

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 1991 CREEL SURVEY RESULTS

1991 DOLAN LAKE
 72 ACRES
 REGION 5, DISTRICT 16

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/1991 through 11/15/1991
 Year periods stratified.
 Fishing modes (boat vs. shore) stratified.
 Day types (weekday vs. weekend/holiday) stratified.
 Day periods (morning, midday, and afternoon) stratified.

SAMPLING RATIO: 332/738 = 45.0%

NUMBER OF INTERVIEWS: 1329

Table 1. Total fishing effort, by fishing mode and day type.

| FISHING MODE | DAYTYPE | ANGLER-HOURS | 95% CI | HOURS/ACRE | 95% CI | % EFF |
|--------------|---------|--------------|-------------------|------------|---------------|-------|
| BOAT | WEEKDAY | 3517 | 2898-4136 (18%) | 49 | 41-58 (18%) | 17% |
| | HOLIDAY | 2896 | 2254-3537 (22%) | 40 | 32-49 (22%) | 40% |
| | TOTAL | 6412 | 5521-7304 (14%) | 90 | 77-102 (14%) | 27% |
| SHORE | WEEKDAY | 3797 | 3237-4356 (15%) | 53 | 45-61 (15%) | 14% |
| | HOLIDAY | 2742 | 2370-3113 (14%) | 38 | 33-44 (14%) | 30% |
| | TOTAL | 6538 | 5867-7210 (10%) | 91 | 82-101 (10%) | 21% |
| BOAT & SHORE | WEEKDAY | 7314 | 6479-8148 (11%) | 102 | 91-114 (11%) | 16% |
| | HOLIDAY | 5637 | 4896-6379 (13%) | 79 | 68-89 (13%) | 35% |
| | TOTAL | 12951 | 11834-14067 (9%) | 181 | 166-197 (9%) | 24% |

Table 2. Total fishing harvest and harvest rates, in numbers of fish.

| # HARVESTED | 95% CI | #/HOUR | 95% CI | #/HA | #/ACRE | SPECIES |
|-------------|--------------------|--------|-------------------|--------|--------|-----------------|
| 16175 | 13034-19315 (19%) | .932 | .749-1.116 (20%) | 558.99 | 226.22 | All species |
| 119 | 43-195 (64%) | .006 | .001-.010 (74%) | 4.10 | 1.66 | Black crappie |
| 7900 | 5808-9991 (26%) | .483 | .343-.623 (29%) | 273.02 | 110.49 | Bluegill |
| 1989 | 1505-2473 (24%) | .127 | .092-.162 (28%) | 68.73 | 27.81 | Channel catfish |
| | | **** | NOT RECORDED **** | | | Golden shiner |
| 51 | 0-114 (122%) | .004 | .000-.008 (119%) | 1.78 | 0.72 | Green sunfish |
| 506 | 275-738 (46%) | .026 | .013-.038 (48%) | 17.50 | 7.08 | Largemouth bass |
| 2482 | 1377-3587 (45%) | .133 | .068-.199 (49%) | 85.78 | 34.72 | Redear sunfish |
| 298 | 122-473 (59%) | .014 | .007-.021 (50%) | 10.29 | 4.16 | Walleye |
| 41 | 10-72 (75%) | .002 | .000-.004 (97%) | 1.42 | 0.58 | Warmouth |
| 2181 | 1091-3272 (50%) | .113 | .061-.166 (46%) | 75.38 | 30.51 | White crappie |
| 549 | 323-774 (41%) | .021 | .013-.029 (39%) | 18.96 | 7.67 | Yellow bullhead |
| 59 | 18-99 (70%) | .003 | .000-.006 (90%) | 2.02 | 0.82 | Yellow bass |

Table 3. Total fishing harvest and harvest rates, in kilograms.

