32 | 226 | 2 | 0.22 (0.05) | 13.20 (0.28) | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1946 | 12 | 38 | 3 | | | | | | | | | | | | | | | | 1.68 (1.27) | 10.21 (0.06) | | | | | | | | | |
| | 1947 | 57 | 247 | 10 | 0.04 (0.02) | | | | | | | | | | | | | | | 1.05 (0.48) | | | | | | | | | | |
| | 1948 | 27 | 160 | 2 | 1.03 (0.36) | | | | | | | | | | | | | | | 0.24 (0.01) | | | | | | | | | | |
| | 1950 | 12 | 18.5 | 6 | 1.95 (0.70) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1951 | 128 | 307.5 | 15 | 1.36 (0.20) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1952 | 84 | 240 | 8 | 0.60 (0.20) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1953 | 59 | 193 | 4 | 0.07 (0.01) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1954 | 77 | 212.25 | 6 | 1.07 (0.53) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1955 | 59 | 89 | 4 | 1.54 (0.17) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1956 | 105 | 340 | 11 | 0.25 (0.06) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1957 | 34 | 91 | 7 | 0.43 (0.19) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1958 | 73 | 202.5 | 8 | 0.06 (0.03) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1959 | 104 | 223 | 8 | 0.46 (0.09) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1960 | 79 | 267 | 3 | 0.15 (0.02) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1961 | 59 | 182.5 | 4 | 0.66 (0.11) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1962 | 167 | 509 | 9 | 0.33 (0.07) | | | 0.01 (0.01) | | | | | | | | | | | | | | | | | | | | | | |
| | 1963 | 13 | 20 | 3 | 0.25 (0.09) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1964 | 129 | 349.25 | 12 | 0.19 (0.06) | | | | | | | | | | | | | | | | | | | | | | | | 0.03 (0.03) | |
| Fish Hook | 1955 | 2 | 2 | 1 | | | | | 0.50 (-) | | | | | | | | | | | | | | | | | | | | | |

Appendix 4-22.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseeds unfish | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | |
|----------|------|---------------------|-------------|----------|-------------|----|---------------|--------|-----------------|--------|-----------------|--------|----------|----|---------------------|----|-----------|----|--------------|------|---------|----|---------------|--------|--------------|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Grass | 1945 | 3 | 6 | 1 | | | | | | | | | | | | | | | | | | | 0.17 | 18.00 | | |
| | 1958 | 4 | 24 | 1 | | | | | | | | | | | | | | | | | | | (-) | (-) | | |
| Gypsy | 1930 | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | | 2.50 | 30.00 | | |
| | 1950 | 2 | 2 | 1 | | | | | | | | | | | | | | | | | | | (-) | (-) | 1.50 | |
| Hemlock | 1950 | 10 | 39 | 4 | | | | | | | | | | | | | | | 0.15 | | | | 0.69 | | | |
| | 1952 | 3 | 6 | 1 | | | | | | | | | | | | | | | (0.16) | | | | (0.24) | | | |
| | 1955 | 6 | 26 | 1 | | | | | | | | | | | | | | | | | | | 0.15 | | | |
| | 1959 | 3 | 12 | 1 | | | | | | | | | | | | | | | | | | | (-) | | 0.33 | |
| | 1962 | 5 | 23 | 1 | | | | | | | | | | | | | | | | | | | (-) | | 0.35 | |
| | 1963 | 6 | 18 | 2 | | | | | | | | | | | | | | | | | | | (-) | | 0.28 | |
| | | | | | | | | | | | | | | | | | | | | | | | | (0.06) | | |
| Mitchell | 1940 | 1 | 4.5 | 1 | | | | 1.11 | 11.50 | | | | | | | | | | | | | | | | | |
| | 1954 | 4 | 11 | 2 | | | | (-) | (-) | | | | | | | | | | | | | | | | | |
| | 1958 | 4 | 4 | 1 | | | | | | | | | | | | | | | | 0.18 | | | | 0.09 | | |
| | | | | | | | | | | | | | | | | | | | (0.07) | | | | (0.15) | | | |
| Moose | 1956 | 2 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | |
| Nugent | 1941 | 20 | 71.5 | 6 | | | | 0.01 | 13.00 | 0.20 | 13.29 | 0.87 | 7.44 | | | | | | | | | | | | | |
| | | | | | | | | (0.01) | (-) | (0.08) | (0.27) | (0.43) | (0.06) | | | | | | | | | | | | | |
| | 1945 | 8 | 44 | 2 | | | | 0.18 | 13.48 | | | 1.36 | 9.00 | | | | | | | | | | | | | |
| | | | | | | | | (0.07) | (0.11) | | | (0.12) | (0.00) | | | | | | | | | | | | | |
| | 1946 | 4 | 9.5 | 2 | | | | 0.42 | 13.00 | | | 1.37 | 7.00 | | | | | | | | | | | | | |
| | | | | | | | | (0.18) | (0.00) | | | (0.90) | (-) | | | | | | | 1.47 | | | | (2.33) | | |
| Owl | 1952 | 3 | 6 | 1 | | | | | | | | | | | | | | | | | | | | 0.17 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | (-) | | |

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Appendix 4-22.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseeds unfish | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | | |
|---------------|------|---------------------|-------------|----------|-------------|----|---------------|----|-----------------|----|-----------------|----|----------|----|---------------------|----|-----------|----|--------------|------|---------|----|---------------|----|--------------|--------|-----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Pelican | 1933 | 3 | 4 | 1 | | | | | 0.75 | | | | | | | | | | | 2.50 | | | | | | | |
| | 1938 | 2 | 2.5 | 1 | | | | | (-) | | | | | | | | | | | 2.80 | 8.00 | | | | | | |
| Pickereel | 1931 | 2 | 4 | 2 | | | | | | | | | | | | | | | | | | | | | 12.25 | 8.00 | |
| | 1938 | 2 | 4.5 | 1 | | | | | | | | | | | | | | | | | | | | | (0.25) | 0.00 | |
| | 1945 | 6 | 11 | 2 | | | | | | | | | | | | | | | | | | | | | 3.33 | 8.00 | |
| | 1946 | 8 | 34.5 | 3 | | | | | | | | | | | | | | | | | | | | | (-) | (-) | |
| | 1949 | 15 | 28.5 | 4 | | | | | | | | | | | | | | | | | | | | | 0.73 | 16.00 | |
| | 1950 | 2 | 8 | 1 | | | | | | | | | | | | | | | | | | | | | (0.13) | (-) | |
| | 1953 | 2 | 6 | 1 | | | | | | | | | | | | | | | | | | | | | 0.52 | 22.90 | |
| | 1954 | 9 | 22 | 3 | | | | | | | | | | | | | | | | | | | | | (0.23) | 0.44 | |
| | 1959 | 2 | 7 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.63 | |
| | 1964 | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | (0.07) | |
| Reservoir Dam | 1952 | 3 | 6 | 1 | 1.00 | | | | | | | | | | | | | | | | | | | | | (-) | |
| Sand | 1954 | 3 | 4 | 2 | | | | | | | | | | | | | | | | | | | | | | 1.00 | |
| | 1956 | 3 | 6 | 1 | | | | | | | | | | | | | | | | | | | | | | (1.50) | |
| | 1958 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | 8.50 | |
| Second | 1945 | 1 | 2.5 | 1 | | | | | | | | | | | | | | | | | | | | | | (-) | |

Appendix 4-22.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseeds unfish | | rock bass | | yellow perch | | walleye | | northern pike | | bullhead sp. | | | | | | |
|--------|------|---------------------|-------------|----------|-------------|----|---------------|----|-----------------|----|-----------------|----|----------|----|---------------------|----|-----------|----|--------------|--------|---------|----|---------------|--------|--------------|--------|--------|--------|------|----|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | |
| Snyder | 1937 | 2 | 6 | 2 | | | | | | | | | | | | | | | | | | | 0.83 | 21.40 | (0.50) | (0.40) | | | | | |
| | 1938 | 2 | 10 | 2 | | | | | | | | | | | | | | | | | | | 0.70 | 21.86 | (0.10) | (0.40) | | | | | |
| | 1944 | 9 | 33 | 3 | | | | | | | | | | | | | | | | | | | 0.36 | 18.13 | (0.29) | (0.91) | | | | | |
| | 1945 | 2 | 9 | 1 | | | | | | | | | | | | | | | | | | | 0.22 | 15.00 | | | | | | | |
| | 1946 | 15 | 62 | 7 | | | | | | | | | | | | | | | | | | | (-) | (-) | 0.35 | 19.18 | | | | | |
| | 1947 | 16 | 57 | 5 | | | | | | | | | | | | | | | | | | | (0.07) | (0.70) | 0.25 | | | | | | |
| | 1948 | 21 | 58 | 7 | | | | | | | | | | | | | | | | 0.14 | | | (0.18) | 0.24 | | | | | | | |
| | 1949 | 37 | 150 | 21 | | | | | | | | | | | | | | | | (0.14) | | | (0.11) | 0.15 | | | | | | | |
| | 1950 | 5 | 17 | 2 | | | | | | | | | 1.29 | | | | | | | | | | (0.14) | 0.27 | | | | | | | |
| | 1951 | 27 | 84.5 | 10 | | | | | | | | | (1.67) | | | | | | | | | | (0.05) | 0.06 | | | | | | | |
| | 1952 | 7 | 26 | 2 | | | | | | | | | 0.14 | | | | | | | | | | (0.04) | 0.13 | | | | | | | |
| | 1954 | 13 | 21.5 | 3 | | | | | | | | | (0.09) | | | | | | | | | | (0.07) | 0.08 | | | | | | | |
| | 1955 | 7 | 18 | 2 | | | | | | | | | | | | | | | | | 0.04 | | (0.04) | 0.14 | | | | | | | |
| | 1956 | 7 | 7 | 3 | | | | | | | | | | | | | | | | | (0.06) | | (0.04) | 0.14 | | | | | | | |
| | 1958 | 8 | 48 | 2 | | | | | | | | | | | | | | | | | | | (0.16) | 0.14 | | | | | | | |
| | 1959 | 12 | 34 | 2 | | | | | | | | | | | | | | | | | | | | 0.19 | | | | | | | |
| | 1960 | 4 | 4 | 2 | | | | | | | | | | | | | | | | | | | | (0.12) | 0.19 | | | | | | |
| | 1961 | 5 | 12 | 2 | | | | | | | | | | | | | | | | | | | | | 0.08 | | | | | | |
| | 1962 | 21 | 69 | 6 | | | | | | | | | | | | | | | | | | | | | 0.08 | | | | | | |
| | 1963 | 35 | 103 | 9 | | | | | | | | | | | | | | | | | | | | | 0.08 | | | | | | |
| | 1964 | 30 | 61.5 | 7 | | | | | | | | | | | | | | | | | | | | | 0.85 | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | (1.51) | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0.29 | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (0.07) | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.25 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.08) | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.35 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.15) | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.23 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.13) | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5.26 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | (1.11) | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.68 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.33) | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.10 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.06) | | | |

Appendix 4-23.—Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | rock bass | crappie sp. | yellow perch | | walleye | | northern pike | | bullhead sp. | | | | | | |
|--------|------|---------------------|-------------|----------|-------------|----|-------------|----|---------------|----|-----------------|----|-----------------|----|----------|-----|---------------------|-----------|-------------|--------------|----|---------|----|---------------|----|--------------|----|-----|------|--------|--------|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | | |
| Buck | 1952 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 0.50 | | | |
| | 1953 | 2 | 8 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | (-) | | | |
| | 1960 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 0.13 | | | |
| | 1960 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | (-) | | | |
| Camp 9 | 1953 | 2 | 8 | 1 | | | | | | | 0.63 | | | | 0.13 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | (-) | | | | (-) | | | | | | | | | | | | | | | | | |
| Canoe | 1951 | 3 | 6 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | 0.50 | | |
| | 1954 | 3 | 9 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | (-) | | | |
| | 1954 | 3 | 9 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1.56 | | | |
| | 1955 | 2 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | (-) | | | |
| | 1960 | 2 | 8 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | 0.13 | | |
| Clear | 1961 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | (-) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1.50 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | (-) | | |
| | 1950 | 2 | 5 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | 0.40 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | (-) | | |
| | 1954 | 7 | 18 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | 1.78 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.07) | | |
| | 1956 | 45 | 704 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | 0.17 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.11) | |
| | 1957 | 3 | 5 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1959 | 2 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1960 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1961 | 72 | 206 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.78 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.13) | | |
| 1962 | 77 | 203 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | 0.01 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.01) | | |
| 1963 | 40 | 121 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.26 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.04) | | |
| 1964 | 40 | 61 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.36 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.19) | | |