| KG HARVESTED | 95% CI | KG/HOUR | 95% CI | KG/HA | AVE KG | SPECIES |
|--------------|------------------|---------|-------------------|-------|--------|-----------------|
| 2793 | 2336-3250 (16%) | .159 | .133-.186 (16%) | 96.53 | 0.173 | All species |
| 19 | 8-30 (59%) | .001 | .000-.001 (62%) | 0.64 | 0.158 | Black crappie |
| 688 | 503-873 (27%) | .042 | .029-.054 (30%) | 23.78 | 0.087 | Bluegill |
| 815 | 613-1018 (25%) | .054 | .033-.074 (38%) | 28.17 | 0.410 | Channel catfish |
| | | **** | NOT RECORDED **** | | | Golden shiner |
| 3 | 0-7 (117%) | .000 | .000-.001 (137%) | 0.12 | 0.066 | Green sunfish |
| 451 | 245-657 (46%) | .021 | .012-.030 (42%) | 15.58 | 0.891 | Largemouth bass |
| 272 | 160-384 (41%) | .014 | .008-.020 (44%) | 9.41 | 0.110 | Redear sunfish |
| 172 | 75-269 (57%) | .008 | .004-.012 (48%) | 5.94 | 0.579 | Walleye |
| 5 | 2-9 (68%) | .000 | .000-.001 (108%) | 0.18 | 0.129 | Warmouth |
| 233 | 140-325 (40%) | .014 | .007-.022 (53%) | 8.04 | 0.107 | White crappie |
| 130 | 71-190 (46%) | .005 | .003-.007 (44%) | 4.50 | 0.238 | Yellow bullhead |
| 5 | 1-8 (76%) | .000 | .000-.000 (77%) | 0.16 | 0.078 | Yellow bass |

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Table 4. Total fishing harvest and harvest rates, in pounds.

| LB HARVESTED | 95% CI | | LB/HOUR | 95% CI | LB/ACRE | AVE LB | SPECIES |
|--------------|-----------|--------|---------|------------------|---------|--------|-----------------|
| 6158 | 5151-7166 | (16%) | .351 | .294-.409 (16%) | 86.13 | 0.381 | All species |
| 41 | 17-65 | (59%) | .002 | .001-.003 (62%) | 0.58 | 0.348 | Black crappie |
| 1517 | 1109-1925 | (27%) | .092 | .065-.119 (30%) | 21.22 | 0.192 | Bluegill |
| 1797 | 1350-2244 | (25%) | .119 | .073-.164 (38%) | 25.14 | 0.904 | Channel catfish |
| | | | **** | NOT RECORDED | **** | | Golden shiner |
| 7 | 0-16 | (117%) | .001 | .000-.001 (137%) | 0.10 | 0.145 | Green sunfish |
| 994 | 540-1448 | (46%) | .046 | .027-.065 (42%) | 13.90 | 1.965 | Largemouth bass |
| 600 | 353-848 | (41%) | .031 | .017-.045 (44%) | 8.39 | 0.242 | Redear sunfish |
| 379 | 165-593 | (57%) | .018 | .009-.027 (48%) | 5.30 | 1.276 | Walleye |
| 12 | 4-20 | (68%) | .001 | .000-.001 (108%) | 0.16 | 0.285 | Warmouth |
| 513 | 308-717 | (40%) | .032 | .015-.049 (53%) | 7.17 | 0.235 | White crappie |
| 287 | 156-419 | (46%) | .010 | .006-.015 (44%) | 4.02 | 0.524 | Yellow bullhead |
| 10 | 2-18 | (76%) | .000 | .000-.001 (77%) | 0.14 | 0.173 | Yellow bass |

Table 5. Total fishing catch and catch rates, in numbers of fish.
Catch includes both harvested and released fish.

| # CAUGHT | 95% CI | | #/HOUR | 95% CI | | #/HA | #/ACRE | SPECIES |
|----------|-------------|--------|--------|-------------|--------|--------|--------|-----------------|
| 22396 | 18544-26247 | (17%) | 1.278 | 1.063-1.494 | (17%) | 773.98 | 313.23 | All species |
| 172 | 28-316 | (84%) | .007 | .002-.012 | (69%) | 5.96 | 2.41 | Black crappie |
| 10689 | 8036-13343 | (25%) | .633 | .467-.798 | (26%) | 369.42 | 149.50 | Bluegill |
| 3055 | 2325-3786 | (24%) | .186 | .142-.230 | (24%) | 105.60 | 42.73 | Channel catfish |
| 22 | 0-49 | (123%) | .001 | .000-.002 | (125%) | 0.77 | 0.31 | Golden shiner |
| 59 | 0-122 | (107%) | .005 | .000-.010 | (100%) | 2.04 | 0.83 | Green sunfish |
| 1259 | 874-1643 | (31%) | .075 | .044-.106 | (42%) | 43.50 | 17.60 | Largemouth bass |
| 2525 | 1417-3632 | (44%) | .135 | .069-.201 | (49%) | 87.25 | 35.31 | Redear sunfish |
| 382 | 163-601 | (57%) | .018 | .010-.027 | (45%) | 13.20 | 5.34 | Walleye |
| 180 | 0-362 | (101%) | .008 | .000-.017 | (112%) | 6.21 | 2.51 | Warmouth |
| 2868 | 1680-4055 | (41%) | .154 | .090-.218 | (42%) | 99.10 | 40.11 | White crappie |
| 1080 | 738-1422 | (32%) | .048 | .034-.063 | (31%) | 37.32 | 15.10 | Yellow bullhead |
| 105 | 37-173 | (65%) | .008 | .001-.014 | (87%) | 3.63 | 1.47 | Yellow bass |