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Appendix 4-23.—Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | rock bass | crappie sp. | yellow perch | | walleye | | northern pike | | bullhead sp. | | | |
|-----------|------|---------------------|-------------|----------|-------------|-------------|-------------|-------------|---------------|----|-----------------|-------------|-----------------|-------------|-------------|-----|---------------------|-------------|-------------|--------------|-------------|---------|----|---------------|--------------|--------------|----|-----|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Cranberry | 1947 | 3 | 9 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dodge | 1939 | 5 | 34.2 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1945 | 3 | 9 | 1 | | | | | | | | | | 0.33 (-) | 0.33 (-) | | | | | | | | | | | | | | |
| | 1948 | 2 | 4 | 1 | | | | | | | | | | | | | | 0.75 (-) | | | | | | | | | | | |
| | 1952 | 8 | 17 | 1 | | | | | 0.12 (-) | | | | | 0.65 (-) | | | | 0.24 (-) | | | 0.06 (-) | | | | | | | | |
| | 1953 | 7 | 13 | 3 | | | | | 0.08 (0.10) | | | 0.08 (0.05) | | 3.15 (0.36) | | | | 0.15 (0.11) | | | 0.08 (0.05) | | | | | | | | |
| | 1954 | 11 | 22 | 2 | | | | | | | | | | 2.91 (1.55) | 0.09 (0.01) | | 0.09 (0.10) | | | | | | | | | | | | |
| | 1955 | 12 | 15 | 1 | | | | | 0.67 (-) | | | | | 0.80 (-) | | | | | | | | | | | | | | | |
| | 1956 | 18 | 33 | 2 | | | | | | | | | | 1.76 (0.49) | | | | | | | | | | | | | | | |
| | 1957 | 59 | 116 | 8 | | | | 0.01 (0.01) | 0.06 (0.03) | | 0.11 (0.11) | | 1.75 (0.36) | 0.11 (0.04) | | | 0.01 (0.01) | 0.01 (0.01) | | 0.12 (0.05) | | | | | | | | | |
| | 1958 | 41 | 102 | 7 | | | | 0.01 (0.01) | 0.03 (0.02) | | | | 2.35 (0.46) | | | | 0.01 (0.01) | | | 0.09 (0.04) | | | | | | | | | |
| | 1959 | 47 | 94.25 | 7 | | | | 0.16 (0.10) | | | | | 1.57 (0.51) | 0.01 (0.01) | | | 0.01 (0.01) | | | 0.01 (0.01) | | | | | | | | | |
| | 1960 | 17 | 36 | 7 | | | | 0.25 (0.12) | | | | | 0.19 (0.17) | | | | | | | | | | | 0.08 (0.09) | | | | | |
| | 1961 | 43 | 100 | 8 | | | | 0.28 (0.06) | 0.04 (0.02) | | | | 0.30 (0.09) | | | | | | | | | | | | | | | | |
| | 1962 | 31 | 81 | 8 | | | | 0.16 (0.05) | 0.02 (0.02) | | | | 0.95 (0.62) | 0.04 (0.04) | | | 0.09 (0.04) | | | 0.05 (0.03) | | | | | | | | | |
| | 1963 | 26 | 69 | 7 | | | | 0.17 (0.09) | | | | | 0.07 (0.08) | | | | | | | 0.12 (0.09) | | | | | 0.04 (0.04) | | | | |
| | 1964 | 61 | 150 | 15 | | | | 0.43 (0.10) | | | | | 0.55 (0.25) | | | | 0.01 (0.01) | | | 0.09 (0.05) | | | | | | | | | |
| Doyle | 1952 | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drice | 1941 | 2 | 5 | 2 | | 0.40 (0.32) | | | | | | | | | | | | | | | | | | 0.40 (0.48) | 24.00 (0.00) | | | | |

Appendix 4-23.—Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | rock bass | crappie sp. | yellow perch | | walleye | | northern pike | | bullhead sp. | | | |
|--------|------|---------------------|-------------|----------|-------------|----|-------------|----|---------------|----|-----------------|----|-----------------|------|----------|-----|---------------------|-----------|-------------|--------------|--------|---------|----|---------------|--------|--------------|--------|--------|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Driggs | 1930 | 10 | 25.5 | 10 | | | | | | | | | | | | | | | | | | | | | 0.78 | 19.70 | 0.47 | 9.00 | |
| | 1931 | 1 | 2.5 | 1 | | | | | | | | | | | | | | | | | | | | | (0.18) | (0.39) | (0.49) | (-) | |
| | 1932 | 2 | 8 | 2 | | | | | | | | | | | | | | | | | | | | | 2.00 | 36.00 | | | |
| | 1938 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | | |
| | 1939 | 14 | 33 | 9 | | | | | | | | | | | | | | | | | | | | | 0.25 | 20.00 | | | |
| | 1942 | 6 | 28 | 3 | | | | | | | | | | | | | | | | | | | | | (0.00) | (0.00) | | | |
| | 1943 | 19 | 111 | 4 | | | | | | | | | 0.11 | 7.00 | | | | | | | 0.02 | 10.00 | | | 2.00 | 31.00 | | | |
| | 1944 | 4 | 4 | 1 | | | | | | | | | (0.05) | (-) | | | | | | | (0.01) | (-) | | | (-) | (-) | | | |
| | 1946 | 44 | 126.5 | 8 | | | | | | | | | | | | | | | | | | | | | 0.09 | 20.00 | 0.97 | 23.19 | |
| | 1947 | 3 | 18 | 1 | | | | | | | | | | | | | | | | | | | | | (0.09) | (-) | (0.12) | (0.59) | |
| | 1948 | 13 | 31 | 4 | | | | | | | | | | | | | | | | | | | | | 0.29 | 21.50 | | | |
| | 1949 | 2 | 6 | 1 | | | | | | | | | | | | | | | | | | | | | (0.15) | (0.33) | | | |
| | 1950 | 22 | 50 | 8 | | | | | | | | | | | | | | | | | | | | | 0.23 | 16.00 | | | |
| | 1951 | 16 | 57 | 3 | | | | | | | | | | | | | | | | | | | | | (0.16) | (-) | | | |
| | 1952 | 7 | 19 | 3 | | | | | | | | | | | | | | | | | | | | | 1.00 | 18.50 | | | |
| | 1953 | 11 | 31 | 5 | 0.03 | | 0.52 | | | | | | | | | | | | | | | | | | (-) | (-) | | | |
| | 1954 | 7 | 22 | 3 | (0.04) | | (0.36) | | | | | | | | | | | | | | | | | | (-) | (-) | | | |
| | 1956 | 11 | 51 | 4 | | | | | | | | | | | | | | | | | | | | | 0.56 | 0.06 | | | |
| | 1957 | 8 | 24 | 3 | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | | |
| | 1958 | 8 | 24 | 2 | | | | | | | | | | | | | | | | | | | | | 0.42 | 0.13 | | | |
| | 1959 | 9 | 16 | 1 | | | | | | | | | | | | | | | | | | | | | (0.13) | (0.07) | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0.17 | 0.17 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0.20 | 0.80 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (0.20) | (0.12) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0.08 | 0.28 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (0.08) | (0.15) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0.05 | 0.63 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (0.07) | (0.18) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0.08 | 0.48 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (0.12) | (0.33) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0.28 | 0.41 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (0.15) | (0.14) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0.63 | 0.41 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (0.08) | (0.05) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0.08 | 0.08 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (0.08) | (0.08) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0.25 | 0.25 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (0.04) | (0.04) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 0.50 | 0.50 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | |

Appendix 4-23.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | rock bass | crappie sp. | yellow perch | | walleye | | northern pike | | bullhead sp. | | | | |
|------------------|------|---------------------|-------------|----------|----------------|----------------|----------------|----------------|---------------|----------------|-----------------|----|-----------------|----------------|----------------|-----|---------------------|-----------|----------------|----------------|----------------|---------|----------------|---------------|----------------|--------------|----------------|-----|----|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | |
| Island-continued | 1953 | 30 | 83 | 4 | | | | | | | 0.08 (0.11) | | 0.10 (0.04) | | 1.96 (0.24) | | 0.05 (0.03) | | 0.23 (0.28) | | 0.17 (0.08) | | | | | | | | | |
| | 1954 | 8 | 14 | 2 | | | | | | | 0.21 (0.18) | | | | 1.50 (0.86) | | | | | | 0.14 (0.12) | | 0.07 (0.06) | | 0.07 (0.06) | | | | | |
| | 1955 | 5 | 5 | 1 | | | | | | | 0.20 (-) | | | | 0.60 (-) | | | | | | | | | | | | | | | |
| | 1956 | 9 | 21 | 1 | | | | 0.14 (-) | | 0.19 (-) | | | | | 1.14 (-) | | 0.10 (-) | | | | 0.29 (-) | | | | | | | | | |
| | 1957 | 53 | 140 | 8 | | | | 0.23 (0.10) | | 0.06 (0.04) | | | 0.01 (0.01) | | 0.54 (0.17) | | 0.04 (0.03) | | | 0.01 (0.01) | 0.07 (0.04) | | | | 0.03 (0.03) | | 0.01 (0.01) | | | |
| | 1958 | 37 | 71 | 6 | | | | 0.30 (0.11) | | | | | | | 0.48 (0.25) | | 0.03 (0.03) | | 0.01 (0.02) | | 0.11 (0.07) | | | | | | | | | |
| | 1960 | 13 | 33 | 3 | | | | 0.18 (0.07) | | | | | | | 0.55 (0.62) | | | | | | 0.03 (0.04) | | | | | | | | | |
| | 1961 | 18 | 39 | 3 | | | | 0.26 (0.25) | | | | | | | 1.31 (0.87) | | | | | | 0.03 (0.02) | | | | | | | | | |
| | 1962 | 24 | 46 | 4 | | | | 0.07 (0.08) | | 0.02 (0.02) | | | 0.07 (0.04) | | 0.85 (0.30) | | 0.02 (0.02) | | 0.02 (0.03) | | 0.09 (0.08) | | | | 0.02 (0.02) | | | | | |
| | 1963 | 7 | 13 | 3 | | | | 0.15 (0.15) | | | | | | | 1.38 (0.81) | | 0.23 (0.19) | | | | 0.92 (0.77) | | | | | | | | | |
| 1964 | 13 | 31 | 6 | | | | 0.03 (0.03) | 0.61 (0.36) | | 0.03 (0.04) | | | | | | | | | | | | | | | | | | | | |
| Lard | 1945 | 2 | 10 | 1 | 1.00 (-) | 8 (-) | | | | | | | | | | | | | | | | | | | | | | | | |
| Legion | 1933 | 3 | 4 | 2 | | | | | | | | | | 9.25 (1.75) | 7.59 (0.08) | | | | | | | | | | | | | | | |
| | 1934 | 1 | 2 | 1 | | | | | | | | | | 3.00 (-) | 6.50 (-) | | | | | | | | | | | | | | | |
| | 1939 | 12 | 14.5 | 6 | 0.76 (0.29) | 9.00 (0.62) | | | | | | | | 2.83 (1.63) | 6.00 (0.00) | | | | | | | | | | | | | | | |
| | 1941 | 6 | 11.5 | 4 | 0.78 (0.56) | 9.11 (0.35) | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1942 | 3 | 9 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1946 | 2 | 7 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1947 | 2 | 4 | 1 | | | | | | | | | | | 2.50 (-) | | | | | | | | | | | | | | | |
| | 1950 | 3 | 12 | 1 | | | | | | | | | | | 3.58 (-) | | | | | | | | | | | | | | | |
| | 1952 | 2 | 4 | 1 | | | | | | | | | | | 2.00 (-) | | | | | | | | | | | | | | | |

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Appendix 4-23.—Continued.

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| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | rock bass | crappie sp. | yellow perch | | walleye | | northern pike | | bullhead sp. | | |
|--------|------|---------------------|-------------|----------|----------------|----|-------------|----|---------------|----|-----------------|----|-----------------|----------------|----------------|----------------|---------------------|----------------|-------------|--------------|----|----------------|--------------|---------------|----------------|-----------------|----------------|--------------|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Long | 1938 | 27 | 57 | 8 | 0.04 (0.04) | | | | | | | | 0.07 (0.04) | 1.02 (0.14) | | | | 0.02 (0.02) | | | | 0.02 (0.02) | | | 0.12 (0.04) | | | |
| | 1941 | 4 | 19 | 2 | | | | | | | | | 0.11 (0.11) | 15.00 (-) | 2.74 (0.80) | 7.65 (0.13) | | | | | | | | | | | | |
| | 1951 | 2 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1952 | 3 | 6 | 1 | | | | | | | | | | | | | | | | | | 2.50 (-) | | | | | | |
| | 1953 | 3 | 8 | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1964 | 8 | 14 | 2 | | | | | | | | | | | | | | | | | | | | | | 0.21 (0.12) | | |
| Nevins | 1954 | 6 | 15 | 3 | | | | | | | 0.27 (0.13) | | | | | | | | | | | | | | | | | |
| | 1955 | 13 | 48 | 4 | | | | | | | 0.27 (0.09) | | | 0.02 (0.02) | | | | | | | | 0.31 (0.29) | | | 0.10 (0.06) | | | |
| | 1956 | 4 | 3 | 1 | | | | | | | 0.67 (-) | | | | | | | | | | | | | | | | | |
| | 1957 | 5 | 5 | 1 | | | | | | | 0.40 (-) | | | | | | | | | | | | | | | | | |
| | 1958 | 13 | 41 | 3 | | | | | | | 0.20 (0.04) | | | | | | | | | | | | | | | 0.02 (0.04) | | |
| Otter | 1937 | 2 | 4 | 2 | | | | | | | | | | | | | | | | | | | | | 2.00 (0.50) | 23.63 (0.18) | | |
| | 1956 | 2 | 0.5 | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Pine | 1953 | 2 | 8 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.63 (-) | | |
| | 1961 | 4 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.50 (-) | | |
| Ross | 1939 | 3 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | 1.50 (-) | 20.00 (-) | | |
| | 1942 | 7 | 21 | 3 | | | | | | | | | | | | | | | | | | | | | 0.43 (0.12) | 17.44 (0.24) | | |
| | 1943 | 2 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | 0.50 (-) | 28.00 (-) | | |
| | 1944 | 14 | 43.35 | 4 | | | | | | | | | | | | | | | | | | | | | 0.25 (0.12) | 18.99 (0.45) | 0.12 (0.11) | 11.00 (-) |
| | 1945 | 6 | 36 | 3 | | | | | | | | | | | | | | | | | | 0.03 (0.02) | 12.00 (-) | | 0.14 (0.09) | 20.00 (0.00) | | |

Appendix 4-23.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie sp. | | yellow perch | | walleye | | northern pike | | bullhead sp. | |
|--------------------|------|---------------------|-------------|----------|-------------|----|-------------|----|---------------|----|-----------------|----|-----------------|-----|----------|------|---------------------|----|-----------|----|-------------|--------|--------------|------|---------|--------|---------------|--------|--------------|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Ross- continued | 1946 | 14 | 63 | 5 | | | | | | | | | | | | | | | | | | | 0.02 | 8.00 | | | 0.10 | 20.67 | | |
| | | | | | | | | | | | | | | | | | | | | | | | (0.02) | (-) | | | (0.05) | (1.48) | | |
| | 1947 | 11 | 17 | 2 | | | | | | | | | | | | | | | | | | | 0.12 | | | | 0.41 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (0.07) | | | | (0.01) | | | |
| | 1948 | 17 | 196 | 3 | | | | | | | | | | | | | | | | | | | 0.01 | | | | 0.13 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (0.00) | | | | (0.02) | | | |
| | 1950 | 20 | 55 | 5 | | | | | | | | | | | | | | | | | | | 0.73 | | | | 0.33 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (0.17) | | | | (0.06) | | | |
| | 1952 | 10 | 20 | 1 | | | | | | | | | | | | | | | | | | | | | | | 0.25 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | (-) | | | |
| | 1954 | 8 | 36 | 4 | | | | | | | | | | | | | | | | | | | 0.08 | | | | 0.08 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (0.09) | | | | (0.07) | | | |
| 1955 | 18 | 73 | 4 | | | | | | | | | | | | | | | | | | | 0.15 | | | | 0.08 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | (0.16) | | | | (0.04) | | | | |
| 1956 | 4 | 5 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1957 | 4 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1958 | 6 | 9 | 1 | | | | | | | | | | | | | 0.11 | | | | | | | | | | 0.22 | | 0.33 | | |
| | | | | | | | | | | | | | | | (-) | | | | | | | | | | | (-) | | (-) | | |
| 1959 | 15 | 43 | 3 | | | | | | | | | | | | | | | | | | | | | | | 0.33 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (0.10) | | | | |
| 1960 | 2 | 5 | 1 | | | | | | | | | | | | 1.20 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | (-) | | | | | | | | | | | | | | | | |
| 1962 | 6 | 9 | 2 | | | | | | | | | | | | | | | | | | | | | | | | 0.11 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.15) | | | |
| 1964 | 13 | 37 | 4 | | | | | | | | | | | | | | | | | | | | | | | 0.43 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (0.15) | | | | |
| Round | 1939 | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | 1.00 | 25.00 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | | |
| 1950 | 3 | 9 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1956 | 2 | 6 | 2 | | | | | | | | | | | | | | | | | | | | | | | | 0.33 | | | |
| 1957 | 4 | 12 | 1 | | | | | | | | | | | | | | | | | | | | 0.08 | | | | | | 0.17 | |
| | | | | | | | | | | | | | | | | | | | | | | | (-) | | | | (-) | | (-) | |
| 1959 | 4 | 4 | 1 | | | | | | | | | | | | | | | | | | | | 1.50 | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (-) | | | | | | | |

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Appendix 4-23.—Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | crappie sp. | yellow perch | | walleye | | northern pike | | bullhead sp. | | | |
|-----------------|------|---------------------|-------------|----------|-------------|-------------|-------------|----|---------------|----|-----------------|----|-----------------|----|----------|----|---------------------|----|-----------|-------------|--------------|----------------|---------|----|----------------|----------------|-----------------|----|-----|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Sand | 1944 | 2 | 6 | 1 | 2.17 (-) | 9.00 (-) | | | | | | | | | | | | | | | | | | | | | | | | |
| Seney Refuge | 1948 | 27 | 98 | 2 | | | | | | | | | | | | | | | | | | | | | 0.05 (0.00) | | | | | |
| | 1955 | 4 | 6.5 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1961 | 6 | 12 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1955 | 7 | 12 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1942 | 12 | 31 | 4 | | | | | | | | | | | | | | | | | | | | | | 0.68 (0.21) | 16.76 (0.46) | | | |
| | 1944 | 6 | 15 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.27 (-) | 25.00 (-) | | | |
| | 1946 | 58 | 221 | 5 | | | | | | | | | | | | | | | | | | | | | | 0.29 (0.06) | 21.39 (0.08) | | | |
| | 1947 | 71 | 226 | 11 | | | | | | | | | | | | | | | | | | | | | | 0.46 (0.09) | | | | |
| | 1949 | 5 | 16 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.13 (-) | | | | |
| | 1952 | 127 | 333.5 | 4 | | | | | | | | | | | | | | | | | | 0.01 (0.01) | | | | 0.35 (0.04) | | | | |
| | 1953 | 3 | 18 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.83 (-) | | | | |
| | 1956 | 5 | 30 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.37 (-) | | | | |
| | 1943 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.75 (-) | 25.00 (-) | | | |
| | 1953 | 3 | 6 | 1 | | | | | | | | | | | | | | | | | | | | | | 2.50 (-) | | | | |
| | 1943 | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | 2.00 (-) | 27.00 (-) | | | |
| | 1944 | 2 | 16 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.50 (-) | 22.00 (-) | | | |
| | 1948 | 2 | 12 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.42 (-) | | | | |
| 1949 | 21 | 106 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.22 (-) | | | | | |
| 1952 | 3 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.75 (-) | | | | | |

Appendix 4-23.–Continued.

| Lake | Year | No. | | Days (N) | brook trout | | brown trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed | rock bass | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | |
|-------------------------------|------|---------|----------------|-------------|----------------|--------------|-------------|----|---------------|----|-----------------|----|-----------------|----|----------|-----|-------------|-----------|---------|--------------|----|---------|----|---------------|----|--------------|----------------|
| | | anglers | Total hours | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Seney Refuge– continued | 1950 | 7 | 9 | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1951 | 21 | 239 | 3 | | | | | | | | | | | | | | | | | | | | | | | 1.22 (0.49) |
| | 1954 | 61 | 179.5 | 3 | | | | | | | | | | | | | | | | | | | | | | | 0.28 (0.03) |
| | 1955 | 18 | 49 | 3 | | | | | | | | | | | | | | | | | | | | | | | 0.21 (0.05) |
| | 1956 | 45 | 101 | 2 | | | | | | | | | | | | | | | | | | | | | | | 0.31 (0.25) |
| | 1957 | 21 | 63 | 2 | | | | | | | | | | | | | | | | | | | | | | | 0.21 (0.09) |
| | 1958 | 29 | 61 | 3 | | | | | | | | | | | | | | | | | | | | | | | 0.71 (0.46) |
| | 1960 | 24 | 68 | 2 | | | | | | | | | | | | | | | | | | | | | | | 0.17 (0.05) |
| | 1962 | 37 | 126 | 2 | | | | | | | | | | | | | | | | | | | | | | | 0.16 (0.05) |
| | 1963 | 81 | 263 | 6 | | | | | | | | | | | | | | | | | | | | | | | 0.15 (0.10) |
| | 1964 | 16 | 21.5 | 4 | | | | | | | | | | | | | | | | | | | | | | | 0.18 (0.01) |
| | 1948 | 36 | 106 | 2 | | | | | | | | | | | | | | | | | | | | | | | 0.27 (0.01) |
| | 1945 | 4 | 16 | 1 | 0.50 (-) | 13.60 (-) | | | | | | | | | | | | | | | | | | | | | |
| | 1948 | 4 | 12 | 2 | 0.17 (0.06) | | | | | | | | | | | | | | | | | | | | | | |
| | 1949 | 5 | 7 | 2 | 0.14 (0.16) | | | | | | | | | | | | | | | | | | | | | | |
| | 1950 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1951 | 2 | 6 | 1 | 0.33 (-) | | | | | | | | | | | | | | | | | | | | | | |
| | 1952 | 6 | 9 | 2 | 0.11 (0.20) | | | | | | | | | | | | | | | | | | | | | | |
| | 1953 | 2 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1954 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | |

Appendix 4-23.—Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | rock bass | crappie sp. | yellow perch | | walleye | | northern pike | | bullhead sp. | | | | |
|-------------------------|------|---------------------|-------------|----------|-------------|----|-------------|----|---------------|----|-----------------|----|-----------------|----|----------|-----|---------------------|-----------|-------------|--------------|----|---------|----|---------------|----|--------------|----|--------|--------|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | |
| Worcester— continued | 1954 | 11 | 26 | 3 | | | | | | | | | | | | | | | | 0.77 | | | | | | | | | 0.38 | |
| | | | | | | | | | | | | | | | | | | | | (0.75) | | | | | | | | | (0.25) | |
| | 1955 | 9 | 21 | 3 | | | | | | | | | | | | | | | | 2.48 | | | | | | | | | 0.24 | |
| | | | | | | | | | | | | | | | | | | | | (0.53) | | | | | | | | | (0.16) | |
| | 1956 | 11 | 35 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 0.60 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.80) | |
| | 1957 | 13 | 33 | 3 | | | | | | | | | | | | | | | | 0.27 | | | | | | | | | 0.06 | |
| | | | | | | | | | | | | | | | | | | | | (0.13) | | | | | | | | | (0.06) | |
| | 1959 | 17 | 47 | 3 | | | | | | | | | | | | | | | | 1.49 | | | | | | | | | 0.15 | |
| | | | | | | | | | | | | | | | | | | | (0.13) | | | | | | | | | (0.09) | | |
| 1961 | 10 | 20 | 3 | | | | | | | | | | | | | | | | 0.30 | | | | | | | | | 0.05 | | |
| | | | | | | | | | | | | | | | | | | | (0.20) | | | | | | | | | (0.05) | | |
| 1962 | 4 | 6 | 1 | | | | | | | | | | | | | | | | 2.17 | | | | | | | | | 0.17 | | |
| | | | | | | | | | | | | | | | | | | | (-) | | | | | | | | | (-) | | |
| 1963 | 5 | 20 | 1 | | | | | | | | | | | | | | | | 0.10 | | | | | | | | | 0.15 | | |
| | | | | | | | | | | | | | | | | | | | (-) | | | | | | | | | (-) | | |
| 1964 | 8 | 19 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 0.05 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | (0.02) | | |

Appendix 4-24.—Direct contact lake angler creel data for the Tributaries – upper Indian River. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). Lengths were not collected for rainbow trout and crappie sp. Consequently, the “Average length” column has not been included for these species. Brown trout were harvested in small numbers from Bear Lake in year 1959: catch rate 0.09 (0.03); white bass were harvested from Toms Lake in year 1939: catch rate 0.14 (0.10) with mean length 10.25 (-) inches; and lake herring were harvested from Big Murphy Lake in 1930: catch rate 1.20 (0.27). CPE = catch per unit effort; AL = average length.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | | | |
|------------------------|------|---------------------|-------------|----------|-------------|----|---------------|--------|-----------------|--------|-----------------|----|----------|--------|---------------------|----|-----------|----|---------|--------------|------|---------|--------|---------------|------|--------------|-------|-----|----|--|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | |
| Bear (Delta Co.) | 1937 | 2 | 8 | 2 | | | | | | | | | | | | | | | | | | | | | 0.38 | 18.00 | | | | |
| | 1938 | 6 | 20.5 | 3 | | | | 0.05 | 11.00 | | | | | | | | | | | | | 1.37 | 7.88 | | | 0.15 | 18.00 | | | |
| | 1941 | 4 | 5 | 2 | | | | 0.40 | 11.50 | | | | | | | | | | | | | 1.80 | 7.06 | | | | | | | |
| | 1950 | 5 | 10 | 1 | | | | 0.08 | 0.50 | | | | | | | | | | | | | 0.16 | 0.18 | | | | | | | |
| | 1960 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | 0.80 | | | | |
| Bear (Schoolcraft Co.) | 1938 | 6 | 15 | 4 | | | | | | | | | 2.47 | 7.00 | | | | | | | | 0.60 | 8.00 | | | | | | | |
| | 1939 | 1 | 6 | 1 | | | | | | | | | (1.19) | (0.00) | | | | | | | | (0.67) | (-) | | | | | | | |
| | 1946 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1950 | 4 | 22 | 2 | | | | | | | | | | | | | | | | | | | | | | 0.91 | | | | |
| | 1958 | 5 | 13 | 2 | | | | 0.92 | | | | | | | | | | | | | | | | | | (0.57) | | | | |
| | 1959 | 31 | 77 | 2 | | | | 0.61 | | | | | | | | | | | | | | | | | | (0.19) | | | | |
| Big Bass | 1939 | 6 | 19.5 | 6 | | | | 0.05 | 14.00 | | | | | | | | | | | | | 2.31 | 8.91 | | | | | | | |
| | 1948 | 5 | 10 | 1 | | | | | | | | | | 5.40 | | | | | | | | | 4.70 | | | | | | | |
| | 1950 | 35 | 137 | 8 | | | | 0.11 | | 0.02 | | | | | 0.04 | | | | | | 0.04 | 1.53 | | | | | | | | |
| | 1951 | 2 | 6 | 1 | | | | (0.03) | | (0.01) | | | | | | | | | | | | (0.02) | (0.68) | | | | | | | |
| | 1952 | 3 | 9 | 1 | | | | | | 0.17 | | | | | | | | | | | | | | | | | | | | |
| | 1957 | 2 | 6 | 1 | | | | | | (-) | | | | | | | | | | | | | 1.67 | | | | (-) | | | |

Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | |
|-------------------------|------|---------------------|-------------|----------|----------------|----------------|----------------|-----------------|----------------|-----------------|----------------|-------------|----------------|---------------------|----|-----------|----|---------|----------------|--------------|----------------|--------------|----------------|-----------------|--------------|----|-----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Big Bass-- continued | 1958 | 43 | 147 | 8 | | | 0.11 (0.05) | 0.09 (0.06) | 0.92 (0.35) | | 0.04 (0.03) | | | | | | | | 1.22 (0.28) | | | | | | | | |
| | 1959 | 9 | 24 | 1 | | | | 0.21 (-) | | | | | | | | | | | 2.25 (-) | | | | | | | | |
| | 1960 | 8 | 20 | 2 | | | 0.05 (0.03) | 0.40 (0.14) | 0.30 (0.18) | | | | | | | | | | 0.45 (0.27) | | | | | | | | |
| | 1964 | 8 | 21 | 2 | | | | | 0.05 (0.08) | | | | | | | | | | 1.19 (0.36) | | | | | | | | |
| Big Island | 1933 | 2 | 7 | 1 | | | | | | | | | | | | | | | 2.00 (-) | 12.40 (-) | | | | | | | |
| | 1942 | 3 | 15 | 1 | | | 0.33 (-) | | | | | | | | | | | | | | 11.00 (-) | | | | | | |
| | 1945 | 6 | 34 | 2 | | | | 0.06 (0.06) | 12.00 (-) | | | | | | | | | | | | | | 0.21 (0.21) | 19.70 (-) | | | |
| | 1946 | 6 | 19 | 2 | | | | | | | | | | | | | | | | | | | 0.26 (0.10) | 20.82 (1.30) | | | |
| | 1951 | 8 | 13 | 2 | | | | | | | | | | | | | | | 4.77 (0.86) | | | | 0.38 (0.41) | | | | |
| | 1959 | 17 | 37 | 4 | | | 0.03 (0.02) | | 0.54 (0.21) | 0.65 (0.64) | | | | | | | | | 0.57 (0.55) | | | | 0.27 (0.16) | | | | |
| | 1960 | 6 | 17 | 2 | | | | | | 0.06 (0.03) | | | | | | | | | 0.35 (0.21) | | | | 0.35 (0.50) | | | | |
| | 1961 | 2 | 8 | 1 | | | | | | | | | | | | | | | 1.25 (-) | | | | 0.50 (-) | | | | |
| | 1962 | 9 | 27 | 2 | | | | | | 0.70 (0.63) | | | | | | | | | | | | | 0.15 (0.13) | | | | |
| Big Murphy | 1930 | 0 | 15 | 2 | | | 0.27 (0.22) | 0.07 (0.04) | | | | | | | | | | | | | | | 0.87 (0.09) | 23.62 (1.05) | | | |
| | 1938 | 4 | 3 | 4 | | | 0.33 (0.30) | 14.00 (-) | | | | | 1.33 (1.50) | 7.00 (-) | | | | | | | | | 0.33 (0.30) | 16.00 (-) | | | |
| | 1939 | 2 | 1.5 | 1 | | | | | | | | 5.33 (-) | | | | | | | 4.00 (-) | | | | | | | | |
| | 1940 | 4 | 12.5 | 4 | 1.84 (0.41) | 8.00 (0.00) | | | | | | | | | | | | | | | | | | | | | |
| | 1941 | 5 | 6.75 | 3 | | | 0.30 (0.17) | 14.50 (-) | | | | | | | | | | | | | | | 0.15 (0.18) | 42.00 (-) | | | |
| | 1942 | 2 | 4 | 2 | | | | | 0.25 (0.38) | 21.00 (-) | | | | | | | | | | | | | 0.50 (0.25) | 24.00 (-) | | | |
| | 1944 | 4 | 13 | 2 | | | 0.62 (0.01) | 12.00 (0.00) | | | 0.46 (0.36) | 7.00 (-) | | | | | | | 0.15 (0.12) | 7.00 (-) | 0.23 (0.18) | 18.00 (-) | | | | | |

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Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | | |
|----------------------|-----------|---------------------|-------------|----------|----------------|----|---------------|-----------------|----|-----------------|----------------|----------|----------------|---------------------|----------------|-----------|----|---------|----------------|----|---------|----|---------------|----|----------------|----------------|-----|----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Big Murphy-continued | 1950 | 8 | 22 | 2 | 0.73 (0.66) | | | 0.09 (0.10) | | | | | | | | | | | | | | | | | 0.27 (0.30) | | | |
| | 1951 | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | 1.00 (-) | | | |
| | 1952 | 4 | 13 | 2 | | | | | | | | | | | | | | | | | | | | | 0.23 (0.13) | | | |
| | 1953 | 13 | 48 | 3 | | | | | | | 2.52 (0.65) | | 0.38 (0.29) | | 0.46 (0.34) | | | | | | | | | | | 0.31 (0.31) | | |
| | 1954 | 14 | 35 | 3 | | | | 0.14 (0.01) | | | 5.09 (1.32) | | 0.11 (0.12) | | 0.57 (0.59) | | | | | | | | | | | 0.37 (0.08) | | |
| | 1955 | 11 | 35 | 3 | | | | | | | 1.11 (0.35) | | | | 4.57 (1.91) | | | | 0.14 (0.08) | | | | | | | 0.26 (0.25) | | |
| | 1957 | 4 | 8 | 2 | | | | | | | 2.25 (2.25) | | 0.25 (0.25) | | | | | | | | | | | | | 5.00 (5.00) | | |
| | 1958 | 6 | 15 | 1 | | | | | | | 2.33 (-) | | 0.13 (-) | | | | | | | | | | | | | 0.27 (-) | | |
| | 1959 | 2 | 10 | 1 | | | | | | | 2.40 (-) | | | | 0.20 (-) | | | | | | | | | | | 0.60 (-) | | |
| | 1962 | 18 | 47 | 6 | | | | 0.02 (0.02) | | 0.11 (0.06) | 0.60 (0.19) | | 0.09 (0.05) | | 1.70 (0.64) | | | | | | | | | | | 1.32 (0.57) | | |
| | 1964 | 3 | 9 | 1 | | | | | | | 1.11 (-) | | | | 0.44 (-) | | | | | | | | | | | 0.33 (-) | | |
| | Blue Gill | 1940 | 1 | 3 | 1 | | | | | 1.33 (-) | 14.00 (-) | | | | | | | | | | | | | | | | | |
| 1948 | | 4 | 8 | 1 | | | | | | | 2.13 (-) | | | | | | | | | | | | | | | | | |
| 1952 | | 4 | 12 | 1 | | | | | | | 2.50 (-) | | | | | | | | | | | | | | | | | |
| 1957 | | 4 | 14 | 1 | | | | | | | 1.93 (-) | | 0.29 (-) | | | | | | | | | | | | | 0.21 (-) | | |
| Blue Joe | 1959 | 9 | 21 | 2 | | | | 0.14 (0.15) | | 2.38 (0.93) | | | | | | | | | | | | | | | 0.29 (0.01) | | | |
| | 1961 | 3 | 9 | 1 | | | | | | 6.11 (-) | | | | | | | | | | | | | | | | | | |
| Bullhead | 1952 | 2 | 1 | 1 | | | | | | 2.00 (-) | | | | | | | | | | | | | | | | | | |
| Camp 41 | 1947 | 2 | 6 | 1 | | | | | | | | | | | | | | | | | | | | | 0.50 (-) | | | |

Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | |
|----------|------|---------------------|-------------|----------|-------------|----|---------------|-----------------|--------|-----------------|--------|----------|--------|---------------------|--------|-----------|----|---------|--------------|--------|---------|----|---------------|--------|--------------|----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Carr | 1941 | 3 | 6 | 2 | | | | | | | | | | | 0.17 | 7.00 | | | 1.00 | 7.50 | | | 1.00 | 23.67 | | |
| | 1946 | 2 | 7 | 1 | | | | | | | | | | | (0.11) | (-) | | | (0.67) | (-) | | | (0.33) | (0.33) | | |
| | 1948 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | (-) | (-) | | |
| | 1950 | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | | (-) | | | |
| | 1960 | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | | (-) | 1.50 | | |
| Coattail | 1959 | 6 | 14 | 2 | | | | | 0.21 | | 0.93 | | | | | | | | | 0.21 | | | | 0.29 | | |
| | 1963 | 2 | 6 | 1 | | | | | (0.18) | | (0.80) | | | | | | | | | (0.18) | | | | (0.33) | | |
| Colwell | 1948 | 8 | 23 | 1 | | | | | | | 2.70 | | | | | | | | | 0.35 | | | | | | |
| | 1950 | 7 | 27 | 4 | | | 0.11 | | | | 0.41 | | 0.19 | | | | | | 0.33 | 0.59 | | | | | | |
| | 1952 | 23 | 57 | 5 | | | 0.04 | | | | 0.74 | | 0.28 | | 0.04 | | | | | (0.17) | (0.30) | | | | | |
| | 1953 | 12 | 25 | 3 | | | | | | | 0.12 | | | | | | | | | | | | | | | |
| | 1954 | 10 | 22.5 | 1 | | | | | | | 3.82 | | 0.31 | | | | | | 0.27 | 0.04 | | | | | | |
| | 1955 | 8 | 18 | 2 | | | | | | | 2.22 | | | | | | | | | | | | | | | |
| | 1956 | 4 | 12 | 1 | | | | | | | 1.25 | | | | | | | | | | | | | | | |
| | 1957 | 56 | 134.5 | 11 | | | 0.03 | | 0.08 | | 1.13 | | 0.09 | | | | | | 0.07 | 0.33 | | | | 0.04 | | |
| | 1958 | 31 | 60 | 7 | | | (0.02) | | (0.08) | | (0.23) | | (0.04) | | | | | | (0.02) | (0.27) | | | | (0.03) | | |
| | 1959 | 43 | 105 | 7 | | | | 0.07 | | | 1.05 | | 0.03 | | | | | | 0.05 | 0.45 | | | | 0.02 | | |
| | 1960 | 17 | 29 | 3 | | | | (0.05) | | | (0.49) | | (0.01) | | | | | | (0.04) | (0.23) | | | | (0.01) | | |
| | 1961 | 7 | 11 | 2 | | | | | | | 0.62 | | | | | | | | (0.08) | 0.41 | | | | 0.17 | | |
| | | | | | | | | | | | (0.25) | | | | | | | | | (0.22) | | | | (0.05) | | |
| | | | | | | | | | | 0.27 | | | | | | | | | | | | | 0.36 | | | |
| | | | | | | | | | | (0.02) | | | | | | | | | | | | | (0.26) | | | |

Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | |
|-------------------|------|---------------------|-------------|----------|-------------|----|----------------|-----------------|----|-----------------|----------------|----------------|----------------|---------------------|----------------|----------------|----|---------|----------------|----------------|----------------|----|----------------|----------------|--------------|----|-----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Crooked-continued | 1948 | 21 | 69 | 3 | | | 0.22 (0.14) | | | | | 1.14 (0.36) | | | | | | | | | | | | | | | |
| | 1950 | 3 | 12 | 1 | | | | | | | | | | | | | | | | | | | | 0.08 (-) | | | |
| | 1951 | 1 | 1 | 1 | | | | | | | | | 6.00 (-) | | | | | | | | 3.00 (-) | | | | | | |
| | 1952 | 22 | 68 | 4 | | | 0.01 (0.01) | | | | | 0.03 (0.04) | 0.84 (0.38) | 0.26 (0.15) | | 0.69 (0.40) | | | 0.96 (0.85) | | | | | 0.01 (0.01) | | | |
| | 1953 | 9 | 30 | 2 | | | | | | | | 1.67 (0.82) | 1.60 (2.15) | 0.03 (0.02) | | | | | | 0.03 (0.02) | | | | | | | |
| | 1954 | 16 | 51 | 4 | | | 0.08 (0.06) | | | | | 0.10 (0.04) | | 0.00 (0.00) | | | | | | 1.73 (0.69) | | | | 0.33 (0.06) | | | |
| | 1955 | 11 | 23 | 3 | | | | | | | | 0.04 (0.05) | 0.48 (0.10) | 0.04 (0.05) | | | | | | | | | | 0.09 (0.11) | | | |
| | 1956 | 26 | 60 | 3 | | | 0.05 (0.03) | | | | | 0.58 (0.42) | 0.05 (0.04) | 0.03 (0.02) | | | | | | 0.28 (0.17) | 0.02 (0.01) | | | 0.17 (0.06) | | | |
| | 1957 | 14 | 23 | 2 | | | | | | | | 0.35 (0.21) | 0.57 (0.34) | | | | | | | 0.35 (0.21) | | | | 0.13 (0.09) | | | |
| | 1958 | 24 | 33 | 4 | | | | 0.06 (0.05) | | | | 1.09 (0.69) | 0.06 (0.05) | 0.03 (0.03) | | 0.03 (0.03) | | | | 0.70 (0.36) | | | | 0.03 (0.02) | | | |
| | 1959 | 14 | 34 | 3 | | | | 0.03 (0.04) | | | | 0.97 (0.81) | 0.21 (0.15) | | | | | | | 0.03 (0.04) | | | | 0.09 (0.07) | | | |
| | 1960 | 2 | 6 | 1 | | | | | | | | 0.67 (-) | 0.33 (-) | | | 2.67 (-) | | | | 0.50 (-) | | | | | | | |
| | 1961 | 28 | 54 | 5 | | | | 0.04 (0.04) | | | | 3.33 (0.99) | 1.65 (1.02) | | | 0.33 (0.16) | | | | 0.07 (0.04) | | | | 0.04 (0.04) | | | |
| | 1962 | 26 | 54 | 6 | | | | 0.06 (0.05) | | 0.02 (0.02) | | 2.56 (0.80) | 0.59 (0.25) | 0.02 (0.02) | | 0.28 (0.15) | | | | 0.13 (0.09) | | | | | | | |
| 1963 | 28 | 46.5 | 3 | | | | | | | | 3.38 (0.68) | 0.11 (0.03) | | | 0.09 (0.03) | | | | 0.11 (0.03) | | | | | | | | |
| 1964 | 13 | 39 | 5 | | | | 0.03 (0.03) | | | | 3.51 (1.07) | 0.10 (0.06) | | | 0.18 (0.11) | | | | 0.26 (0.24) | | | | 0.03 (0.03) | | | | |
| Doe | 1947 | 5 | 16 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1949 | 3 | 6 | 1 | | | | | | | | | | | | | | | | 3.17 (-) | | | | 0.33 (-) | | | |
| | 1959 | 4 | 10 | 1 | | | | | | | | | | | | | | | | 1.10 (-) | | | | 0.90 (-) | | | |
| Eagle | 1951 | 8 | 24 | 2 | | | | | | | | | | | | | | | | 0.33 (0.33) | | | | 0.08 (0.00) | | | |

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Appendix 4-24.--Continued.