Table 6. Total fishing catch and catch rates, in kilograms.

| KG CAUGHT | 95% CI | | KG/HOUR | 95% CI | | KG/HA | AVE KG | SPECIES |
|-----------|-----------|--------|---------|-----------|--------|--------|--------|-----------------|
| 3477 | 2948-4006 | (15%) | .199 | .170-.227 | (14%) | 120.17 | 0.155 | All species |
| 21 | 8-33 | (59%) | .001 | .000-.002 | (60%) | 0.71 | 0.120 | Black crappie |
| 847 | 628-1067 | (26%) | .050 | .037-.064 | (27%) | 29.28 | 0.079 | Bluegill |
| 901 | 686-1116 | (24%) | .059 | .038-.080 | (36%) | 31.14 | 0.295 | Channel catfish |
| 1 | 0-3 | (122%) | .000 | .000-.000 | (121%) | 0.05 | 0.061 | Golden shiner |
| 4 | 0-8 | (107%) | .000 | .000-.001 | (122%) | 0.13 | 0.063 | Green sunfish |
| 726 | 475-977 | (35%) | .038 | .024-.051 | (35%) | 25.09 | 0.577 | Largemouth bass |
| 274 | 162-386 | (41%) | .014 | .008-.020 | (44%) | 9.47 | 0.109 | Redear sunfish |
| 187 | 84-291 | (55%) | .009 | .005-.013 | (45%) | 6.48 | 0.492 | Walleye |
| 14 | 3-24 | (79%) | .001 | .000-.001 | (92%) | 0.47 | 0.076 | Warmouth |
| 263 | 166-359 | (37%) | .016 | .009-.024 | (48%) | 9.07 | 0.092 | White crappie |
| 231 | 151-310 | (34%) | .010 | .007-.013 | (34%) | 7.98 | 0.214 | Yellow bullhead |
| 9 | 3-15 | (69%) | .001 | .000-.001 | (100%) | 0.31 | 0.085 | Yellow bass |

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Table 7. Total fishing catch and catch rates, in pounds.

| LB CAUGHT | 95% CI | | LB/HOUR | 95% CI | LB/ACRE | AVE LB | SPECIES |
|-----------|-----------|--------|---------|------------------|---------|--------|-----------------|
| 7666 | 6500-8832 | (15%) | .438 | .375-.502 (14%) | 107.21 | 0.342 | All species |
| 45 | 19-72 | (59%) | .002 | .001-.003 (60%) | 0.63 | 0.264 | Black crappie |
| 1868 | 1384-2352 | (26%) | .110 | .081-.140 (27%) | 26.13 | 0.175 | Bluegill |
| 1986 | 1512-2460 | (24%) | .129 | .083-.176 (36%) | 27.78 | 0.650 | Channel catfish |
| 3 | 0-7 | (122%) | .000 | .000-.000 (121%) | 0.04 | 0.135 | Golden shiner |
| 8 | 0-17 | (107%) | .001 | .000-.002 (122%) | 0.11 | 0.138 | Green sunfish |
| 1601 | 1047-2154 | (35%) | .083 | .054-.113 (35%) | 22.38 | 1.272 | Largemouth bass |
| 604 | 356-852 | (41%) | .031 | .017-.045 (44%) | 8.45 | 0.239 | Redear sunfish |
| 413 | 186-641 | (55%) | .020 | .011-.029 (45%) | 5.78 | 1.085 | Walleye |
| 30 | 6-53 | (79%) | .001 | .000-.003 (92%) | 0.42 | 0.167 | Warmouth |
| 579 | 366-791 | (37%) | .036 | .019-.054 (48%) | 8.09 | 0.202 | White crappie |
| 509 | 334-684 | (34%) | .022 | .014-.029 (34%) | 7.12 | 0.472 | Yellow bullhead |
| 20 | 6-33 | (69%) | .001 | .000-.003 (100%) | 0.28 | 0.188 | Yellow bass |