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| Lake | Year | No. | | | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | |
|------|------|-----------------|-------------|----------|-------------|----|----------------|-----------------|----------------|--------------------------|-------------------------|-------------------------|----------------|--------------------------|----|-----------|----|---------|-------------------------|----|---------|----|---------------|----|--------------|----|--|
| | | anglers (lines) | Total hours | Days (N) | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | |
| East | 1953 | 4 | 16 | 1 | | | | | | | | 1.44 (-) | | | | | | | | | | | | | | | 1.75 (-) |
| | 1957 | 12 | 21 | 3 | | | 0.29 (0.13) | | | | | 0.10 (0.02) | 0.05 (0.07) | | | | | | | | | | | | | | 0.14 (0.21) |
| | 1958 | 22 | 36 | 4 | | | 0.50 (0.24) | | | | | 1.75 (0.32) | 0.61 (0.34) | | | | | | | | | | | | | | 0.31 (0.19) |
| | 1959 | 16 | 28 | 5 | | | 0.04 (0.04) | | | | | 1.93 (0.37) | 0.39 (0.22) | | | | | | | | | | | | | | 0.32 (0.18) |
| | 1960 | 6 | 11 | 2 | | | 0.09 (0.02) | | | | | 0.64 (0.25) | 0.45 (0.83) | | | | | | | | | | | | | | 0.09 (0.17) |
| | 1961 | 9 | 21 | 4 | | | | | 0.10 (0.10) | | | 1.81 (0.65) | 0.81 (0.12) | | | | | | | | | | | | | | 0.86 (0.67) |
| | 1962 | 28 | 51 | 8 | | | | | 0.12 (0.10) | | | 1.76 (0.72) | 0.59 (0.35) | | | | | | | | | | | | | | 0.47 (0.21) |
| | 1963 | 26 | 55 | 5 | | | | | | | | 1.84 (0.52) | 0.29 (0.06) | | | | | | | | | | | | | | 0.53 (0.19) |
| | 1964 | 40 | 92 | 9 | | | | 0.18 (0.08) | | | | 0.57 (0.19) | 0.82 (0.25) | | | | | | | | | | | | | | 0.65 (0.21) |
| Farm | 1962 | 8 | 21 | 3 | | | | | | | | | | | | | | | | | | | | | | | 11.57 (2.08) |
| | 1963 | 12 | 37.5 | 3 | | | | | | | | | | | | | | | | | | | | | | | 11.12 (6.03) |
| | 1964 | 2 | 3 | 1 | | | | | | | | | | | | | | | | | | | | | | | 10.67 (-) |
| Fish | 1929 | 4 | 78 | 4 | | | | | | | | | | | | | | | | | | | | | | | 0.03 (0.00) |
| | 1930 | 15 | 36 | 5 | | | 0.08 (0.07) | | | | | | | | | | | | | | | | | | | | 0.77 20.88 (0.20) (0.38) |
| | 1931 | 10 | 22 | 4 | | | | | | | | | | | | | | | | | | | | | | | 1.44 20.00 (0.21) (0.00) |
| | 1932 | 11 | 20 | 4 | | | | | | | 0.70 7.00 (0.75) (-) | | | | | | | | | | | | | | | | 1.00 19.18 (0.17) (0.19) |
| | 1938 | 1 | 5 | 1 | | | | | | | | | | | | | | | | | | | | | | | 0.70 17.07 0.30 8.00 (0.19) (0.22) (0.32) (-) |
| | 1945 | 2 | 8 | 1 | | | | | | | | 1.88 7.00 (-) (-) | | | | | | | | | | | | | | | 0.80 22.00 (-) (-) |
| | 1946 | 6 | 19 | 3 | | | | | | 0.05 12.00 (0.05) (-) | 0.32 8.00 (0.26) (-) | 0.21 7.00 (0.18) (-) | 7.00 (-) | 0.11 10.00 (0.09) (-) | | | | | 0.21 8.00 (0.18) (-) | | | | | | | | 1.00 (-) |
| | 1947 | 4 | 22 | 2 | | | | | | | | | | | | | | | | | | | | | | | 0.21 8.00 (0.18) (-) |
| | 1948 | 28 | 41 | 3 | | | | | | | | 0.12 (0.14) | | | | | | | | | | | | | | | 0.23 (0.24) |

Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | |
|-----------|------|---------------------|-------------|----------|-------------|----|---------------|-----------------|--------|-----------------|--------|----------|----|---------------------|----|-----------|----|---------|--------------|--------|---------|----|---------------|--------|--------------|----|-----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Foote | 1948 | 13 | 12.5 | 1 | | | | | 0.08 | | 0.40 | | | | | | | | | 6.48 | | | | | | | |
| | | | | | | | | | (-) | | (-) | | | | | | | | | (-) | | | | | | | |
| Grassy | 1930 | 5 | 3 | 1 | | | 0.67 | 10.50 | | | 3.67 | | | | | | | | | | | | 0.33 | | | | |
| | | | | | | | (-) | (-) | | | (-) | | | | | | | | | | | | (-) | | | | |
| | 1931 | 7 | 5 | 1 | | | 0.20 | | | | | | | | | | | | | | | | 4.20 | 22.50 | | | |
| | | | | | | | (-) | | | | | | | | | | | | | | | | (-) | (-) | | | |
| | 1946 | 16 | 36 | 4 | | | 0.56 | 14.00 | 0.08 | 17.00 | 1.42 | | | | | | | | | | | | | | | | |
| | | | | | | | (0.34) | (-) | (0.09) | (-) | (0.93) | | | | | | | | | | | | | | | | |
| | 1951 | 24 | 44 | 4 | | | 0.89 | | | | 1.32 | | | | | | | | | | | | 0.14 | | | | |
| | | | | | | | (0.20) | | | | (0.50) | | | | | | | | | | | | (0.14) | | | | |
| | 1959 | 3 | 7 | 1 | | | | | | | | | | | | | | | | 0.43 | | | 0.29 | | | | |
| | | | | | | | | | | | | | | | | | | | | (-) | | | (-) | | | | |
| | 1963 | 3 | 9 | 1 | | | | | | | | 1.33 | | 0.33 | | | | | | | | | | | | | |
| | | | | | | | | | | | | (-) | | (-) | | | | | | | | | | | | | |
| Grimes | 1930 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | 4.00 | 20.00 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | | |
| Half Moon | 1928 | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | | 1.50 | 22.00 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | | |
| | 1930 | 2 | 3 | 1 | | | | | | | | | | | | | | | | | | | 1.67 | 19.00 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | | |
| | 1938 | 6 | 8 | 2 | | | 0.13 | 11.00 | | | | | | | | | | | | 0.50 | 24.00 | | 0.25 | 24.00 | | | |
| | | | | | | | (0.13) | (-) | | | | | | | | | | | | (0.50) | (-) | | (0.25) | (-) | | | |
| Hartney | 1930 | 5 | 5 | 2 | | | | | | | | | | | | | | | | | | | 2.00 | 22.00 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (0.80) | (-) | | | |
| | 1938 | 4 | 5 | 2 | | | | | | | | | | | | | | | | | | | 1.20 | 25.00 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (0.72) | (0.45) | | | |
| | 1939 | 3 | 4 | 2 | | | | | | | | | | | | | | | | | | | 3.25 | 23.73 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (1.25) | (0.33) | | | |
| Hike | 1958 | 8 | 17 | 3 | | | 0.76 | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | (0.11) | | | | | | | | | | | | | | | | | | | | |
| | 1963 | 14 | 22 | 1 | | | 0.32 | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | (-) | | | | | | | | | | | | | | | | | | | | |
| Hovey | 1929 | 1 | 8 | 1 | | | | | | | | | | | | | | | | | | | 1.00 | 28.00 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | | |
| | 1930 | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | | 0.50 | 25.00 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | | |
| | 1931 | 2 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | |

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Appendix 4-24.-Continued.

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| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | |
|----------|------|---------------------|-------------|----------|-------------|----|---------------|-----------------|--------|-----------------|----|----------|--------|---------------------|--------|-----------|----|---------|--------------|------|---------|-------|---------------|--------|--------------|----|-----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Hughes | 1963 | 1 | 1 | 1 | | | | | | | | 16.00 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | (-) | | | | | | | | | | | | | | | |
| Island | 1930 | 1 | 0.5 | 1 | | | | 2.00 | 11.00 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | (-) | (-) | | | | | | | | | | | | | | | | | | |
| | 1933 | 2 | 14 | 1 | | | | | | | | | | | | | | | | 2.00 | | | | 1.43 | | | |
| | | | | | | | | | | | | | | | | | | | | (-) | | | | (-) | | | |
| | 1938 | 2 | 4 | 1 | | | | | | | | 2.50 | 8.00 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | (-) | (-) | | | | | | | | | | | | | | |
| | 1941 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | 8.00 | 10.00 | | | | | |
| | | | | | | | | | | | | | | | | | | | | | (-) | (-) | | | | | |
| | 1942 | 2 | 8 | 1 | | | | | | | | 1.13 | 8.00 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | (-) | (-) | | | | | | | | | | | | | | |
| | 1951 | 6 | 8 | 1 | | | | | | | | | | | | | | | | | | | | | 0.25 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | (-) | | |
| Klondyke | 1959 | 2 | 6 | 1 | | | | | | | | | | | | | | | | | | | | | 0.67 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | (-) | | |
| Leg | 1949 | 2 | 3 | 1 | | | | 0.33 | | | | 7.00 | | | | | | | | | | | | | | | |
| | | | | | | | | (-) | | | | (-) | | | | | | | | | | | | | | | |
| | 1950 | 25 | 78 | 4 | | | | | | | | 0.37 | 0.05 | 0.12 | 0.08 | 0.05 | | | | | | | | 0.54 | 0.03 | | |
| | | | | | | | | | | | | (0.22) | (0.00) | (0.02) | (0.10) | (0.02) | | | | | | | | (0.17) | (0.04) | | |
| | 1952 | 6 | 19 | 2 | | | | 0.26 | 0.16 | | | 0.37 | | | 1.05 | | | | | | | | | 0.11 | | | |
| | | | | | | | | (0.28) | (0.15) | | | (0.28) | | | (1.00) | | | | | | | | | (0.10) | | | |
| | 1953 | 7 | 23 | 2 | | | | | | | | | | | 0.74 | 0.13 | | | | | 0.09 | | | 0.09 | 0.52 | | |
| | | | | | | | | | | | | | | | (0.39) | (0.07) | | | | | (0.05) | | | (0.05) | (0.77) | | |
| | 1957 | 7 | 12 | 1 | | | | | | | | | | | | 0.17 | | | | | | | | 0.17 | | | |
| | | | | | | | | | | | | | | | | (-) | | | | | | | | (-) | | | |
| | 1958 | 16 | 53 | 4 | | | | | | | | 1.25 | 0.23 | 0.09 | 0.68 | 0.42 | | | | | | | | 0.04 | | | |
| | | | | | | | | | | | | (0.64) | (0.19) | (0.08) | (0.52) | (0.28) | | | | | | | | (0.04) | | | |
| | 1959 | 3 | 9 | 1 | | | | | | | | 1.78 | 0.33 | | 0.89 | 0.22 | | | | | | | | | | | |
| | | | | | | | | | | | | (-) | (-) | | (-) | (-) | | | | | | | | | | | |
| | 1960 | 5 | 16 | 2 | | | | | | | | 1.50 | 0.13 | | | 0.06 | | | | | | | | 0.19 | | | |
| | | | | | | | | | | | | (1.13) | (0.09) | | | (0.05) | | | | | | | | (0.23) | | | |
| | 1961 | 15 | 42.5 | 4 | | | | | | | | 1.65 | | | 0.87 | 0.12 | | | | | | | | 0.02 | | | |
| | | | | | | | | | | | | (0.81) | | | (0.44) | (0.07) | | | | | | | | (0.03) | | | |
| | 1962 | 16 | 37 | 5 | | | | | | | | 0.68 | 0.08 | 0.08 | 0.84 | 0.41 | | | | | | | | 0.08 | 0.22 | | |
| | | | | | | | | | | | | (0.59) | (0.08) | (0.05) | (0.31) | (0.28) | | | | | | | | (0.03) | (0.21) | | |
| | 1963 | 31 | 100 | 9 | | | | | | | | 2.01 | 0.07 | 0.03 | 0.32 | 0.06 | | | | | | | | 0.01 | | | |
| | | | | | | | | | | | | (0.44) | (0.04) | (0.03) | (0.14) | (0.04) | | | | | | | | (0.01) | | | |
| | 1964 | 15 | 60 | 6 | | | | | | | | 0.73 | 0.02 | | 0.08 | 0.20 | | | | | | | | 0.08 | | | |
| | | | | | | | | | | | | (0.31) | (0.02) | | (0.07) | (0.19) | | | | | | | | (0.05) | | | |

Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | |
|---------------|------|---------------------|-------------|----------|-------------|----|---------------|-----------------|-------------|-----------------|-------------|-------------|----------|---------------------|----------|-----------|----|---------|--------------|-------------|-------------|-------------|---------------|-------------|--------------|----|-----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Little Murphy | 1957 | 3 | 6 | 1 | | | | | | | | 1.00 (-) | 0.33 (-) | 0.17 (-) | | | | | 1.67 (-) | | | | | | | | |
| Lost | 1938 | 2 | 3 | 1 | | | 0.33 (-) | 11.00 (-) | | | | | | | | | | | | 0.33 (-) | 7.00 (-) | | | | | | |
| | 1942 | 14 | 56 | 2 | | | 0.16 (0.12) | 12.00 (0.00) | | | 0.16 (0.06) | | | | | | | | | 0.04 (0.05) | 7.11 (0.11) | | | | | | |
| | 1946 | 3 | 10 | 2 | | | 0.30 (0.36) | 13.00 (-) | | | 2.30 (0.64) | 8.00 (0.00) | | | | | | | | 0.50 (0.60) | 8.00 (-) | | | | | | |
| Lyman | 1949 | 3 | 6 | 1 | | | | | 0.33 (-) | | | | | | | | | | | | | | | | | | |
| | 1950 | 9 | 22 | 3 | | | 0.09 (0.10) | 0.27 (0.26) | | | 0.32 (0.22) | 0.09 (0.06) | | | | | | | | 5.68 (1.59) | | | | | | | |
| | 1952 | 1 | 1.5 | 1 | | | | | | | 2.67 (-) | 0.67 (-) | | | | | | | | | | | | | | | |
| | 1958 | 24 | 48 | 6 | | | | | 0.06 (0.06) | | 0.08 (0.06) | 0.04 (0.04) | | | | | | | | | 0.04 (0.04) | | | | | | |
| | 1959 | 7 | 12 | 3 | | | | | | | 1.67 (1.40) | | | | | | | | | | 0.17 (0.15) | | | | | | |
| | 1960 | 14 | 26 | 5 | | | | | | | 1.31 (0.55) | | | | | | | | | | 0.46 (0.43) | | | | | | |
| | 1962 | 3 | 4 | 1 | | | | | | | | | | 0.25 (-) | 0.25 (-) | | | | | | 2.50 (-) | | | | | | |
| | 1963 | 5 | 12 | 1 | | | | | | | 0.08 (-) | | | | | | | | | | 1.92 (-) | | | | | | |
| McComb | 1938 | 3 | 5 | 2 | | | | | 0.20 (0.16) | 14.00 (-) | | | | | | | | | | | 0.80 (0.96) | | | | | | |
| | 1942 | 5 | 18 | 2 | | | 0.28 (0.37) | 12.00 (-) | | | | | | | | | | | | | 0.72 (0.19) | 8.54 (0.14) | | 0.28 (0.19) | 24.00 (-) | | |
| | 1944 | 1 | 3 | 1 | | | | | | | | | | | | | | | | | | | | 0.67 (-) | 20 (-) | | |
| | 1947 | 8 | 18 | 3 | | | | | | | | | | | | | | | 0.17 (0.17) | 0.33 (0.33) | | | | 0.39 (0.20) | | | |
| McInnes | 1942 | 5 | 20 | 2 | | | | | | | 0.20 (0.24) | 8.00 (-) | | | | | | | | | | | | 0.25 (0.20) | | | |
| McKeever | 1931 | 5 | 4 | 2 | | | | | | | | | | | | | | | | | | | | 1.25 (0.25) | 21.60 (0.98) | | |
| | 1933 | 4 | 3 | 1 | | | | | 2.33 (-) | 14.20 (-) | | | | | | | | | | | | | | 0.33 (-) | | | |
| | 1945 | 4 | 24 | 2 | | | 0.29 (0.29) | 13.00 (-) | | | | | | | | | | | | | | | | 0.13 (0.13) | | | |

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Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | |
|--------------------|------|---------------------|-------------|----------|-------------|----|----------------|-----------------|----------------|-----------------|-------------|----------------|----|---------------------|----|-----------|----|---------|--------------|----|-------------|----|---------------|----------------|----------------|-----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| McKeever-continued | 1946 | 6 | 26 | 3 | | | 0.08 (0.05) | | | | | | | | | | | | | | | | 0.08 | 19.00 | (0.10) | (-) |
| | 1947 | 2 | 4 | 1 | | | | | 0.25 (-) | | | | | | | | | | | | | | | | | |
| | 1949 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | 0.25 (-) | | |
| | 1951 | 4 | 8 | 1 | | | | | | | | | | | | | | | | | 1.50 (-) | | | 0.88 (-) | | |
| | 1959 | 6 | 7 | 1 | | | | | | | 2.57 (-) | | | | | | | | | | 2.00 (-) | | | | | |
| Mike White | 1947 | 5 | 6.5 | 1 | | | | | | | | | | | | | | | | | | | 0.31 (-) | | | |
| | 1959 | 4 | 9 | 1 | | | | | | | | | | | | | | | | | 1.44 (-) | | | 0.44 (-) | | |
| Minerva | 1943 | 5 | 13.5 | 2 | | | 2.15 (1.95) | 13.72 (0.13) | 0.07 (0.06) | 14.00 (-) | | | | | | | | | | | | | | | | |
| | 1944 | 2 | 4 | 1 | | | 1.75 (-) | 12.00 (-) | | | | | | | | | | | | | | | | | | |
| | 1949 | 8 | 10 | 2 | | | 0.30 (0.12) | | | | | | | | | | | | | | | | | 0.80 (0.28) | | |
| | 1950 | 13 | 26 | 3 | | | 0.23 (0.11) | | 0.23 (0.30) | 0.04 (0.05) | | | | | | | | | | | | | | 1.62 (1.68) | | |
| | 1951 | 49 | 134 | 9 | | | 0.12 (0.05) | | | 0.10 (0.04) | | 0.01 (0.01) | | 0.01 (0.01) | | | | | | | | | | 3.31 (0.90) | | |
| | 1952 | 43 | 104 | 8 | | | 0.01 (0.01) | | 0.04 (0.03) | 0.15 (0.12) | | | | | | | | | | | | | | 3.50 (0.87) | | |
| | 1953 | 34 | 76.5 | 8 | | | | | | | | | | | | | | | | | | | | 5.37 (1.22) | | |
| | 1954 | 5 | 11 | 2 | | | | | | | | | | | | | | | | | | | | 3.91 (3.17) | | |
| | 1955 | 6 | 4 | 1 | | | | | | | | | | | | | | | | | | | | 2.25 (-) | | |
| | 1957 | 19 | 43 | 4 | | | | | 0.19 (0.15) | 0.70 (0.18) | | 0.05 (0.04) | | | | | | | | | | | | 1.21 (0.52) | | |
| | 1958 | 8 | 16 | 2 | | | | 0.38 (0.38) | | 1.00 (0.75) | | | | | | | | | | | | | | 1.31 (1.31) | | |
| | 1959 | 27 | 74 | 7 | | | | 0.26 (0.14) | 0.01 (0.01) | 0.86 (0.37) | | | | | | | | | | | | | | 0.32 (0.20) | 0.01 (0.01) | |
| | 1960 | 25 | 73 | 8 | | | | 0.08 (0.04) | | 0.58 (0.23) | | | | | | | | | | | | | | 0.71 (0.51) | 0.01 (0.01) | |
| | 1961 | 16 | 38 | 6 | | | | 0.05 (0.05) | | | | | | | | | | | | | | | | 1.63 (0.54) | | |

Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | crappie | yellow perch | walleye | northern pike | | bullhead sp. | |
|------------------------|------|---------------------|-------------|----------|-------------|----|----------------|-----------------|----------------|-----------------|----------------|----------|----------------|---------------------|----|-----------|---------|----------------|----------------|----------------|----------------|--------------|----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Minerva-- continued | 1962 | 13 | 37 | 4 | | | | | 0.14 (0.07) | | 0.03 (0.02) | | | | | | | | 0.24 (0.19) | | | | |
| | 1963 | 21 | 48 | 8 | | | | | 0.02 (0.02) | | 0.13 (0.07) | | 0.10 (0.06) | | | | | | 2.31 (0.98) | | 0.02 (0.02) | | |
| | 1964 | 9 | 28 | 4 | | | | 0.07 (0.05) | | | 0.25 (0.20) | | 0.07 (0.03) | | | | | | 0.14 (0.14) | | | | |
| Mirror | 1930 | 1 | 2 | 1 | | | | | 0.50 (-) | | | | | | | | | | | | | | |
| Moccasin | 1945 | 18 | 58.5 | 5 | | | 0.09 (0.11) | 14.00 (-) | 0.07 (0.03) | 17.00 (-) | | | | | | | | 0.05 (0.05) | 9.33 (0.33) | | | | |
| | 1946 | 4 | 7 | 1 | | | 1.43 (-) | 12.00 (-) | | 11.00 (-) | | | | | | | | | 0.14 (-) | 8.00 (-) | | | |
| | 1947 | 4 | 10 | 2 | | | | | | 1.00 (0.00) | | | | | | | | | | | | | |
| | 1948 | 164 | 269 | 15 | | | 0.65 (0.11) | | | | 1.17 (0.21) | | | | | | | | | | | | |
| | 1951 | 13 | 24 | 3 | | | 0.83 (0.22) | | | | 1.58 (0.44) | | | | | | | | 0.71 (0.54) | | | | |
| Mowe | 1959 | 4 | 9 | 1 | | | | | 0.67 (-) | 1.78 (-) | | | | | | | | | 0.44 (-) | | | | |
| | 1963 | 6 | 24 | 1 | | | | | 0.83 (-) | | | | | | | | | | | | | | |
| Muleshoe | 1964 | 2 | 4 | 1 | | | | | | | | | 0.50 (-) | | | | | | | | | | |
| | 1959 | 4 | 8 | 1 | | | | | | | | | | | | | | | 1.88 (-) | | | | |
| Ostrander | 1942 | 1 | 3 | 1 | | | | | | | | | | | | | | | | | 0.67 (-) | 24.00 (-) | |
| | 1951 | 4 | 8 | 1 | | | | | | | | | | | | | | | | | 1.38 (-) | | |
| Pelican | 1937 | 2 | 7 | 2 | | | | | | | | | | | | | | | 2.57 (0.29) | 7.00 (0.00) | | | |
| | 1938 | 2 | 2 | 1 | | | | | | | | | | | | | | | 3.00 (-) | 8.00 (-) | | | |
| | 1946 | 4 | 8 | 1 | | | | | | | | | | | | | | | | | | | |
| | 1959 | 5 | 10 | 1 | | | | | | | | | | | | | | | 0.30 (-) | | 0.50 (-) | | |

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Appendix 4-24.-Continued.

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| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | |
|-----------|------|---------------------|-------------|----------|-------------|----|---------------|-----------------|--------|-----------------|-------|----------|------|---------------------|----|-----------|----|---------|--------------|------|---------|--------|---------------|--------|--------------|--------|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Perch | 1942 | 6 | 13 | 1 | | | | | | | | | | | | | | | 1.08 | 7.00 | | | | | | |
| | 1943 | 3 | 30.5 | 1 | | | | 0.03 | 15.00 | | | 0.43 | 8.30 | | | | | | (-) | (-) | | | | | | |
| | 1945 | 2 | 8 | 1 | | | | (-) | (-) | | | (-) | (-) | | | | | | | | | | | | | |
| | 1947 | 16 | 54 | 4 | | | | 0.15 | | 0.02 | | 0.06 | | | | | | | (-) | 9.00 | | | | | | |
| | 1962 | 1 | 1 | 1 | | | | (0.13) | | (0.02) | | (0.04) | | | | | | | | (-) | | | | | | |
| | 1962 | 4 | 6 | 1 | | | | | | | | | | | | | | | | 7.50 | | | | | | |
| Petes | 1933 | 2 | 4 | 1 | | | | | | | | 6.25 | (-) | | | | | | | | | | | | | |
| Peye | 1938 | 4 | 11 | 4 | | | | 0.64 | 11.57 | | | | | | | | | | | | | | | | | |
| | 1940 | 2 | 4 | 2 | | | | (0.35) | (0.20) | | | | | | | | | | | | | | | | | |
| | 1942 | 10 | 49 | 3 | | | | | | 0.04 | 12.00 | | | | | | | | | | | 0.18 | 23.33 | | | |
| | 1948 | 7 | 4 | 1 | | | | | | (0.03) | (-) | | | | | | | | | | | (0.14) | (1.05) | | | |
| | 1951 | 9 | 17 | 3 | | | | | | 1.00 | (-) | | | | | | | | | | | 0.35 | | | 1.18 | |
| | | | | | | | | | | | | | | | | | | | | | (0.29) | | | (0.09) | | |
| Powell | 1942 | 6 | 36 | 2 | | | | 0.28 | 12.00 | | | | | | | | | | | | | | | | | |
| | 1959 | 3 | 8 | 1 | | | | (0.00) | (0.00) | | 0.63 | (-) | | | | | | | | | | 2.00 | | | | |
| Red Jacks | 1929 | 2 | 4 | 2 | | | | | | | | | | | | | | | | | | 0.50 | | | 0.75 | 21.33 |
| | | | | | | | | | | | | | | | | | | | | | | (0.50) | | | (0.25) | (1.67) |
| | 1930 | 14 | 27.5 | 9 | | | | | | | | | | | | | | | | | | 0.04 | | | 1.05 | 21.24 |
| | | | | | | | | | | | | | | | | | | | | | | (0.03) | | | (0.17) | (0.21) |
| | 1931 | 2 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | 1.50 | 22.00 |
| 1938 | 1 | 3 | 1 | | | | | | | | | | | | | | | | | | | | | (-) | (-) | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1.00 | 25.00 | |
| | | | | | | | | | | | | | | | | | | | | | | | | (-) | (-) | |
| Rim | 1944 | 5 | 16.25 | 1 | | | | 0.06 | 11.00 | | | | | | | | | | | | | | | | | |
| | 1948 | 5 | 13 | 1 | | | | (-) | (-) | | | | | | | | | | | | | | | | | |

Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | |
|---------|------|---------------------|-------------|----------|-------------|----|---------------|-----------------|-------|-----------------|--------|----------|----|---------------------|----|-----------|-----|---------|--------------|--------|---------|----|---------------|-------|--------------|----|-----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Rock | 1930 | 1 | 4 | 1 | | | | | | | | | | | | | | | | | | | 0.75 | 23.00 | | | |
| | 1953 | 1 | 2 | 1 | 1.00 | | | | | | | | | | | | | | | | | | (-) | (-) | | | |
| | 1959 | 23 | 58 | 3 | 0.57 | | | | | | | | | | | | | | | | | | | | | | |
| | 1963 | 12 | 18 | 1 | (0.04) | | | | | | | | | | | | | | | | | | | | | | |
| Rumble | 1951 | 5 | 26 | 1 | | | | | | | | | | | | | | | | | | | | 0.50 | | | |
| Sand | 1937 | 13 | 38.75 | 12 | | | | 0.03 | 10.00 | 0.18 | 7.00 | | | | | | | | | 2.06 | 9.23 | | | | | | |
| | 1938 | 1 | 7 | 1 | | | | (0.03) | (-) | (0.12) | (0.00) | | | | | | | | | (0.51) | (0.10) | | | | | | |
| | 1938 | 2 | 5 | 1 | | | | 0.57 | 11.00 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | (-) | (-) | | | | | | | | | | | | | | | | | | |
| | 1949 | 4 | 8 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1955 | 4 | 18 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1961 | 5 | 9 | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1962 | 2 | 4 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Skeels | 1935 | 2 | 7 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1938 | 6 | 7 | 4 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1945 | 1 | 1 | 1 | | | | | | | 2.00 | 7.00 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | (-) | (-) | | | | | | | | | | | | | | | |
| Square | 1954 | 7 | 25 | 2 | 0.16 | | | | | | | | | | | | | | | | | | | | | | |
| Straits | 1933 | 2 | 3 | 1 | (0.03) | | | | | | | | | | | | | | | | | | | | | | |
| | 1935 | 5 | 12 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1937 | 4 | 10 | 4 | | | | 0.10 | | | 0.30 | 7.00 | | | | | | | | | | | | | | | |
| | | | | | | | (0.11) | | | (0.32) | (-) | | | | | | | | | | | | | | | | |

Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | | |
|-------------------|------|---------------------|-------------|----------|-------------|----|---------------|-----------------|--------|-----------------|--------|----------|--------|---------------------|--------|-----------|--------|---------|--------------|--------|---------|--------|---------------|--------|--------------|----|-----|----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Straits-continued | 1938 | 8 | 9 | 5 | | | 0.00 | | 0.11 | 16.00 | 0.11 | 7.00 | | | | | | | | | | | 0.33 | 21.33 | | | | |
| | 1939 | 18 | 31.5 | 8 | | | | | (0.11) | (-) | (0.11) | (-) | | | | | | | | 0.03 | 9.00 | | | 0.79 | 19.60 | | | |
| | 1941 | 1 | 1 | 1 | | | | | | | | 3.00 | 7.00 | | | | | | | | | | | | | | | |
| | 1942 | 4 | 24 | 1 | | | 0.08 | 13.00 | | | | | | | | | | | | | | | | | | | | |
| | 1946 | 2 | 6 | 1 | | | (-) | (-) | | | | | | | | | | | | | | | | 0.33 | 17.00 | | | |
| | 1948 | 2 | 2 | 1 | | | | | 1.00 | | | | | | | | | | | | | | | (-) | (-) | | | |
| | 1951 | 6 | 10 | 1 | | | | | | | | | | | | | | | | | | | | 0.60 | | | | |
| | 1959 | 20 | 42 | 3 | | | | | | | | 0.21 | 0.76 | | | | | | | 0.90 | | | | (-) | 0.55 | | | |
| | 1963 | 9 | 20 | 1 | | | | | | | | 0.05 | 0.30 | | | | | | | | | | | 0.05 | | | | |
| | | | | | | | | | | | (-) | (-) | | | | | | | | | | | (-) | | | | | |
| Swan | 1932 | 13 | 19 | 6 | | | | | 0.32 | 11.00 | | | | | | | | | | | | | | 0.58 | 20.38 | | | |
| | | | | | | | | | (0.11) | (-) | | | | | | | | | | | | | | (0.39) | (0.82) | | | |
| Thornton | 1938 | 3 | 2 | 1 | | | | | 3.00 | 16.00 | | | | | | | | | | | | | | | | | | |
| | 1946 | 11 | 26 | 5 | | | | | (-) | (-) | | | 1.65 | 7.93 | 0.04 | 6.00 | 0.04 | 8.00 | | | | | | | | | | |
| | 1947 | 3 | 7.5 | 2 | | | | | | | 0.13 | | | | | | | | | | | | | | | | | |
| | 1948 | 126 | 197 | 14 | | | | | | | | | 1.73 | | | | | | | | | | | | | | | |
| | 1949 | 8 | 8 | 1 | | | | | | | | | 2.46 | | | | | | | | | | | | | | | |
| | | | | | | | 0.30 | | | | | | (0.04) | | | | | | | | | | | | | | | |
| | | | | | | | 0.25 | | | | | | 5.00 | | | | | | | | | | | | | | | |
| | | | | | | | (-) | | | | | | (-) | | | | | | | | | | | | | | | |
| Thunder | 1930 | 3 | 10 | 3 | | | | | | | | | 3.20 | 8.96 | 0.60 | | | | | 0.10 | 12.00 | | | 0.10 | | | | |
| | | | | | | | | | | | | | (0.79) | (0.15) | (0.58) | | | | | (0.14) | (-) | | | (0.10) | | | | |
| | 1934 | 3 | 8.5 | 2 | | | | 0.12 | 12.00 | | | | 1.18 | | 0.24 | | | | | | | | | 0.59 | | | | |
| | | | | | | | | (0.17) | (-) | | | | (0.69) | | (0.33) | | | | | | | | | | (0.35) | | | |
| | 1937 | 5 | 10.5 | 4 | | | | 0.19 | 10.00 | | | | 0.29 | 7.00 | | | 0.95 | 7.00 | | 0.10 | 8.00 | | | | | | | |
| | | | | | | | (0.22) | (-) | | | | (0.34) | (-) | | | (1.17) | (-) | | (0.12) | (-) | | | | | | | | |
| | | | | | | | | | | | | | 0.00 | | | | | | | | | | | 0.71 | 19.25 | | | |
| | | | | | | | | | | | | | (0.00) | | | | | | | | | | | (0.24) | (1.89) | | | |
| | | | | | | | 0.01 | 14.00 | | | | | 0.11 | 7.25 | | | 0.01 | | | 0.03 | 8.50 | 0.10 | 18.14 | 0.16 | 16.08 | | | |
| | | | | | | | (0.01) | (-) | | | | | (0.07) | (0.37) | | | (0.01) | | | (0.02) | (0.50) | (0.06) | (0.86) | (0.05) | (0.45) | | | |

Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | largemouth bass | bluegill | pumpkinseed sunfish | | rock bass | crappie | yellow perch | walleye | northern pike | | bullhead sp. | | | |
|-----------------------|------|---------------------|-------------|----------|-------------|------|---------------|-----------------|-----------------|----------|---------------------|--------|-----------|---------|--------------|---------|---------------|--------|--------------|--------|----|-----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Thunder- continued | 1940 | 6 | 5.75 | 6 | | | 0.17 | 14.00 | | 0.35 | 7.00 | | | | 0.00 | | | 0.17 | 14.00 | | | |
| | | | | | | | (0.17) | (-) | | (0.35) | (-) | | | | (0.00) | | | (0.17) | (-) | | | |
| | 1941 | 10 | 22.75 | 3 | | | | | | | | | 0.13 | 6.50 | 1.01 | 7.65 | 0.04 | 16.00 | 0.40 | 16.20 | | |
| | | | | | | | | | | | | | (0.10) | (-) | (0.39) | (0.10) | (0.03) | (-) | (0.21) | (0.10) | | |
| | 1942 | 6 | 27 | 1 | | | | | | 0.67 | 7.40 | | | | 0.67 | 6.80 | | | 0.11 | 17.00 | | |
| | | | | | | | | | | (-) | (-) | | | | (-) | (-) | | | (-) | (-) | | |
| | 1943 | 21 | 53 | 4 | | | | | | 0.49 | 6.73 | | 0.02 | 6.00 | 0.70 | 7.31 | | | 0.42 | 16.09 | | |
| | | | | | | | | | | (0.26) | (0.05) | | (0.02) | (-) | (0.07) | (0.04) | | | (0.07) | (0.15) | | |
| | 1944 | 10 | 37.5 | 3 | | | | | | 0.67 | 7.00 | | 0.03 | 6.00 | 0.27 | 7.50 | | | 1.01 | 15.35 | | |
| | | | | | | | | | | (0.38) | (0.00) | | (0.03) | (-) | (0.26) | (-) | | | (0.43) | (0.11) | | |
| | 1948 | 6 | 8 | 2 | | | | | | | | | | | 0.50 | | | | 0.38 | | | |
| | | | | | | | | | | | | | | | (0.50) | | | | (0.38) | | | |
| | 1949 | 26 | 87 | 6 | | | | | | 0.23 | | 0.08 | 0.08 | | 0.17 | | 0.02 | | 0.16 | | | |
| | | | | | | | | | | (0.23) | | (0.08) | (0.08) | | (0.08) | | (0.01) | | (0.10) | | | |
| | 1950 | 14 | 34 | 3 | | | | | 0.09 | 0.76 | | 0.03 | | | 0.35 | | 0.21 | | 0.21 | | | |
| | | | | | | | | | (0.13) | (0.24) | | (0.04) | | | (0.23) | | (0.10) | | (0.08) | | | |
| | 1951 | 26 | 71.5 | 4 | | | | 0.11 | | 0.53 | 0.03 | 0.01 | | | 0.36 | | | | 0.11 | | | |
| | | | | | | | (0.06) | | (0.16) | (0.02) | (0.01) | | | (0.07) | | | | (0.07) | | | | |
| 1952 | 9 | 24 | 2 | | | | | | 0.46 | | 0.13 | | | 0.13 | | 0.13 | | 0.21 | | | | |
| | | | | | | | | | (0.23) | | (0.06) | | | (0.06) | | (0.06) | | (0.06) | | | | |
| 1953 | 15 | 46 | 4 | | | | | | 0.37 | | 0.17 | | | 0.30 | | 0.04 | | 0.17 | | 0.04 | | |
| | | | | | | | | | (0.26) | | (0.10) | | | (0.25) | | (0.03) | | (0.15) | | (0.03) | | |
| 1954 | 10 | 14 | 1 | | | | | | | 0.07 | 0.14 | | | 0.64 | | | | 0.21 | | 0.29 | | |
| | | | | | | | | | | (-) | (-) | | | (-) | | | | (-) | | (-) | | |
| 1956 | 2 | 6 | 1 | | | | | | | | | | | 5.00 | | | | | | | | |
| | | | | | | | | | | | | | | (-) | | | | | | | | |
| 1957 | 7 | 19 | 2 | | | | | | | | | | | | | | | 0.26 | | | | |
| | | | | | | | | | | | | | | | | | | (0.04) | | | | |
| 1958 | 15 | 27 | 4 | | | | | | 0.07 | | 0.04 | | | 0.22 | | | | 0.15 | | 0.04 | | |
| | | | | | | | | | (0.08) | | (0.04) | | | (0.17) | | | | (0.08) | | (0.03) | | |
| 1961 | 6 | 7 | 1 | | | | | | 0.14 | | 1.00 | | | 0.29 | | | | 0.14 | | | | |
| | | | | | | | | | (-) | | (-) | | | (-) | | | | (-) | | | | |
| 1963 | 57 | 139 | 8 | | | | 0.03 | | 0.54 | 1.49 | 0.04 | | | 0.31 | | 0.04 | | 0.06 | | 0.03 | | |
| | | | | | | | (0.02) | | (0.20) | (0.89) | (0.03) | | | (0.13) | | (0.03) | | (0.03) | | (0.01) | | |
| 1964 | 18 | 43 | 5 | | | | | | 0.07 | 0.28 | 0.16 | | | 0.70 | | | | 0.28 | | | | |
| | | | | | | | | | (0.07) | (0.20) | (0.12) | | | (0.41) | | | | (0.07) | | | | |
| Tie | 1944 | 2 | 8 | 1 | 2.13 | 8.60 | | | | | | | | | | | | | | | | |
| | | | | | (-) | (-) | | | | | | | | | | | | | | | | |
| Toms | 1938 | 20 | 45.5 | 8 | | | | | 1.34 | 7.33 | 0.11 | 7.00 | | | 1.45 | 8.00 | | | | | | |
| | | | | | | | | | (0.51) | (0.06) | (0.09) | (0.00) | | | (0.61) | (0.00) | | | | | | |
| | 1939 | 6 | 7.25 | 2 | | | | | | | | | | 6.62 | 8.00 | | | | | | | |
| | | | | | | | | | | | | | | (0.43) | (0.00) | | | | | | | |

Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | |
|----------------|------|---------------------|-------------|----------|----------------|----|---------------|-----------------|----------------|-----------------|----------------|----------------|----|---------------------|----|-----------|----------------|----------------|----------------|---------|----------------|----------------|----------------|--------------|-----|----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Toms-continued | 1940 | 4 | 7.5 | 2 | | | | | | | 2.00 (0.53) | 6.27 (0.07) | | | | | | 0.27 (0.18) | 7.00 (-) | | | | | | | |
| | 1946 | 6 | 20 | 3 | | | | | | | 0.80 (0.73) | 7.00 (-) | | | | | | 0.75 (0.69) | 7.00 (-) | | | | | | | |
| | 1947 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | |
| Triangle | 1938 | 2 | 3 | 2 | | | | | 0.33 (0.22) | 17.00 (-) | | | | | | | | | | | | 0.33 (0.44) | 18.00 (-) | | | |
| | 1941 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | 1.00 (-) | 26.00 (-) | | | |
| | 1943 | 4 | 11 | 1 | | | | | | | 0.64 (-) | 7.00 (-) | | | | | | | | | | | | | | |
| | 1951 | 7 | 28 | 1 | | | | | 0.07 (-) | | | | | | | | | | | | | | 0.11 (-) | | | |
| | 1952 | 7 | 30 | 2 | | | | | 0.23 (0.18) | | | | | | | | | | 0.53 (0.36) | | | | 0.07 (0.04) | | | |
| | 1953 | 3 | 6 | 1 | | | | | | | | | | | | | | | | | | | 0.33 (-) | | | |
| | 1959 | 4 | 9 | 1 | | | | | 0.22 (-) | | | | | | | | | | | | | | | | | |
| | 1961 | 36 | 120 | 5 | | | | | | 0.03 (0.02) | 0.78 (0.24) | 0.05 (0.03) | | | | | | | 0.03 (0.02) | | | | 0.25 (0.13) | | | |
| | 1962 | 5 | 22 | 3 | | | | | 0.09 (0.10) | | | | | | | | | 0.41 (0.33) | 0.09 (0.09) | | 0.14 (0.15) | | 0.09 (0.09) | | | |
| | 1963 | 10 | 30 | 3 | | | | | 0.07 (0.08) | | 0.17 (0.13) | 0.10 (0.06) | | | | | | 0.03 (0.03) | 0.43 (0.17) | | | | 0.03 (0.04) | | | |
| 1964 | 6 | 17 | 2 | | | | | | | | | | | | | | 0.18 (0.12) | | | | | 0.29 (0.09) | | | | |
| Truman | 1947 | 1 | 2 | 1 | 1.50 (-) | | | | | | | | | | | | | | | | | | | | | |
| | 1949 | 35 | 53 | 5 | 4.45 (1.02) | | | | | | | | | | | | | | | | | | | | | |
| | 1950 | 14 | 42 | 3 | 1.05 (0.08) | | | | | | | | | | | | | | | | | | | | | |
| | 1951 | 36 | 54 | 5 | 1.94 (0.27) | | | | 0.74 (0.48) | | | | | | | | | | | | | | | | | |
| | 1959 | 20 | 52 | 2 | 0.87 (0.03) | | | | | | | | | | | | | | | | | | | | | |
| | 1960 | 4 | 26 | 1 | 0.31 (-) | | | | | | | | | | | | | | | | | | | | | |

Appendix 4-24.-Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | rainbow trout | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie | yellow perch | | walleye | | northern pike | | bullhead sp. | | |
|---------------------|------|---------------------|-------------|----------|----------------|----|---------------|-----------------|----|-----------------|----------------|-------------|----|---------------------|----------------|-------------|----|---------|--------------|----------------|-------------|----|---------------|-------------|--------------|----|-----|
| | | | | | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE |
| Truman continued | 1961 | 61 | 100.5 | 1 | 1.69 | | | | | | | | | | | | | | | | | | | | | | |
| | 1963 | 37 | 82 | 2 | 1.00 (0.02) | | | | | | | | | | | | | | | | | | | | | | |
| Turtle | 1946 | 5 | 15.5 | 2 | | | | | | | 0.19 (0.30) | 7.00 (-) | | | 0.06 (0.10) | 8.00 (-) | | | | 0.06 (0.10) | 6.00 (-) | | | | | | |
| Twilight | 1955 | 2 | 4 | 1 | | | | | | | 1.25 (-) | | | | | | | | | | | | | | | | |
| Twin | 1945 | 2 | 8 | 1 | | | | | | | | | | | | | | | | | | | | 0.25 (-) | 20.00 (-) | | |

Appendix 4-25.—Direct contact lake angler creel data for the Tributaries – lower Indian River lakes. Estimates are given with 1 standard error in parentheses. One or multiple angler interview records are included per Days (N). When Days (N) equaled 1 or when only 1 length was reported, standard errors could not be estimated and are reported as (-). Lengths were not collected brook trout, brown trout, crappie sp., bullhead., sucker sp., and sturgeon. Consequently, the “Average length” column has not been included for these species. CPE = catch per unit effort; AL = average length.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | brown trout | smallmouth bass | largemouth bass | bluegill | pumpkinseed sunfish | rock bass | crappie sp. | yellow perch | walleye | northern pike | bullhead sp. | sucker sp. | sturgeon | | |
|--------|------|---------------------|-------------|----------|----------------|------------------|-----------------|-----------------|-----------------|---------------------|------------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|----------------|-----------------|
| | | | | | CPE | CPE | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Banana | 1951 | 8 | 8.0 | 1 | | | | | | | | | | | | | | | | |
| | 1953 | 4 | 5.0 | 2 | | 0.20 (0.08) | | | | | | | 1.00 (1.60) | | | | | | | |
| | 1955 | 1 | 6.0 | 1 | | 0.33 (-) | | | | | | | | | | | | | | |
| Indian | 1930 | 15 | 32.0 | 15 | | | | | | | 0.06 (0.06) | | 1.22 (0.27) | 0.38 (0.14) | 0.31 (0.13) | | | | | |
| | 1933 | 1 | 1.5 | 1 | | | | | | | | | | | | | | | | |
| | 1934 | 36 | 61.5 | 20 | 0.02 (0.02) | 0.41 (0.12) | 0.07 (0.07) | 2.13 (0.88) | | | 0.31 (0.18) | | 2.86 (0.79) | 0.83 (0.20) | 0.15 (0.05) | | | | | |
| | 1936 | 1 | 0.5 | 1 | | | | | | | | | 4.00 (-) | 7.00 (-) | | | | | | |
| | 1937 | 4 | 7.5 | 4 | | 0.13 (0.13) | 10.00 (-) | | | | | | 3.60 (3.29) | 7.07 (0.05) | 0.80 (0.17) | 18.00 (1.34) | | | | |
| | 1938 | 3 | 10.0 | 3 | | | | | | | | | 1.00 (0.60) | 7.00 (-) | 0.30 (0.18) | 14.00 (-) | | | | |
| | 1939 | 126 | 222.3 | 114 | | <0.01 (<0.01) | 14.00 (-) | | 0.25 (0.13) | 7.11 (0.09) | 0.09 (0.06) | 7.40 (0.24) | 0.08 (0.03) | 5.83 (1.77) | 1.41 (0.24) | 8.23 (0.09) | 0.08 (0.02) | 15.88 (0.37) | 0.11 (0.03) | 17.46 (0.46) |
| | 1940 | 55 | 135.8 | 55 | | | | | | 0.10 (0.09) | 7.23 (0.23) | | 0.24 (0.06) | 7.50 (0.09) | | 0.04 (0.02) | 18.80 (1.02) | | | |
| | 1941 | 89.25 | 143.5 | 7 | | 0.01 (0.00) | 15.00 (-) | 0.01 (0.01) | 14.00 (4.00) | 0.01 (0.01) | 6.00 (-) | | 0.03 (0.03) | 8.00 (-) | 1.41 (0.65) | 7.62 (0.06) | 0.06 (0.03) | 17.61 (0.38) | 0.10 (0.06) | 15.88 (0.13) |
| | 1942 | 46 | 171.8 | 5 | | | | | | | | | 3.46 (0.25) | 8.29 (0.01) | 0.01 (0.01) | 21.00 (-) | 0.09 (0.03) | 17.58 (0.05) | | |
| | 1943 | 87 | 261.3 | 7 | | | | | | | | | 2.01 (0.40) | 7.30 (0.01) | 0.33 (0.08) | 16.82 (0.07) | 0.39 (0.06) | 19.96 (0.02) | | |
| | 1944 | 106 | 322.0 | 10 | | <0.01 (<0.01) | 12.00 (-) | | | | <0.01 (<0.01) | 7.00 (-) | 1.63 (0.29) | 7.48 (0.02) | 0.16 (0.05) | 17.78 (0.18) | 0.30 (0.09) | 19.15 (0.16) | | |
| | 1945 | 12 | 36.0 | 2 | | | | | | | | | 0.08 (0.02) | 9.33 (1.33) | 0.19 (0.01) | 17.26 (0.12) | 0.61 (0.51) | 27.07 (0.79) | | |

Appendix 4-25.–Continued.

| Lake | Year | No. anglers (lines) | Total hours | Days (N) | brook trout | | brown trout | | smallmouth bass | | largemouth bass | | bluegill | | pumpkinseed sunfish | | rock bass | | crappie sp. | | yellow perch | | walleye | | northern pike | | bullhead sp. | | sucker sp. | | sturgeon | | | |
|---------------|------|---------------------|-------------|----------|-------------|------------------|------------------|--------------|------------------|----|-----------------|------------------|----------|------------------|---------------------|-----------------|-----------|----|------------------|----------------|--------------|----------------|---------|----------------|---------------|------------------|--------------|------------------|------------------|------------------|------------------|----|-----|----|
| | | | | | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL | CPE | AL |
| Indian-cont. | 1948 | 148 | 402.5 | 10 | | | | | | | | | | | | 0.03 (0.02) | | | | 2.00 (0.41) | | 0.06 (0.03) | | 0.05 (0.01) | | | | | | | | | | |
| | 1949 | 168 | 305.0 | 16 | | | <0.01 (<0.01) | | <0.01 (<0.01) | | | | | | | 0.08 (0.04) | | | <0.01 (<0.01) | 1.61 (0.20) | | 0.18 (0.09) | | 0.20 (0.06) | | | | | | | | | | |
| | 1950 | 260 | 552.0 | 32 | | | | | | | | 0.03 (0.03) | | <0.01 (<0.01) | | 0.12 (0.05) | | | | 2.06 (0.34) | | 0.18 (0.05) | | 0.18 (0.03) | | | | | | | | | | |
| | 1951 | 131 | 491.0 | 16 | | | | | | | | 0.13 (0.12) | | | | 0.08 (0.02) | | | | 0.66 (0.15) | | 0.14 (0.04) | | 0.10 (0.03) | | | | | | | <0.01 (<0.01) | | | |
| | 1952 | 389 | 1268.5 | 30 | | | <0.01 (<0.01) | | | | | 0.01 (0.00) | | | | 0.08 (0.02) | | | | 0.47 (0.06) | | 0.25 (0.04) | | 0.13 (0.02) | | <0.01 (<0.01) | | | | | | | | |
| | 1953 | 317 | 970.0 | 34 | | | | | <0.01 (<0.01) | | | 0.02 (0.01) | | | | 0.04 (0.02) | | | | 0.98 (0.14) | | 0.19 (0.03) | | 0.09 (0.01) | | 0.01 (0.01) | | | | | | | | |
| | 1954 | 204 | 643.0 | 25 | | | <0.01 (<0.01) | | | | | <0.01 (<0.01) | | <0.01 (<0.01) | | 0.09 (0.04) | | | | 1.55 (0.26) | | 0.11 (0.03) | | 0.14 (0.04) | | 0.02 (0.02) | | <0.01 (<0.01) | <0.01 (<0.01) | <0.01 (<0.01) | | | | |
| | 1955 | 331 | 904.0 | 26 | | | <0.01 (<0.01) | | | | | <0.01 (<0.01) | | | | 0.03 (0.01) | | | <0.01 (<0.01) | 0.77 (0.14) | | 0.18 (0.06) | | 0.14 (0.02) | | 0.01 (0.01) | | <0.01 (<0.01) | <0.01 (<0.01) | | | | | |
| | 1956 | 175 | 345.0 | 13 | | | | | | | | | | | | 0.05 (0.01) | | | | 1.28 (0.43) | | 0.12 (0.02) | | 0.12 (0.02) | | | | | | | | | | |
| | 1957 | 390 | 902.5 | 36 | | | <0.01 (<0.01) | | | | | <0.01 (<0.01) | | | | 0.03 (0.01) | | | | 1.19 (0.17) | | 0.12 (0.03) | | 0.10 (0.02) | | <0.01 (<0.01) | | | | | | | | |
| | 1958 | 414 | 987.5 | 35 | | | <0.01 (<0.01) | | <0.01 (<0.01) | | | 0.02 (0.01) | | <0.01 (<0.01) | | 0.05 (0.02) | | | | 1.37 (0.19) | | 0.10 (0.02) | | 0.09 (0.01) | | <0.01 (<0.01) | | | | | | | | |
| | 1959 | 360 | 915.0 | 32 | | | <0.01 (<0.01) | | <0.01 (<0.01) | | | <0.01 (<0.01) | | <0.01 (<0.01) | | 0.02 (0.01) | | | | 1.05 (0.19) | | 0.13 (0.02) | | 0.10 (0.03) | | 0.02 (0.02) | | | | | | | | |
| | 1960 | 257 | 606.0 | 19 | | | <0.01 (<0.01) | | | | | <0.01 (<0.01) | | <0.01 (<0.01) | | 0.01 (0.01) | | | | 0.81 (0.23) | | 0.21 (0.06) | | 0.03 (0.01) | | <0.01 (<0.01) | | | | | | | | |
| | 1961 | 372 | 1025.0 | 32 | | | 0.01 (<0.01) | | | | | <0.01 (<0.01) | | <0.01 (<0.01) | | 0.03 (0.01) | | | | 0.59 (0.12) | | 0.21 (0.03) | | 0.07 (0.01) | | <0.01 (<0.01) | | <0.01 (<0.01) | <0.01 (<0.01) | | | | | |
| | 1962 | 212 | 489.5 | 20 | | | <0.01 (<0.01) | | <0.01 (<0.01) | | | | | | | 0.01 (<0.01) | | | | 1.01 (0.15) | | 0.06 (0.02) | | 0.06 (0.02) | | 0.13 (0.10) | | | | | | | | |
| | 1963 | 244 | 759.0 | 32 | | | | | | | | <0.01 (<0.01) | | <0.01 (<0.01) | | 0.03 (0.02) | | | | 0.75 (0.19) | | 0.10 (0.02) | | 0.08 (0.03) | | | | | | | <0.01 (<0.01) | | | |
| 1964 | 620 | 1636.5 | 59 | | | <0.01 (<0.01) | | | | | 0.05 (0.02) | | | | 0.03 (0.00) | | | | <0.01 (<0.01) | 1.75 (0.23) | | 0.08 (0.01) | | 0.09 (0.01) | | 0.01 (<0.01) | | <0.01 (<0.01) | <0.01 (<0.01) | <0.01 (<0.01) | | | | |
| 1965 | 268 | 809.0 | 34 | | | | | | | | | | | | | | | | | 1.60 (0.26) | | 0.05 (0.02) | | 0.09 (0.03) | | | | | <0.01 (<0.01) | <0.01 (<0.01) | | | | |
| Smiths Slough | 1937 | 1 | 4.5 | 1 | | | 0.44 (-) | 13.00 (-) | | | | | | | | | | | | | | | | | | | | | | | | | | |